POVERTY, DEVELOPMENT AND DONOR ISSUES

Business goals for development – a new vision for development post MDGs? 1
Urban Tipping Points – important new research on the roots of violence 2

ECONOMIC ISSUES

Changing role of smallholder farmers in South Africa’s food system 4
Africa needs another model of regional integration 5

POLITICAL ISSUES

Mozambique gas reserves could be ‘game changer’ 6

SOCIAL ISSUES

State funding for low-fee private schools could serve poorer communities 6

ENVIRONMENTAL ISSUES

Climate change threatens Botswana’s main tourist attraction 8
African nations agree to put a price on nature 8

SCIENCE & TECHNOLOGY ISSUES

New science academy established in DRC 9
Madagascar launches online research network 9
Update on affordable mobile devices for Africa 9
Apps4Africa Southern Africa Winners 10
Mapping African agriculture: A wealth of data comes online 10
Business goals for development – a new vision for development post MDGs?

As the international community gears up for Rio+ 20, and also begins to focus on what is needed to replace the Millennium Development Goals when they expire in 2015, many are starting to ask whether and how the private sector should be involved in a new framework for international development. Overseas Development Institute (ODI) developed some initial ideas on what business engagement might look like and is convening business and other stakeholders to take forward this discussion.

Both donors and developing countries are arguing for a greater focus on economic growth and private sector investment in a post-2015 agreement. The newly set up High-level Panel to advice on the design of a new development framework after 2015, highlighted the critical role that economic growth and trade play in reducing poverty. The case for leveraging private sector resources to accelerate progress towards development goals is often made, but so far there haven’t been specific proposals or discussions on how (if at all) the private sector could engage more effectively in a new development framework.

It is useful to review previous experience. When the MDGs were agreed, MDG8 on partnerships mentioned the need to deliver some goals together with the private sector (e.g. access to ITC and pharmaceuticals) but businesses were not involved in the goal-setting process. Some initiatives, such as the Business Call to Action, launched after the goals were agreed, sought to engage businesses ex post, inviting companies to make commitments to help deliver some of the goals.

The development landscape has changed significantly since early 2000. A number of businesses have become much more involved in poverty and development debates. As expectations on the role of business in development are on the rise, some of these businesses may, arguably, want to be more involved in the discussions about a new development framework this time round. This also makes sense from the point of view of development communities: leveraging on business resources and expertise where appropriate can help maximise development impact.

So, is there a role for private sector in the process of agreeing a new framework for development after 2015, and, eventually, in the agreement itself? And if so, what could this be? We [ODI] have developed a set of 3 initial proposals / scenarios, involving varying degrees of business engagement, as set out below:

- **Scenario 1 Business feeds into the development of the framework to ensure it maximises the contribution they can make to growth and development**: under this scenario, firms are consulted in the process of agreeing a new development framework, with a focus on what they would like to see included in the goals, that would best help them contribute towards delivering them. A coalition of business associations articulates the views of interested businesses and feeds into the UN-led process set to agree a new development framework after 2015.

- **Scenario 2 Business makes pledges and commitments attached to specific goals and donors strengthen partnerships with business to deliver goals**: in addition to feeding their views to the UN-led process, firms are invited to make (opt-in) pledges and commitments related to specific goals agreed by governments in the UN-led process. Goals are used as an opportunity to pool efforts and contributions from different relevant actors (including existing pledges) providing some coherence to different isolated initiatives. Although the initiative risks turning into a PR exercise, if focused and with buy-in from relevant actors, it could become an effective mechanism to drive theme/goal- based partnerships. These would take a more long-term and holistic approach to finding joint solutions that maximise the impact of donor spend and the scale and success of business investment.

- **Scenario 3 Improved reporting on the contribution of business to development goals – a separate framework for business**: business and development practitioners see an opportunity in debates about a new development agreement to discuss what makes an inclusive/responsible business and standardise measurement on business contribution to development goals. Currently reporting is varied making meaningful comparisons, even within the same industry, a difficult task. Working groups including industry experts are set up to work out a few top-line common indicators across industries, and more detailed industry-specific breakdowns. With calls for integrated reporting, some forward-looking
companies include this information in their main financial reports. Some governments adopt this framework as part of their regulation (e.g. requirements for those businesses registered or listed in their countries), or provide positive incentives to companies that report or comply.


