## Horizon Scan

**SOUTHERN AFRICA**

Issue 31, March 2012

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### POVERTY, DEVELOPMENT AND DONOR ISSUES

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Big Data, big opportunities for development

The expanding use of mobile phones throughout the developing world has brought many essential services (banking, healthcare and education) to previously disconnected populations. With the rapid growth in mobile communications, a torrent of transactional data, so called Big Data has emerged. Experts estimate it now reaches 2.5 quintillion bytes every day.

Careful analysis of this transactional data holds the promise to better understand mobile phone users living in extreme poverty. New services can be demand-based from the needs, living conditions and behaviours of those in extreme poverty can serve as the anchor points of innovation. Additionally, the public sector and civil society can offer more rapid response to conditions that threaten vulnerable populations, like droughts or famines, while the private sector hopes to offer more intuitive and user-friendly services.

In the area of agriculture and food security, analysing the patterns of mobile payments for agricultural products can enable more accurate predictions about food production trends, ensure the availability of proper crop storage, and result in more targeted financial services for smallholder farmers.

Mobile use patterns may also help governments and development organizations more quickly identify regions in distress. Early detection can help prevent families from leaving their land, further decreasing agricultural production.

Policy-makers, corporate leaders and development experts are becoming increasingly aware of the mutual benefits of creating a “data commons”, where this data can be transparently maintained and applied to the benefit of all. But a more concerted effort from all actors will be required to face the challenges of using this new data asset in an open, trusted and principled manner. Governments can take the lead by setting policy and legal frameworks that protect individuals.

A number of organizations, including the World Bank, are already working to overcome the challenges and create the incentive structures needed for cross-sector cooperation. And several forward-thinking governments in the developing world are demonstrating how they can catalyse the development of this ecosystem by opening their own datasets and actively managing their dissemination and use.

Despite the magnitude of the challenges, the opportunities available are bigger, and the chance to better serve individuals in emerging markets should outweigh the risks and push this effort forward.

Source: http://forumblog.org/2012/02/big-data-big-opportunities-for-development/

Malawi’s successful community-based ‘irrigation clubs’ have unintended consequences

Informal irrigation arrangements used by local Malawian farmers’ groups have been far more successful than top-down projects piloted by development agencies at improving farmers’ livelihoods, and have increased the amount of irrigated land in the country. However, they are creating worrying problems of land tenure and access to water, driven by a surge in the global demand for arable land – according to a new study by the Japanese government’s aid agency, JICA (Japan International Cooperation Agency).

A key insight is how the value of land itself is being dramatically affected by pressures to formalise land tenure, led by the attractive prospect of securing land ownership along riverbanks. Meanwhile the amount of stream water is rapidly depleting due to the unregulated spread of irrigation. These are the findings of Atsushi Hanatani and Mine Sato at JICA’s Research Institute (JICA-RI), the research arm of the agency.

The study describes how informal and temporary river diversion structures have been developed by entrepreneurial local farmers across Malawi who seek to supplement food shortages and increase their income, leading to the emergence of community-based ‘irrigation clubs’. These arrangements have been effective. However their success at expanding the amount of irrigated lands is creating a new and worrisome situation.

Crucially, Hanatani and Sato show how the value of the land is linked to the commoditisation of land along riverbanks, as landowners seek to formalise land tenure and begin to extract revenue from renting land to
other farmers. Furthermore, competition among upstream and downstream farmers is becoming intense over limited amounts of water. “Riverbank land during the dry season – and access to river water – used to be seen by the farmers as a pure public good, but as irrigation expands this is all changing”, explains Atsushi Hanatani, the first author of the paper. “The unregulated spread of irrigation, spurred by global demand for arable land and agricultural output, are responsible for that.”


Since the price spikes of 2008 and the renewed interest in smallholder agriculture as an engine for poverty reduction, land tenure has again become an issue of focus for the development community, especially in the rural areas of Latin America, sub-Saharan Africa, and South Asia. Some development experts argue that strengthening the property rights of the rural poor leads to increased investment and contributes to economic growth and more equitable development. Recent innovations in cadastral survey techniques, for example, can facilitate this process, making it more transparent, cheaper, and accessible to the rural poor. Others note that securing rights to land is only one intervention that contributes to growth and investment and that too much emphasis on land rights does not necessarily increase land tenure security or promote land improvements and expand productivity. They warn that determining property rights alone can present opportunities for individuals with more financial resources and political connections to take advantage of the rural poor, particularly women, and lead to large concentrations of land and inequitable development.

