# Panel W: Technology transfer and indigenous knowledge (chair: Antti Ainamo)

### 1) Antti Ainamo (University of Turku): Science and Technology Policy Collaboration: Building New Bridges across North-South Capacity Divides

In the last decades there have various turns in thinking in the social and economic sciences both in the Northern (the "North") and in the Southern hemispheres (the "South"). For a long time, the hegemonic view was that there was little of economic or social value that would trace back to the pre-colonial experience. Now, on one hand, in various ways, it is increasingly understood that the colonial and post-colonial experiences are different phenomena when viewed from the perspective of the North and the South. On the other hand, as many philosophers and sociologists have noted, the modern emphasis on change and movement is also is a similar social construction. Cultural, social or economic evolution is an obvious starting point for many scholars in any discipline in Northern Europe, Northern America or, more recently, NICs such as

China. Often, there is here an emphasis on economic growth and social and democratic progress. In partial contrast, in many places and spaces in the South, experiences and histories of human subjects and the production of cultural phenomena may follow a conception of time that might be stable or cyclical rather than growth-oriented and progressive as in the North. The spatial and philosophical realization that spatial and temporal understandings are not universal around the world has had a major impact on African studies and research on Africa. Appedurai (2005) and North and his colleagues (2009) show that violent conflicts and separatist movements often originate in, and thrive on the particular conditions that prevail in tensions between borderlands or geographical and social spaces where governance is fragile in comparison and the "analysis" or assumptions of interconnected decision makers. Often marginal phenomena from the borderlands spill over into the centers of decision-making as sudden outburst of violence. Sometimes they spill over from the center to the margin. However, atother times, violence is (a) constrained and (b) channeled productively into innovations by local institutions or by clans, local networks or other local social mechanisms. To constrain violence and to benefit from innovations in what is a margin to their own system, the European Union, the U.S. and China are among some of the players in the North that are involved in a new scramble to reconnect their economic and social centers with the economic and social centers and margins in Africa. Europe, the U.S. and China compete with one another in that one's favored set of transnational and national corporations and SMEs in the North is not the same as another's. This paper reports the first findings from a mapping exercise of science and technology policies across three countries in the African Union and three countries of the European Union. Various country-level policies are analyzed to express their spatial and temporal domains in semantic terms to denote the building of national and regional science and technology capacity in one's nation-state or region. The first weak implications arising from our mapping of science and technology policies in and across Egypt, Kenya, South Africa, Turkey, Belgium and Finland suggests that we are still far away from a situation where policies would be a transparent tool in the hands of also actors in Pralahad (2010) has called the "bottom of the pyramid". Yet, we can already vision why, when violence is constrained and capacities for local innovation are harnessed, global trends intermingle with local discourses and vice-versa, resulting in vibrant new expressions, fusions and hybridizations in the economy, the social sphere, and even culture, language, and the arts.

## 2) Batsirai Chivhanga (Aalto University, Finland): Designed Innovations for Development

The main purpose of this panel is to bring together researchers and practitioners that are exploring and implementing innovative ideas and solutions to make a tangible impact on development initiatives in the context of the African continent. Professionals and academics working in different design fields and interdisciplinary areas are encouraged to provide alternative insights towards the search for alternative innovative ideas and solutions that will result in the crafting of local solutions that will yield more development impact in Africa. Design solutions should improve living. A good design improves living. The field of design is still to be embraced in development paradigms and make it a significant intellectual resource to empower local African designers in their search for appropriate new products and services. Designed local solutions have the potential to take Africa out of poverty. There is still a long way to go before that can happen – there have been many missed opportunities to leapfrog development paths. Architectural design for example has not been effectively harnessed to conceive better living environments in those rural settings. African engineers and scientists have not done enough to apply their knowledge in conceiving ground breaking locally relevant innovations. The political, social and economic instabilities in Africa indeed cast a dark shadow on anything that seems to show change. Designed solutions should be applied in every sector and political impediments still have the potential to thwart such attempts to bring refreshing ideas in developing practices. Despite this problem, external development agencies and relevant stakeholders should be forging links with African designers towards creating products and services that will be tailor made to be appropriate to African people living on the continent.