Achieving inclusive and sustainable development is undoubtedly a complex challenge, but one that is more likely to be achieved if resources and expertise from different actors are combined and used strategically. Business can [and arguably should] play a critical role. In addition, it seems likely that business may also be more able to play an effective role when looking at the recent ‘non-performance’ of governments at Rio+20 in comparison to the progress made by business (see here http://www.economist.com/blogs/schumpeter/2012/06/rio20-summit for a good opinion piece on this topic). Download a copy of ODI's new paper 'Beyond 2015: What role for business?' (pdf) here http://www.odi.org.uk/resources/details.asp?id=6645&title=post-2015-millennium-development-goals-role-business  

An interesting Southern African case study of business playing a significant role in advancing sustainable development is that of food and clothing retailer Woolworths. It has 21,000 employees, revenues of about US$ 3 billion and operates 67 retail stores and 82 concession retail outlets across South Africa and a number of African states. 97% of its products are own-brand, which provides a unique opportunity for the company to develop a leading sustainable brand. Woolworths has been featured as a developing world sustainability champion by the World Economic Forum (see here http://reports.weforum.org/new-sustainability-champions/#view/new-sustainability-champions/case-studies/4-15-woolworths/) and see here http://www.woolworthsholdings.co.za/investor/gb/2010/environment/f.asp for one of its unique sustainability approaches called ‘Farming for the Future’.  

Urban Tipping Points – important new research on the roots of violence

Cities are often violent places – a social, ethnic and religious tinderbox of people piled up together with competing needs for space, housing or cash. Mostly the tension is contained, but not always – when and why does it spill over into bloody mayhem? That's the question at the heart of a fascinating research project run by Caroline Moser and Dennis Rodgers. The research team fed back on its findings in Geneva last week. Below is a summary of that discussion.

The Urban Tipping Point project scanned the literature and identified four ‘conventional wisdoms’ (not always based on much evidence) on the causes of urban violence: poverty; ‘youth bulges’, political exclusion and gender-based insecurity. It decided to test these with empirical research in four very dissimilar cities – Nairobi (Kenya), Dili (Timor-Leste), Santiago (Chile) and Patna (India).

The project title suggests its hypothesis – that violence does not arise in a continuous manner, but through sudden, discontinuous tipping points. The team also decided to borrow from commodity chains and explore whether ‘violence chains’ were a useful way to understand these outbreaks.

Each city study threw up something different and interesting: in Nairobi, the ‘violence chains’ discussions with focus groups revealed multiple forms of violence (landlord-tenant, sexual, criminal) beyond the political violence after the 2008 elections. These came together when they mapped them onto violence ‘hotspots’ such as a bridge in the Mukuru slum infamous for rape attacks. Community leaders jumped on the information and started discussing improved street lighting and providing housing for police to make the area safe.

In Dili, the focus was on the outbreak of post-independence violence in 2006. A key cause was the ‘institutional multiplicity’ of overlapping authorities and security systems (police v burgeoning private security groups v martial arts associations) – the project found that violence routinely ascribed to mobs and unemployed youths is actually instigated by local politicians and elites conducting turf wars (the Nairobi study came to the same conclusion).

Patna was initially chosen as a success story – a formerly crime-ridden city that after 2005 had seen a dramatic fall in conflict. But the research found something altogether different – violence has not gone away, merely changed its nature (decline in organized crime, but overall crime rates have increased) and geography (now much more
confined to the slums). The local authorities brought in a ban on gambling to (successfully) attack organized crime, but liberalized alcohol production and consumption to raise revenues, leading to an upsurge in violence against women. In the slums, the police seem to have ‘violence filters’, acting promptly to resolve disputes over water and sanitation, where caste tensions might spill over into the wider city, but largely ignoring more containable land disputes.

In Santiago, the main finding was that violence persists in poor, middle income and upper income areas, but in different forms: “In low-income El Castillo violence results from exclusion and a lack of opportunities; among the elites in La Dehesa it relates to accumulating and maintaining wealth and “afraid of the have-nots”; finally in the intermediate sector of Contraloría that violence occurs in a context where households struggle to improve their lot, suffering high stress levels and family breakdown.”

In terms of the four ‘conventional wisdoms’, the project found that politics and power, much more than poverty, are a driver of violence; that ‘youth bulges’ only become a problem when politicians start recruiting young men as foot-soldiers; that political exclusion is less related to violence than elites stirring up violence in a negative variety of inclusion and that gender-based insecurity is universal, with clear links between it and more public forms of violence.