Tenure security rather than just property rights is the linchpin to rural economic development. With a system of property rights that is viewed as legitimate, smallholders can use their claim for collateral for agricultural inputs, improvements, innovations, and expansion of their enterprises. To achieve tenure security, however, property rights are only effective when combined with other measures, such as affordable access to legal services, trustworthy land administration, and honest, fair, and gender-neutral enforcement and judicial systems. Without these additional conditions, property rights alone have minimal impact on land tenure security and the commitment of smallholders, particularly women, to invest in improvements or innovations.

The study also highlights a ‘disconnect’ between some donor agencies’ attempts to improve irrigation management in African contexts and the local approaches which, in Malawi, have proven to be more successful. The study suggests donor agencies would do better to engage with these local irrigation methods but will be faced with a dilemma: foster their profitability and pushing them further down the path of commoditisation – running the risk of aggravating inequality between farmers – or attempt to foster the communitarian incentives which made them possible in the first place.

**ECONOMIC ISSUES**

Africa starts crowdfunding finance for films – creative industries are nascent, but could lead to economic growth, skills development and job creation.

Africa has begun to engage in crowdfunding some of the funding for feature films. Crowdfunding is getting lots of small contributions from individuals that taken together can make up a good chunk of change. Furthermore it connects the film to the audience at pre-production stage.

Despite Nollywood being in the top 3 of the largest film industries in the world, Africa’s total contribution to the international film economy is almost negligible compared to Hollywood and Bollywood. The Nigeria and the South African governments have seriously begun to think about how their film industry might start to become a significant export force. But one major challenge faced by African film-makers and producers can best be illustrated by comparing Hollywood revenue sources and expenditure to those made by Nollywood producers.

The Hollywood studios spend heavily on both production and marketing-distribution so that they can maximize a film’s performance in a relatively short period of time. In this short period covering cinema and home video release, the film will make the majority of its revenues. It is a different story with African films where cinema box office revenues are almost non-existent and where VCD/DVD releases struggle to provide the majority of revenues in Africa’s pirate infested waters.

What has changed over the last 10 years is the arrival of the Internet to help film makers. This could offer a lifeline for the African film industry, as it can positively help three of the steps needed to make a film
financially successful: funding, production, and distribution. With more fibre delivery, new satellite DTH solutions and some lower priced internet broadband services becoming available across the African continent, film makers have started to use the internet to make their films a success.

Crowdsourcing allows a film-maker to pitch his or her idea and in exchange for some modest benefits to raise funding for it. This is not going to float Hollywood blockbuster budgets but for more modestly budgeted film projects, it can form one leg of a three-legged funding stool that might include donations, sponsorship and public funding. Also if you have a film idea that can raise either significant numbers of donors (however small) or significant sums of money, this might help persuade other sources of funding to come in.

One example of successful crowdsourcing is The Good Man, a low budget feature film set between Northern Ireland and South Africa. South African directors Jordan Harland and Tyron Janse van Vuuren have both used the IndieGoGo website site to raise money for their film projects. Visitors to the site are given a brief plot summary of the movie and are able to make contributions anywhere from as small as $1.

In the African context, there is clearly a trust issue: sending off money to someone you've never heard of to finance a film sounds like the perfect Nigerian 419 scam. But provided individuals can demonstrate that they are what they say they are, this opens a new route for film funding. There are also film funding bodies who can help weed out the unscrupulous.

But why stop with films? Africa really needs good locally made TV programmes. These need both good creative ideas and money. Africa’s TV broadcasters are in the main risk-averse and would prefer to buy cheaper telenovelas or Nollywood than invest in their own programming. Indeed, some actually run their broadcast stations like a taxi firm: you pay for airtime to show your programme. A good crowdsourcing site outside of South Africa might raise both the level of the creative pool of ideas and finance. Any takers? More on crowdsourcing here and here:


There surely is a market ready and waiting – it could herald a new era of African language creative industries with all its concomitant benefits. In the absence of capital and funding, crowdsourcing is a definite start / early signal.