## 3) Florence Odora Adong (Nordic Africa Institute, Sweden): Rediscovering Africa: Hard Choices in Attaining Durable Solutions Amidst Pressure of Aid Interventions

Despite the optimism after independence, violence and political disorder became widespread in Africa at the end of the 20<sup>th</sup> century; security environment changed dramatically – aggravated by the effects of globalization, climate change and technological advances. Africa constantly struggles with multiple crises and tough choices. African governments find themselves alternating between pursuing peace negotiations with its nemesis and defending themselves against charges by international community for abetting human right abuses. Endemic ethnic, regional and sectarian grievances threaten cohesion within Africa and often force African governments to choose between accommodation and suppression. With the economies reeling from the global downturn, Africa has little alternative but to accept the hard terms imposed by the International Monetary Fund and other creditors. Africa is also faced with having to satisfy demands from the western countries to crush the same domestic rebel groups that the leaders, in turn, are anxious to retain because these groups serve the leaders' interests as proxy forces in exploiting the natural resources for their own benefit and affluence; while denying citizens the right to peace and development. This paper discusses possibilities for Africa, and strategies to find durable solutions amidst pressure from the western countries and the international community – a change in direction; it will show what further choices Africa should make in choosing a role for the west and the international community in Africa's affairs. The paper presents principles on way forward on security and economic development strategies including increases in the level of multilateral cooperation, horizon scanning and intervention to promote preventative action, how to deploy military, economic, diplomatic and cultural fields to buttress Africa's efforts towards durable solutions.

# 4) Jacob Udo (University of Leeds, UK): Rethinking Information Intervention in Divided Societies: Triumphs and Troubles of Transforming of Information Space in the Democratic Republic of Congo

The destructive role of the media notably in the Rwandan genocide and the conflicts in the Balkans has generated substantial researches on the role of the media in mobilising groups for conflict. Less researched however has been the role of the media in transforming conflicts in crises states as part of international humanitarian intervention although such intervention cases abound. This paper addresses this gap by discussing the opportunities and constraints of information intervention as a function of humanitarian intervention in the Democratic Republic of Congo (DRC). The paper draws on Price & Thompson's (2002, p8) re-definition of Metzl's (1997) concept of information intervention as "the extensive external management, manipulation ... of information space in conflict zones", and argues that in the DRC where the UN has the largest peacekeeping and Radio Missions in its history, the information space has undergone extensive manipulation and transformation in terms of local access to media, reach, regulatory framework for media practice and impact. The result, as supported by discussions in 16 focus groups among two ethnic networks across four contexts in South Kivu of eastern DRC, is that citizens have become more engaged with their civic responsibilities and better informed about local peacebuilding processes and new democratic reforms. Rwandan Hutu settlers in South Kivu on the other hand feel more isolated and more threatened because their level of participation is limited by the constraints of citizenship and identity; also fear of rejection and re-starting another life in Rwanda have hindered their return to the homeland. The challenge, the paper argues, is for both governmental and nongovernmental information interveners to develop more inclusive media intervention programmes particularly in contexts of divided societies.

## 5) Nathaniel Umukoro (Delta State University, Abraka, Nigeria): Infrastructural Decay: Bane to Reconnecting Africa

Infrastructure is central to Africa's future. This is because no meaningful development can take place without it. Adequate infrastructure is required for Africa to surmount the problems created in the continent by colonialism. Although it is well understood that energy, water, sanitation, telecommunication and transport have long been mentioned by most heads of state in their speeches as essential concerns for which more resources are needed, insignificant achievements have been made. Africa's infrastructure stocks inherited from the colonial powers which supported reasonably strong economic growth from the early 1960s until the 1970s has reduced drastically. This ugly situation negatively affects the ability of African countries to enjoy the gains of modern technology and globalization for ensuring regional integration. Instead negative outcomes such as violent conflicts and the proliferation of ethnic militias seeking to end underdevelopment and infrastructural decay has been a common feature in the continent. With the aid of secondary data, the paper argues that available infrastructure in Africa is far below what is required. The expenditure on infrastructural development is not commensurate with what is required to attain the millennium development goals. The paper also shows that Africa's infrastructural problem is a product of misguided public policies and corruption. The paper recommends among other things that proper policy formulation, implementation and sincere fight against corruption are essential to curbing the infrastructural problems in the continent. Strategies for accomplishing these objectives were identified.

#### 6) R.C. Fox (Rhodes University, South Africa) and P.A. Assmo (Högskolan Väst,

### Sweden): Connecting with Africa through the Linnaeus-Palme Exchange programme

One way to connect with Africa is through educational exchange programmes - we use Sweden's Linnaeus-Palme exchange programme as our case study - and present an evaluation of the connections forged by our own agreement between Rhodes University, South Africa and Högskolan Väst, Sweden from 2003-2007 within the broader context of the programme's activities. This paper presents the results of in-depth interviews with the 25 students from Högskolan Väst who exchanged with students from Rhodes University. Both groups of students were pursuing degrees where space and place are integral to learning: Högskolan Väst's International Programme in Politics and Economics and Rhodes University's Geography Honours degree. Our curricula make use of role playing simulations as one way to enhance appreciation of space and place, another is to exchange groups of students so that experiential learning takes place. The students from Sweden took course-work and also undertook minor research projects in South Africa. This paper presents an assessment of the topics which they researched and examines how the exchange experience enhanced their understanding through educational and social interaction in one small portion of South Africa.