Some of the study’s initial recommendations for the slum hotspots in Nairobi are:

1. Mainstream considerations of urban violence into wider processes like slum upgrading and urban planning
2. Engage far more with the police as development partners (the researchers were surprised by the level of interest from senior police figures in all the case study cities, and convinced that they were genuinely interested in finding solutions)
3. Use ‘participatory violence appraisal’ to identify hot spots and early warnings of brewing conflict
4. Land tenure systems are crucial, and are best dealt with by clarifying the ambiguities and overlaps in existing systems, rather than starting from scratch.
5. Similarly, overlapping authority systems (e.g. between traditional and modern; city and national) are a recipe for conflict, with more participation and active organization a healthy counterweight.

Duncan Green, in his Poverty Matters blog, mentions that for him this study comes pretty close to being the perfect research project: a clear, important question; a challenge to conventional wisdom; mixed research methods combining participatory qualitative and quantitative; gender mainstreaming throughout; practical implications; the majority of the research carried out by a range of southern research institutions and lots of in-country consultation on the initial findings.

He also reckons that the project could be improved in two main ways. “Firstly, it needs to get deeper into the idea of tipping points. It found these helpful in tying in localized outbreaks to city-wide social and political processes, but discontinuous change is generally symptomatic of complex systems, and the project could usefully draw on that literature to pay more attention to the nature of resilience and fragility and to think in terms of violence webs, not violence chains (life and conflict just aren’t as linear as the word ‘chain’ implies). A complex systems approach would also suggest thinking less in terms of specific policy recommendations and more about ways of working – circuit breakers, faster feedback loops, multiple parallel experiments and learning to fail faster. It might also be interesting, as one participant suggested, to borrow from epidemiology, for example to identify the individuals who act as the main vectors of violence in given situations and focus on influencing them, or look at the 70% of young people who, even in the most violent communities, do not engage in violence – understanding their ‘resistance’ to violence would be a fascinating place to start.

Secondly, the research needs to talk more about how some new key actors need to be drawn into the process – informal authorities, faith-based and grassroots organizations, local NGOs and, as mentioned previously, the police. These can be part of the problem as well as the solution (in Nairobi, slum residents identified community based organizations as causes of violence, and NGOs as peace makers). Picking the right people to talk (and more importantly, listen) to is more important than having another blueprint in your back pocket.
### ECONOMIC ISSUES

**Changing role of smallholder farmers in South Africa’s food system**

Given current South African political imperatives for socio-economic transformation, smallholder farmers are sometimes seen as a panacea for rural poverty and unemployment. Smallholder farmers are coming under increased pressure to actively participate in the mainstream economy, by integrating their food production into existing agro-food value chains. The government’s strategy in respect of market integration, by facilitating certification process (GlobalGAP certification), emphasises supplying produce for supermarkets or export markets.

South Africa food markets are estimated to be worth over R200 billion (US$24 billion), with the fresh produce sector commanding a 15% share. Food markets in South Africa are highly concreted and integrated and governed by a few oligopolistic agribusinesses. Four retail chains (Shoprite-Checkers, Pick n Pay, SPAR and Woolworths) increasingly dominate fresh produce markets, which has resulted in the displacement of traditional markets such as the National Fresh Produce Markets. Supermarkets have become de facto governors of the country’s food business. Supermarkets are bargain hunters, increasingly looking for producers who can guarantee not only competitive pricing but also quality, quantity and consistency. Restructuring processes, allowing supermarkets to dominate fresh food markets, often shun smallholder farmers, because of the high transaction costs incurred in coordinating smallholder farmers.

However, the Competition Commission’s recent decision to approve Wal-Mart’s acquisition of Massmart might just be a game changer. The Commission’s ruling that Wal-Mart must set up a local procurement fund may allow some smallholder farmers to access supermarket value chains on a substantial scale - or may just be an agreement on paper, not backed by effective implementation.

A recent PLAAS (Institute for Poverty, Land and Agrarian Studies) study in Limpopo Province sought to understand smallholder farmers’ participation in fresh produce value chains. The study found that most of the farmers who market fresh produce are full time commercial farmers but they are resource poor, with inadequate production equipment (e.g. tractors and ploughs) and infrastructure (e.g. irrigation). The smallholder farmers surveyed participate in multiple markets, ranging from formal to informal, but informal market participation dominates. Market diversification is probably a risk mitigation strategy given the price volatility and quality differentiation experienced in the fresh produce sector. The National Fresh Produce Market (Johannesburg Fresh Produce Market) has secured the largest market share of produce from these smallholder farmers, despite being the market that is furthest away from Limpopo (about 300km). Informal channels such as roadside and farm gate markets have a significant share, while supermarkets and agro-processors are the least supplied.