**Code for responsible investing kicks in**

The Code for Responsible Investing in South Africa (Crisa) has taken effect and will provide institutional investors with guidelines encouraging them to integrate responsible investment principles into their work. But the code, which is expected to be adopted by all the members of the Association for Savings and Investments SA (Asisa), will be voluntary. Last year Finance Minister Pravin Gordhan warned that if there was not enough voluntary adherence to Crisa, more regulation could be considered. South Africa is the second country after the UK formally to encourage institutional investors to integrate into their investment decisions sustainability issues such as environmental, social and governance (ESG). John Oliphant, chairman of the stakeholder committee that drafted the Code last year, says: “As long-term investors with fiduciary duties, we simply cannot afford to ignore the importance of integrating sustainability issues, including ESG, into long-term investment strategies. As institutional investors we have the ability to influence and encourage the companies in which we invests to apply sound governance principles and to care for the environment in which they operate.”

Crisa applies to institutional investors such as pension funds and insurance companies as the owners of assets, and their service providers including asset managers and consultants. It encourages institutional investors and service providers to adopt its principles and practice recommendations on an "apply or explain" basis. The effective date for reporting on the application of Crisa is 1 February 2012.

**The growth of Africa's fast-food industry is opening up opportunities for farmers.**

In some places in Africa, fast-food giant Kentucky Fried Chicken (KFC) doesn’t serve lettuce on its burgers. This is not to save on costs or due to a difference in local tastes, but rather because there are no local lettuce producers who can supply the quantities and quality required by KFC.

"In one or two of our geographies ... we haven’t got suitable lettuce production, and as a result, our burgers don’t actually have lettuce on them,” Keith Warren, managing director of KFC Africa told How we made it in Africa in an exclusive interview.

It is colloquial knowledge that the Afrikaans creative industry (film, music, TV programmes and publishing) employs tens of thousands of people and produces more than all the other African languages put together. Were this occurrence to be repeated – and
“That is a short-term problem, and it is not something we want to entertain at all because burgers don’t taste as good without lettuce ... We are working very hard and closely with the local farmers to get them to produce lettuce at the quality and the standard that we need to put on our burgers.”

Yum Brands!, the US-based owner of KFC, has embarked on an aggressive African expansion strategy. The company has been operating in southern Africa since the 1970s, but has over the last few years started to grow its footprint further north. In 2012 KFC plans to open new outlets in Angola, Malawi, Tanzania, Uganda, Zimbabwe, the Democratic Republic of Congo and Madagascar. The company already has a presence in Nigeria, Ghana and Kenya, among other countries.

According to Warren, there is a huge appetite for KFC among African consumers, but that in many cases growth is being held back by inadequate farming capacity to supply the company with chickens and vegetables. He used the example of Nigeria, a country where Yum! aims to have 300 outlets by 2020: “The only limiting factor we’ve got in Nigeria right now is actually chicken supply, and finding suppliers who are able to meet our global quality standards in sufficient quantity. The commercial chicken industry is horribly underdeveloped.”

Supplying a brand such as KFC with chickens and other products has the potential to be a lucrative business for farmers. Warren says that in South Africa, where the company has over 600 outlets, nearly 8% to 10% of the commercial chickens produced are sold through KFC. He notes that there are numerous opportunities for farmers and entrepreneurs to partner with KFC.

When KFC entered the Nigerian market, the company had difficulty in persuading farmers to become its suppliers. “When we first went into Nigeria, it took a lot of convincing to get one of the chicken farmers to partner, because of the amount of investment they needed to make to achieve our quality standards. The other chicken producers weren’t particularly interested. But once they saw the success we were achieving with that one farmer, they then went and said, ‘We better get on board’. And now we have four chicken producers in Nigeria, all certified and credited, and achieving our standards…”

According to Warren, it is KFC’s ambition to have local suppliers in each of the African countries where it operates. In areas such as Nigeria and East Africa, KFC had to develop its supply chains from scratch. However in Ghana, the company currently uses imported chicken, but Warren says the plan is to start with local production. “Why would you want to be paying the cost of ... shipping products, when you can actually source it locally? Most of Africa is blessed with enormous agricultural wealth, so therefore it is a matter of unlocking that and developing the technology to meet our supply demands.”


Yum! is certainly not the only restaurant group presenting opportunities for African farmers. For example, just during the last three months of 2011, South African fast-food and restaurant franchisor Famous Brands has opened 18 new outlets in the rest of the continent. This is in addition to numerous other restaurants and hotel groups looking to take advantage of Africa’s growing middle-class.

**POLITICAL ISSUES**

**Active citizenship needed for transformation**

South African people need to be more active in the country’s politics than they were during the anti-apartheid struggle, Minister in the Presidency Trevor Manuel said. “I talk about people who have voices. I am talking about communities who come together and say, this is our health facility. If the nurses are watching The Bold and the Beautiful or Generations, and people are not getting treatment, they say it’s our problem, we will fix it,” he said yesterday. “That is the kind of active citizenship that tore down the wall of apartheid. It was that that emboldened us to do what we had to do, and we need it now more than we ever needed it before 1994.”

Manuel, who also acts as the National Planning Commission chairperson, was speaking at a Centre for Small Business Development meeting at the Soweto campus of the University of Johannesburg. He said the committee and its National Development Plan would explore and experiment with different ways of facilitating development in the country.

“Point out to us [the committee] what we are not doing right. Come up with better suggestions so that when we take this development plan to Cabinet we will take the view of not just 26 commissioners, but will say with authority that this is the resident voice of South Africa.” “The other day in Parliament I quoted a philosopher, and he is not one of the great philosophers that people identify with. The one I quoted was a guy...
with dreadlocks called Peter Tosh. The quote was: ‘everybody wants to go to heaven but nobody wants to die’,” he said. “If you want the transformations [in the country] you have to make the tough decisions to get there.


Minister Manuel is referring to, and calling for, one of the critical leverage points identified by the Dinokeng Scenarios for South Africa’s future - an engaged and active civil society. This, together with a collaborative and enabling state, should lead to the most preferable 2020 future, called ‘Walk Together’. There is a lot of work to be done with regard to both these key scenario axes. Currently civil society tends to be weak, in silos and sometimes suffering a sense of entitlement - ‘everybody want to go to heaven but nobody wants to die’ - whilst the state, especially in the face of global challenges and complexity, is increasingly ineffective and prone to corruption. It would seem the current path is towards the ‘Walk Apart’ future.

Angolan hip hop as a political opposition tool

Critical voices are usually effectively repressed by the authorities in Angola and very limited public mobilization has occurred up to now. There is, however, a milieu of critical hip-hop musicians, who have mainly operated underground, but inspired by the movements in Northern Africa started to move into the streets.

One of the most famous Angolan rappers is MCK, who just released a new album with the title ‘Proibido Ouvir Isso’ (Listening to this prohibited). He said to Voz de América that Angolan hip-hop is “a new tool for political participation that has brought back to life the revolutionary spirit of the music from the 1970ies, which was music against the colonial repression.”

According to the Angolan journalist Victor Vunge, who knows the hip-hop milieu from the inside, these musicians have played a protagonist role in organizing and mobilizing for the protests during the last year. They primarily use the internet and one of Angola’s few independent radio stations, Radio Despertar, to spread their music and messages, to mobilize and to document the attempts at silencing them.

The perhaps most critical rapper of this movement, known as Brigadeiro 10 Pacotes, currently lives in exile in New York, from where he has strongly condemned the violent attacks. His latest release is called ‘The State of the Nation’, answering back on a speech with the same name held by the president in Parliament. The lyrics include statements such as:

- The worst weapon in Angola is the disease of corruption
- If you have money you have health, if you don’t you die like a dog
- The hospital beds are for sale, the sick sleep on the floor
- This is the crude reality
- Angola is like a naked prostitute where all the leaders unquestioned eat it all

Source: http://freemuse.org/sw46964.asp. See also here for mainstream coverage of this phenomenon http://www.economist.com/node/21551547

According to the Economist MCK and fellow artists are central to a slender but persistent protest movement that is making the government tetchy in the run-up to parliamentary elections due later this year. One of Angola’s last two independent newspapers, Folha 8, was recently raided (see here http://mg.co.za/article/2012-03-13-angolan-newspaper-targeted-for-dos-santos-outrage) for lampooning the president, while other media outlets have long since been bought off. Nobody expects an effective challenge from the host of brave but impotent opposition parties. Yet despite being banned on government radio, the lyrics of MCK and other rappers sound a constant subversive drumbeat.