Contrary to the conventional view that supermarkets fail to source produce from smallholders, some (e.g. SPAR and Pick n Pay) do undertake local procurement - largely from smallholder farmers. This shift away from centralised procurement allows some smallholder farmers to participate in mainstream markets, but their potential is limited by the difficulties of maintaining quality and consistent supply.

Despite the significant role of informal markets, government has no policies or programmes to enhance smallholder capacities to supply these markets. The PLAAS study suggests that informal markets channels (roadside and farm gate) should not be overlooked by policy makers and development practitioners. Informal markets can play an important role in the rural population with respect to enterprise development, job creation, food security and income generation.

The study also revealed growing support from supermarkets for local procurement models. Local packhouse smallholder farmer co-operatives, have the potential to offer local supermarkets easy, co-ordinated access to smallholder produce. However, the PLAAS study showed that it is not enough to invest in building packhouse infrastructure and supporting formal market certification. Government support for smallholder farmers must also include:

- training, focused on developing viable business models (which link upstream and downstream processes) and financial management;
- facilitating or providing, financial investment in cooperatives until such time as they become going concerns; and
- finding ways to support smallholder farmer efforts by developing alternative fresh produce markets.

The Department of Agriculture, Forestry and Fishers (DAFF), the Department of Trade and Industry (DTI), and the Sector Education and Training Authority (SETA) now recognise support systems for smallholders are needed,
but so far their efforts in this direction have been weak and ineffective. Smallholder farmers are struggling to find production and marketing support in ways that are appropriately aligned with their production systems and capacities. While value chain integration is indeed complex, given that different smallholder farmers aim to produce for different market segments, the current failures of support systems are not due primarily to a lack of knowledge about what needs to be done, but rather because of insufficient action on the ground, and little on-going support for processes - not just infrastructure.


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**Africa needs another model of regional integration**

Support for regional economic integration in Africa runs high amongst the continent’s international development partners and African elites. However, its expression in European forms of economic integration is not appropriate to regional capacities and in some cases may do more harm than good. This lacuna is exacerbated by technical and theoretical analyses rooted either in economics or international relations literature. This [journal] article sets out to reconceptualise the foundations of African economic integration by reviewing key debates within each literature and comparing the results across disciplinary boundaries.

Overall, it is concluded that a much more limited approach is required, one that prioritises trade facilitation and regulatory cooperation in areas related primarily to the conduct of business; underpinned by a security regime emphasizing the good governance agenda at the domestic level. Care should be taken to design the ensuing schemes in such a way as to avoid contributing to major implementation and capacity challenges in establishing viable and legitimate states. In doing so, the presence of regional leaders with relatively deep pockets - South Africa in the Southern African case - points to the imperative of building such limited regional economic arrangements around key states. 

Source: [http://www.ingentaconnect.com/content/rowledg/is/2012/00000047/0000001/art00006](http://www.ingentaconnect.com/content/rowledg/is/2012/00000047/0000001/art00006)

These very interesting [and valid] recommendations are based on a study conducted by Peter Draper, entitled Breaking Free from Europe: Why Africa Needs Another Model of Regional Integration. It is published in the International Spectator, Volume 47, Number 1. A subscription is required to access this journal article. A read-only copy, however, can be requested from Tanja@hichert.co.za

A similar argument is made by Draper in an open access article entitled, Rethinking the (European) foundations of sub-Saharan African regional economic integration: A political economic essay. It can be downloaded here (pdf) [http://www.oecd.org/dataoecd/18/59/46013902.pdf](http://www.oecd.org/dataoecd/18/59/46013902.pdf). In this Working Paper, Draper takes stock of the last decade of African development from an African perspective. The author pleads for a recalibration of Africa’s regional integration models, a process whereby ‘champion countries’ spearhead a less ambitious, but more effective agenda that addresses the region’s immediate development needs. He goes on to argue that for Africa, the European model of regional economic integration—at least in the short term—is not useful. He makes the case for limited regional economic integration which steers clear of formal, institution-intensive arrangements as seems to be the norm in sub-Saharan Africa.