Angola is an example of what has recently been coined a ‘MIFF’ – Middle Income Failed and Fragile – state by the Economist. These are semi-prosperous when measured by income per person, however, they contain a large and rising share of very poor people. Geoffrey Gertz and Laurence Chandy of the Brookings Institution, calculate that MIFF countries account for roughly 180m of the world’s neediest people (those living on less than $1 a day). That is 17% of the total number of the world’s poorest—more than the 10% who live in poor but stable countries. MIFFs also pose a big problem for Western governments which want to influence them. Being no longer poor, their elites rarely see the need for aid, military or developmental. Being fragile, their governments often consist of complex, fractious coalitions that are hard to deal with.
SOCIAL ISSUES

South Africa may soon have one of the world’s few self-funded universities

Education pioneer Taddy Blecher recently announced that he was aiming to make his Maharishi Institute fully self-funded “within one to two years.” The Maharishi Institute, which is part of the Cida Foundation, is situated in the Johannesburg central business district. Cida, an acronym for the Community and Individual Development Association, was formed in 2000, and offers students an almost free university education.

In South Africa, the Maharishi Institute was created under the Cida brand. The institute’s educational offering is similar to that of Cida, but offers a different education experience in terms of subjects covered and other areas, for slightly more fees per person. The institute aims to give the previously disadvantaged an “accelerated holistic education” that involves students working at an in-house call centre and in other roles at the university, while they study. Speaking at the institute’s recent monthly breakfast, attended by other education entrepreneurs, Dr Blecher said that self-funding could be achieved because of the input of the institute’s call-centre business.

“Our students are working in the centre and looking after much of their own campus’s needs such as basic maintenance,” he said. “They help fix lights and so on. This is while they study and learn to function as excellent individuals.” He said the institute always intended to differentiate itself from other schools by being self-funded, low cost and easy to access. Most students at the institute are on financial aid programmes, under which up to 100% of their fees can be covered by noncollateral-based student loans. Through working at the call centre, those students are able to repay the loans over time while they study.

Source: http://www.businessday.co.za/articles/Content.asp?id=168179

A unique approach to improving education has won prestigious international CSR award.

Cape-based Symphonia for South Africa received the Blue Dart Global Corporate Social Responsibility award for social entrepreneurship at a ceremony held at Taj Lands End in Mumbai, India recently. The award was in recognition of the development of a programme called School @ the Centre of Community, which brings business leaders and school principals together in a co-learning and co-action agreement.

James Eckley, Symphonia’s national projects manager, says the approach not only pairs business and education but encourages communities to become involved with their local schools. According to Symphonia’s website, the project rests on the belief that many of the social challenges in South Africa are directly related to the breakdown of communities. “Schools are the centre of communities. We know pupils will do well if communities support them in their education,” says Eckley. Symphonia, which concentrates on impoverished areas, has taken its methods to 21 schools in Cape Town, 16 in Johannesburg and four in Durban and, says Eckley, the project is growing by the week. But there is a long way to go - it is estimated that there are about 25 000 under-performing schools in South Africa.

According to Eckley the crisis in education is an indication that many existing projects are not achieving the desired results because the immense challenges principals face have demotivated them and they have lost their drive and passion. As a result, he says, it is not sufficient to put principals through training programmes. Instead, the business approach of providing each one with a partner and surrounding her or him with an actively engaged team is more effective.

“Symphonia’s method gives the school principal a sense of support, ignites leadership within him or her, and encourages resourcefulness,” he says. In Symphonia’s experience, the best people to support principals are South African business leaders who are experienced in and equipped to implement organisational change. But the community, too, has a responsibility. “It takes a village to raise a child,” says the old African proverb.