In another recent article, covering a somewhat related issue, tralac researcher, Sean Woolfrey, poses the question whether African countries should be jumping on the preferential trade agreement (PTA) bandwagon. See here [http://us2.campaign-archive1.com/?u=3bdf093b3611382763c2c1a5e&id=432e26506d&ec=faefcf6d7b](http://us2.campaign-archive1.com/?u=3bdf093b3611382763c2c1a5e&id=432e26506d&ec=faefcf6d7b).

Amongst others he argues that: ‘Given the current malaise in African countries’ traditional export markets and the inherent limits to gains from an inward-focused regional integration agenda, it surely makes sense for African countries to seek more substantial economic engagement with
countries in Asia and Latin America. However, whether this necessitates the conclusion of comprehensive trade agreements with these economies is less clear. If African countries do not seek to develop or participate in such arrangements, they risk being further marginalised by the global proliferation of PTAs, and especially by the increased use of such measures by dynamic economies in East and Southeast Asia. On the other hand, closer economic ties and greater bilateral trade and investment flows do not necessarily require formally institutionalised arrangements such as FTAs. Similarly, formal agreements do not necessarily result in substantially greater economic engagement. Indeed, much of the criticism of African economic integration has stemmed from the perceived failure of formal regional arrangements to stimulate greater trade and investment flows.

Two interesting new pieces of work on regional integration. Both indicate that Africa needs to look beyond conventional wisdom and attempt to implement something that is more likely to work.

### POLITICAL ISSUES

**Mozambique gas reserves could be ‘game changer’**

The huge reserves of oil and gas in Mozambique could be a "game changer" for the southern African economy, according to Professor Jenik Radon of Columbia University's School of International and Public Affairs.

Mr Radon said, however, that to ensure the country does not miss out on this "window of opportunity", it will need effective extraction laws, staff and "political will". Currently, Mozambique’s regulatory environment in the industry was lacking, and draft legislation was not nearly sufficient, Mr Radon said at a media roundtable in Johannesburg recently.

One country that was a good example of having the "political will" to get all the balances right was Ghana, he said. "The people seem professional and want to get it right." Mr Radon was optimistic that Mozambique would "get it right" too but there was currently a lack of capacity.

The proper establishment of laws and institutions was the critical foundation needed for the country to make the most of its large reserves, he said. The country’s existing draft law on oil and gas extraction was less than 20 pages, which was not nearly enough to give proper clarity on issues, he added. The role of government is to regulate the industry but the extractive industry was also a business and the interests of the two had to be balanced carefully, he said.

The problem though, was that companies were already staffed much better, and government would have to adequately handle pressures now, so that companies did not “call the shots” in the future, he said. Mr Radon said “strict liability” needed to be enforced in terms of health and environmental licences. The rights of landowners needed to be properly accounted for to avoid social disturbances, he said.

“This (the oil and gas reserves) could be a real game changer,” he said, adding that in the long term it could alleviate poverty and turn the country into a middle income country. But because change would not happen “overnight”, Prof Radon said: “The hardest thing about developing is managing expectations.” Communication and transparency with citizens would thus be critical, he added. “It’s going to be a long road for Mozambique”, he said, adding that the country needed to be patient and manage its people’s expectations.


A superb example beautifully articulated of how to avoid the resource curse and utilise the extractive industry for society as a whole. In a nutshell it is about proactive institutional capacity building, political will, transparency and the management of expectations. Perhaps, with the right interventions at the right time, Mozambique could have a game-changer on its hands instead of becoming yet another regional example of how not to do it.

### SOCIAL ISSUES

**State funding for low-fee private schools could serve poorer communities**

An extract of a recent op-ed by Ann Bernstein and Stefan Schirmer.

South Africa’s public schooling system needs fundamental reform. Choice and diversity in a schooling system can improve outcomes. The private (independent) school sector provides this diversity and an alternative way to access quality education. Private schools, especially in low-income communities, are a growing and vital part of ensuring more choice for parents and driving better performance by all schools, public and private. This means that those interested in schooling reform should be concerned about
the increasingly disabling policy environment affecting private schooling.

Research into private low-fee schooling in SA indicates that strengthening this sector requires smart regulation and an effective combination of public and private resources. Schools that receive public funding must be held accountable for how they use those funds but smothering all private schools in red tape will block an important way of expanding quality schooling. In the main, adequate regulations are already in place to hold private schools accountable. If these are adhered to, fraud will be prevented.

In 2010, the Centre for Development and Enterprise (CDE) published the results of its research into this innovative area of education. By showing that low-fee private schools exist in surprisingly large and fast-growing numbers in and around townships, inner cities and remote rural areas, the findings dispelled some myths: that private education is only for the rich and that most low-fee schools are run by crooks. Quality does vary, but ample evidence was gained of dedication on the part of “edupreneurs”, who establish and run schools, by teachers who work hard and for lower salaries than their public counterparts, and from parents and pupils whose desire for quality education has created this expanding market and drives accountability for results and standards. Many such schools provide choice for parents and pupils and the kind of competition and accountability that could be a spur to self-renewal in the public system.

What needs to be done to expand access to quality education in the private school sector? The experience in countries as diverse as India, Brazil, Pakistan, the Philippines, Chile and elsewhere gives food for thought.

India has adopted one effective way of assessing the output of all schools against a common standard. Its open school system allows pupils to study anywhere they choose, including at home, and to write a certificate examination at the end of class 3, class 5, class 8, class 10 and class 12. In this way, government bureaucracies ensure uniform standards without dictating how schools achieve results. At the same time, the system provides parents with information they can use to assess the quality of schools.

The Delhi-based Centre for Civil Society is demonstrating through a pilot project that an education subsidy, given directly to very poor parents, can be managed effectively and generate tangible benefits. These include better performance at school, more involvement of parents in their children’s schooling and a greater willingness among parents to spend money on their children’s education.

Private sector providers of education in India offer continuous professional development services from centres near clusters of private schools; send graduates from the best local universities to low-fee schools on a rotational basis; set up “information technology classrooms”; and use the “due diligence” reports on schools provided by education service providers as a way to assess the creditworthiness of schools. The providers of education services identify the good schools and provide assurances that they will not default on loans. Within this system, a large international bank advanced US$500 000 and committed itself to granting loans to 50 schools for the poor within two years. According to the bank, no school defaulted.

In the Philippines, an accreditation federation has been set up comprising different school accreditation boards. Each of these boards has to meet certain standards, after which they are allowed to accredit private schools under their jurisdiction.

In Pakistan, the Punjab Education Foundation is an autonomous, statutory body responsible for private, not-for-profit schooling. The foundation runs a range of government-funded programmes, including voucher schemes and teacher-training programmes; disperses public funds to private schools for the poor; and monitors them. This illustrates the advantages of governments establishing privately run, autonomous statutory bodies focused on the needs of private schools and deriving their legitimacy from the schools’ success.

Increasingly, companies all over the developing world are entering the education business by setting up school chains. They have the capacity to set up administration systems for large numbers of schools and develop a central curriculum and teaching and learning materials that are available at cheap unit cost to the chain’s schools.

These examples could motivate the government, private players, parents and civil society organisations to play distinctive roles in helping to design and implement a more favourable dispensation for quality, low-cost private schools in SA. Ideally, such a dispensation would promote the expansion of better quality private schools and encourage public school improvement through competition.

With these goals in mind, more decision-makers in the government could engage with practical ideas from other developing countries and collaborate with private partners on their implementation. Private sector organisations could explore the
establishment of a special loan facility at a favourable interest rate, and with a lenient repayment schedule, which private schools could access. Private funders could also help introduce more efficient business models, such as school chains. Parents and community organisations could provide sustained pressure to promote school choice and improve the quality of education available to the poor.

International experience shows that the regulatory environment can facilitate or inhibit the development of innovative, low-cost private schools. Creating a simpler and more equitable regulatory environment for private and public schools would allow more private schools to be established and grow in response to community demand. They could provide access to underserved pupils while still being held accountable for quality education by their users and government performance targets. Providing parents with schooling choices will encourage an environment that can drive better quality and performance in public and private schools. Increased state funding for children in low-fee private schools will enable these schools to sustainably serve even poorer communities. This will require more effective use of education budgets and would be a cost-effective way to raise educational outcomes.

Source: http://www.businessday.co.za/articles/Content.aspx?id=174443

A somewhat longer than normal article, however, its length is justified by the excellent argument presented, the interesting comparative examples, the 'paradoxical nature of this idea and the practical suggestions on how to support low fee private schools in poorer communities. The CDE research document, which was based on a workshop attended by local and international experts, can be downloaded from here: http://www.cde.org.za/article.php?a_id=418

ENVIRONMENTAL ISSUES

Climate change threatens Botswana's main tourist attraction

Botswana urgently needs policies to facilitate climate change adaptation to protect the Okavango Delta, the country’s most lucrative tourist attraction, according to a new study. Recent statistics from the Bank of Botswana show that tourism is the country’s second largest source of income, contributing US$753 million to GDP in 2011. The Delta is one of the most popular destinations for visitors to the country.