It is estimated that children spend just 20% of their time in school and the rest of it within their community. For this reason the NPO urges parents and communities to become involved in their children’s...
education, as parents, Symphonia maintains, are a child’s primary teachers. Among the factors Symphonia believes will lead to success are:

- the establishment of a new contract between schools and parents that encourages active participation;
- making a school the hub of a community through community-building sessions and other events;
- the implementation of an SMS system that allows schools to quickly and easily communicate with parents;
- the use of homework diaries to facilitate conversations between parents and teachers;
- and the use of “smart-kids” books to enable parents to become actively involved with homework.

However, the organisation emphasises that communities should not expect a quick fix and that it can take between three and five years to transform the situation in a school.


Examples of creative solutions to the problems and opportunities of city dwellers.

The Deutsche Bank Urban Age Award jury convened from 20-22 March in Cape Town to adjudicate 254 entries of projects that recognise and celebrate creative solutions to the problems and opportunities of city dwellers. The jury toured the city and unanimously identified eight projects to shortlist for the R750 000 (US$ 97 000) prize money. In alphabetical order they are:

- Bicycle_Empowerment_Network (BEN) (city-wide)
- Masiphumelele_Community_Library (Masiphumelele)
- Mothers Unite (Lavender Hill)
- Regeneration of City and Soul (Retreat)
- Rocklands_Urban_Abundance_Centre (Rocklands, Mitchells Plain)
- Social Justice Coalition (Khayelitsha)
- Thrive_Recycling (Imizamo Yethu/Hout Bay)
- VPUU - Violence Prevention through Urban Upgrading (Khayelitsha)

The jury believes the submissions reflect the rich reservoir of organisations, talent, energy and grassroots leadership across all segments of the city, a diversity of activism that bodes well for Cape Town’s future.

For more information on the award, visit www.DBUAaward.net.

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**ENVIRONMENTAL ISSUES**

'Co-management' of fisheries can meet the livelihood needs of local communities and protect fish stocks

Finding a sustainable approach to fisheries management is the natural resources scientist’s equivalent of searching for the Holy Grail. A new study recently presented in the Proceedings of the National Academy of Science (PNAS) may have taken the search one step closer to finding a way to avoid a fisheries’ tragedy of the commons. The study shows that partnerships between government, conservation groups, and local fishers – known as 'co-management' – have considerable success in both meeting the livelihood needs of local communities and protecting fish stocks. One of the largest studies of its kind, the team studied 42 local fisheries arrangements on coral reefs in Kenya, Tanzania, Madagascar, Indonesia, and Papua New Guinea, using a combination of interviews with local fishers and community leaders and underwater fish counts. The team discovered that co-managed reefs were less likely to be overfished compared to reefs that were not. 'We found clear evidence of people's ability to overcome the 'tragedy of the commons' by making and enforcing their own rules for managing fisheries', explains lead author Dr Josh Cinner of the ARC Centre of Excellence for Coral Reef Studies and James Cook University, Australia. 'More importantly, we have identified the conditions that allow people to make co-management successful, providing vital guidance for conservation groups, donors, and governments as to what arrangements are most likely to work', Cinner says.

'Managers and donors can facilitate desirable co-management outcomes by working with resource users on context-dependent strategies to improve livelihoods and governance, such as dampening the negative influence of global markets, providing equitable livelihood benefits, and strengthening local institutions. These policy actions will be a substantial departure from the norms of many fisheries managers, and implementing them effectively will require forging partnerships with social scientists, donors, financial institutions, and civil society.'

This study can help solve the overfishing crisis where it is needed most, by showing what does and does not work in the small-scale fisheries that are most difficult to manage. Essentially, both top-down and bottom-up solutions are needed.
Work in progress study looks at whether ecosystem services can contribute to poverty alleviation

South Africa’s Council for Scientific and Industrial Research (CSIR) and the Stockholm Resilience Centre (SRC) have collaborated to produce a poster for the Planet under Pressure conference that looks at ecosystem services for poverty alleviation. Their work in progress indicates that critical research challenges are related to a better understanding of the links between ecosystem services and human wellbeing, trade-offs between services, implications of property and user rights, and short and long-term resilience of interventions. They identify seven general strategies for poverty alleviation related to ecosystem. The strategies aim to:

1. **Meet basic subsistence needs** through improved provision of food, fuel, water and basic building material through small interventions at household level. Example: urban gardening or providing small livestock.

2. **Enhance productive and functional landscapes**, focusing on maintaining or enhancing regulating ecosystem services such water infiltration, erosion control, or micro-climate regulation in order to secure or increase provisioning services. Example: tree planting or erosion measures.

3. **Support small-scale agricultural development** through investments in or dissemination of new technology, agricultural inputs, knowledge enhancements, or market access to generate economic returns. Example: supply of fertilizers

4. **Market local high value ecosystem products**. Supporting harvesting, production, market access, and branding of local ecosystem produce to generate income. Example: shade grown coffee or shea butter.

5. **Stimulate nature-based tourism.** Enabling facilities and infrastructure for tourism to create employment and income-generating opportunities for local people. Example: tourism lodges adjacent to national parks.

6. **Enable biocultural revitalization.** Initiatives drawing on cultural ecosystem services to strengthen identity and reclaims rights to land and ecosystem services. Example: the Potato Park in Peru established to enhance protection of crop diversity and farming practices in a sacred landscape.

7. **Provide compensation and reward for ecosystem services.** Agreement that implement direct and indirect compensation from ecosystem service beneficiaries to land stewards. Examples: Payments for Ecosystem Services, or Working for Water program.

Two complementary PhD projects have been set up to empirically investigate the links between poverty and ecosystem services in the Eastern Cape Province of South Africa. The landscape in this province has been heavily influenced by Apartheid spatial planning policies, and it still exhibits some of the highest levels of poverty in the country. At the same time, the region is one of rich cultural and biological diversity, with fascinating social and ecological gradients. Source: Research not published yet, poster available on request: e-mail Tanja@hichert.co.za

**TECHNOLOGY ISSUES**

**Can creativity fix South(ern) Africa?**

“Why make money in America when you can make a difference in Africa?” Tech entrepreneur and angel investor Stafford Masie challenges the audience at Culture Shift, an ideation and mentorship programme sponsored by the British Council and held in Johannesburg last weekend. Masie offered to match the prize money of R50 000 (US$ 6 500) for the winning concept that will emerge from three exhausting days of development in a warehouse space in downtown Johannesburg.

[While] politicians argue about the meaning of the word “refugee” while the unemployed grow increasingly impatient for jobs to materialise out of the ether. Now, more than ever we need fresh thinking and new ideas. Which is where creativity and innovation of the kind promoted by Culture Shift come in. It is not possible to compete with the Far East on price or productivity; it’s
in the quality of the ideas we conceive and execute that economic freedom lies.

South Africa ranks 45th in the Global Creativity Index, a measurement tool developed by the highly influential urbanist Richard Florida (the leading countries are the usual suspects: Sweden and the US; China ranks 58th).

Florida’s argument has long been that economic success is closely linked to the presence of what he calls the “creative class”, knowledge workers who focus on developing new innovations. Creativity, he argues, reduces inequality, improves quality of life and increases overall happiness.

The criteria used to produce the GCI rankings are Florida’s three critical Ts of economic development: technology (R&D, innovation), talent (human capital, education) and tolerance (attitudes to diversity), and the importance of all three is clearly evident in this diverse crowd, who range from environmentalists to artists and web developers. The thinking behind Culture Shift is this: put together someone who’s creative with someone who can code and someone with business nous, and see what they come up with.

The 35 participants, selected for the passion for what they do, excellence in their field and commitment to making a positive impact on society, are given three days to come up with a concept, code it, prototype it and pitch it to a panel of investors. Some of the ideas presented include:

- Culture Club, a mobile app matching audiences to cultural events.
- qriosity, a mobile app which allows visitors to Johannesburg to scan QR codes on buildings to learn more about their history.
- Indabo, which aims to match underutilised community facilities with groups looking to hire them.
- Pre-ScholaR, a preschool in a box, intended to address one aspect of South Africa’s education crisis.
- Arts-In, a mentorship programme for artists, and
- Family Match, a platform where South African families from different backgrounds meet one another in order to learn more about how they live.

“This is your chance to create a cohesive culture socially,” explains one of the presenters. The questions are tough: Are your projections correct? How will you generate revenue? Monetisation and business models are clearly a challenge.