Wame L. Hambira, from the Department of Environmental Science at the University of Botswana in Gaborone, warned that unless government policies take account of current and forecasted climate shifts, the tourism sector could be badly damaged, with serious implications for the wider economy. Hambira’s findings appeared in a study published in the International Journal of Tourism Policy. Tourism activities conducted there include safaris, bird-watching, traditional canoeing, photography tours and camping expeditions. The delta is also used by local communities for water, fishing, agriculture, and the production of cultural artefacts such as baskets and beads, Hambira told SciDev.Net. But the distribution of water channels and flooding patterns are shifting, she said.

"The declining precipitation and increasing temperatures have implications for the amount of inflow into the delta,” she said. Reduced inflow could result in swamps drying out and forests being replaced by grasslands. As a result, local animal species would either become extinct or move away, with catastrophic implications for tourism. She said her findings point to the need for a comprehensive adaptation mechanism for Botswana. Botswana is in the process of formulating a new policy on climate change, but no date has been set for its introduction.


Like most Southern African countries Botswana is faced with a future youth bulge and limited options and economic opportunities for its population. Botswana’s economy relies solely on diamond extraction, tourism and a bit of beef export. 'Losing' the tourism sector as flagged in the study above, could be catastrophic. This extract illustrates the critical need for foresight-oriented policy-making and the implementation of adaptation mechanisms at national level. The capacity for this is limited in the region and there is a clear need for knowledge-building in this regard.

African nations agree to put a price on nature

Ten African nations have pledged, ahead of Rio+20, to include the economic value of natural resources in their national accounts. The heads of state or government of Botswana, Liberia, Mozambique and Namibia, along with ministers from Gabon, Ghana, Kenya, Rwanda, South Africa and Tanzania, signed the 'Gaborone Declaration'
at the Summit for Sustainability in Africa (24-25 May), co-hosted by the government of Botswana and the nongovernmental organisation Conservation International. The declaration undertakes to add the full value of forests, coral reefs, grasslands and other natural resources and ecosystems to the countries’ national and corporate planning and reporting policies. The countries agreed to report annually on their progress. See [here](http://blog.conservation.org/2012/06/incorporating-nature-into-decision-making-in-madagascar/) for reportage of a Madagascan case study.

### SCIENCE & TECHNOLOGY ISSUES

#### New science academy established in DRC

Researchers in the Democratic Republic of Congo (DRC) have established an Academy for the Advancement of Science and Technology for Innovation (ACASTI). The academy was launched in Kinshasa last month, at a ceremony entitled ‘Today’s Science for the Development of DRC Tomorrow’. It will particularly focus on the coordination of scientific research into natural resources to boost economic development.

The academy’s board president, Taba Kalulu Muzele, told *SciDev.Net* that it also aims “to contribute to the progress of science, art and literature, and ensure the visibility abroad of research carried out in different parts of DRC”. The academy will also supervise the development of research and reference teaching institutes, with a view to inspiring young Congolese people to consider careers in science. It will be established as an independent, non-profit, non-political body endowed with civil status, and will have administrative and financial autonomy.

Its financing will be drawn from members' contributions, donations, legacies, and support from the Ministry of Scientific Research. As well as academic membership, the academy can also confer honorary membership, for example to “an individual or civil benefactor interested in scientific research in DRC,” Taba said.


#### Madagascar launches online research network

Madagascar has launched an online research network, the Research and Education Network for Academic Learning Activities (iRENALA), which aims to boost science, technology and education in the country, as well as internationalise its science. The network, launched earlier this month, will promote discussions between worldwide researchers, students and policymakers, and facilitate access to digitised documents available in virtual libraries, according to Horace Gatien, president of Toamasina University. It will also encourage remote learning in the higher education sector, he said.

iRENALA will also connect Madagascar to a cluster of worldwide networks through GÉANT, an existing pan-European research and education network, which connects 40 million users in over 8 000 institutions worldwide. The project stems from an agreement signed in December 2011 between the government and Telma, an Internet and mobile phone service provider, which functions via the high speed fibre optic cable running through the Eastern African Submarine Cable System."