How sustainable or practical are the solutions that have resulted from the exercise? It’s hard to imagine that any of the ideas that were pitched could be real money-spinners. Perhaps that isn’t the point though. I ask entrepreneur Nhlanhla Sibiya, whose passion for Johannesburg inspired the winning idea, for his view on the potential for creativity to contribute to economic upliftment. "We’re already a creative economy,” he says with quiet conviction.

Source: http://mg.co.za/article/2012-03-26-can-creativity-fix-south-africa

There is an under the radar shift to creative tech-oriented entrepreneurial activity currently building up momentum in South Africa. When connecting the dots of events such as the one described above, with the launch of Angel Investors group AngelHub, with the activities of Silicon Cape Initiative, with competitions such as the Cape Town Entrepreneurial Competition, it becomes possible to image that an African ‘Silicon Valley’ tailored to African needs may yet emerge. A case in point is SMEasy, a cloud-hosted business and financial management system for Small and Medium Enterprises. See also this related article http://businesstech.co.za/news/internet/8288/silicon-valley-in-south-africa/

New online map overlays conflict, climate change and aid in Africa

A pilot version of an online mapping tool has been launched in Africa which enables researchers and policymakers to identify how climate change vulnerability, conflict, and aid intersect. Researchers from the Strauss Center’s Climate Change and African Political Stability (CCAPS) programme, United States, integrated data from areas of climate change vulnerability and active aid-funded projects in Malawi, and mapped this information onto the locations of Malawian conflicts up to 2010.

The result is a dynamic tool that can help policymakers, researchers and aid groups plan for climate change mitigation activities and deliver aid more effectively. The tool comprises multiple datasets that can be layered to provide answers to a range of questions; for example, whether regions most at risk from climate change are benefiting from aid. It can also be used by policymakers and non-profit organisations to find under-served communities and implement aid projects there – and by the communities themselves to lobby for help.

The researchers plan to make the tool available on government and civil society websites, as well as through mobile phone applications, so that policymakers and interested stakeholders can access it. , she added. There are also plans to replicate the tool in Ethiopia, and to train stakeholders elsewhere in Africa to carry out mapping and
identify projects with a specific climate change focus. Additional pilots are planned with grassroots communities vulnerable to climate change, to determine whether it is easy for them to access and use. 


Water monitoring 'easier' with free mobile phone app

A mobile phone application that enables users of low-cost phones to submit water quality results quickly and easily is having a positive impact among users. The Water Quality Reporter (WQR) application was developed by the iCOMMS team at the civil engineering department at the University of Cape Town in South Africa, under the leadership of Associate Professor Ulrike Rivett.

The application was developed under the auspices of Aquatest – a multidisciplinary international research programme conducted by a University of Bristol-led consortium – which is developing affordable water-testing hardware and software for use in developing countries. The reporting application means people with entry-level mobile phones can submit water quality test results via SMS.

As well as developing the WQR software, the iCOMMS team have also developed mechanisms for integrating water quality results into existing information systems, and a feedback loop between communities and supporting authorities. The system is being used to carry out residual chlorine water testing, and to carry out hydrogen sulphide tests, which check for microbiological contamination in water destined for household use.

“All of the programming [used to develop the application] is open source and locally developed,” she said, adding that WQR can be downloaded for free from the iCOMMS website. Gazi Xolile, from the Water Care unit of Amathole District Municipality, which covers rural areas of South Africa’s Eastern Cape Province, praised the application. “The cell phone device is ... convenient to use as you can click to the application at any time and view the water quality results without needing to be at the office,” he said. “We are also looking at expanding the scope of using this system to conventional water treatment works where the plant operators will log in the dam levels, reservoir levels, rainfall, turbidity and pH information.”

The application is also being used in the Chris Hani Municipality around Queenstown, according to Francois Nel, assistant director of municipal health services and environmental management, who said it was easy to use and required little training. “The live report back system gives immediate indication of non-compliance at sample points that can be immediately followed up,” he said, adding that it was also being used to monitor the performance of environmental health practitioners.

A broader range of water quality tests will be possible in future, said Rivett. Separately to her work on WQR, Rivett is also exploring the application of mobile phone technology to other health-related settings, including the provision of support to people with HIV, through a non-governmental organisation she has established called Cell-Life.