Learning and research activities are destined to improve, despite the fact that Malagasy universities are poorly equipped with infrastructure and resources," the Malagasy prime minister, Jean Omer Beriziky, said at the launch. "We will produce many more experts capable of taking the country forward and ending poverty within 20 years."


**Amongst others, academies such as these can make a good contribution to countering the 'brain-drain' prevalent in the Southern African region, and through collaboration, also serve as a local partner for relevant research. However, in the Angola case it is not known yet -- there is no website yet -- whether the focus on the "coordination of scientific research into natural resources to boost economic development” is geared more to exploitation or preservation / valuation. In the Madagascar case, the role of science and technology is more explicitly linked to countering poverty.**

#### Update on affordable mobile devices for Africa

Most mobile analysts in Africa have come to the consensus that the future of Internet access on the continent lies in mobile. Over the next decade, mobile devices will serve as the vehicle for delivering Internet access to millions of Africans. For this to happen, the devices will have to be highly affordable. As such, when device manufacturer Huawei launched its sub-$100 Ideos X1 Android smartphone in Kenya about two years ago,
many were filled with anticipation for the coming African smart phone revolution. Enter Samsung with its ambitious Africa smartphone strategy. According to Reuters, “Samsung Electronics Co aims to double its share of the sub-Saharan smartphone market to 20% by next year, as it focuses on affordable handsets.” [Viz. the Galaxy Pocket, a stripped-down member of its Galaxy smartphone family.] Samsung estimates Africa’s smartphone penetration to be at about 6% - 8% and it is looking to massively increase its share of the smart phone market. The company aims to make up to $10 billion in sales from Africa by 2015. Source: http://thenextweb.com/africa/2012/06/19/the-affordable-african-smartphone-battle-begins-samsungs-galaxy-pocket-vs-huaweis-ideos-x1/a

The African smartphone space is wide open for whichever device manufacturer best executes its affordable smartphone strategy. GSM Arena makes a detailed comparison of both devices across features, specifications and price. Check out their analysis here.

Mobile device competition is not the point here, though. The point is that the social changes created by these technologies and (more affordable) devices will get faster, spread further and over the next decade impact a range of areas in ways we cannot even begin to imagine. The ICT wave hitting Africa will be a driver of economic and social change unlike anything that has happened elsewhere, because, as Cyrus Farivar in The Internet of Elsewhere says: “When the Internet arrives in any country, it bumps up against various pre-existing political, economic, and cultural histories and contexts, and often what comes out are rather surprising results.” And to quote William Gibson: “The strongest impacts of an emergent technology are always unanticipated. You can’t know what people are going to do until they get their hands on it and start using it on a daily basis, using it to make a buck and using it for criminal purposes and all the different things that people do”.

Apps4Africa Southern Africa Winners
The winners of the Southern Africa portion of the Apps4Africa competition were announced on 15 June. They are:
- **1st $15,000 – myHealth (Botswana)** Helps users take precautions by providing information about weather and diseases related to the weather like diarrhoea and malaria. Then it helps the user schedule an appointment with a doctor to receive appropriate care.
- **2nd $7,000 – Service Anti Cyclone (Madagascar)** Alerts users to pending cyclones, which are very common, and cause significant damage to the area.
- **3rd $3,000 – UnsApp (Zimbabwe)** Spreads awareness through a web forum where adaptive management techniques maybe be considered in improving food security in the future.
Honourable mentions included:
- **Varimi (Zimbabwe and Zambia)** Varimi Portal pushes out key farming information to its registered users to help them adapt, for instance weather projections or answers to commonly asked agricultural questions.
- **OraniQ (Zimbabwe)** Promotes information about using chemicals to farmers in hopes that they will produce organic foods instead of chemical enhanced crops.
- **AgriLife (Madagascar)** Urges users to participate in reforestation projects to help locals recover from cyclone damage in Madagascar.
Source: http://blog.apps4africa.org/2012/06/15/announcing-the-apps4africa-southern-africa-winners/

Mapping African agriculture: A wealth of data comes online
New spatial data, harmonised with data compiled from a range of other sources, have now been made available online at http://harvestchoice.org/products/map, along with tools for exploring the information in creative ways. Using the website’s mapping capabilities, users can identify regions of a country with high concentrations of both poverty and cropland, or search for locations that combine production of sufficient quantities of a particular crop with good access to markets. Besides maps and mapping tools, the HarvestChoice website provides datasets, working papers, presentations, and spatial and economic models—all at no cost.