Innovation Africa

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It is now ten years since the *Economist* newspaper declared Africa to be "the hopeless continent". Today, the same magazine offers a different prognosis, building on the World Bank's prediction of growth rates for sub-Saharan African economies that will be twice those of Europe. This is in the context of a severe and prolonged recession in North America and Europe and a growing realization that the epicentres of development are shifting eastwards, and southwards. Today, I will reflect on what this may mean for some aspects of a small part of innovation. The qualifiers are deliberate; predicting the future in our complex, interconnected world in hubris.

My case will be in three parts. First, that sustainable economic growth depends on myriad "innovation pathways", rather than on discrete, spectacular events. Second, that there is nothing inherently ethical about innovation, economic growth or markets, and that beneficiation comes from organizational context. Third, that the "Third Sector" has a key role – NGOs, civil society bodies, Trusts and the like that work in the space between the private sector and government.

One evocative instance of these shifting forces and opportunities is film and Manthia Diawara's wonderful new book, *African Film: New Forms of Aesthetics and Politics*, published earlier this year. I read this in Manchester, thinking what to say in Dakar. Diawara, born in Mali, writes from New York, thinking what to say about African film in Berlin. The thread that runs through his essays is that world cinema – including African cinema – has been appropriated by Europe as a weapon in its cultural war with Hollywood. By valorizing African cinema, French producers (the particular focus of Diawara's work) have continued to appropriate Africans' creativity and imagination. Instead, Diawara wants recognition of the "value and specificity of African cinema in both contemporary and aesthetic terms, as well as in terms of the visions of the world from a continent that has been silenced for a long time". He stresses "the value in Africans owning their own aesthetics and vision of the world in cinema … a dialogue of equal partnership between North and South" (Diawara 2010:73). I will return to Diawara's analysis of current trends in Africa's film industry later.

Cinema leads into the question of economic growth and development in a second useful way. Film production, in common with other digital commodities and services, makes money from the marginal costs of reproduction and distribution. The main, and often very substantial, investment is upfront and the return lies in selling access to a catalogue of material that can be distributed very cheaply on DVDs (or, increasingly, on-line). This applies as much to aging Hollywood blockbusters, music and course materials for universities. The business model was perhaps best refined by the Disney Corporation, which polices its copyrights mercilessly, tracking down anyone who reproduces the ageless Mickey Mouse without payment of a royalty. Diawara's critique is directed against a future for cinema in Africa in which old hits from the USA or Europe swamp out opportunities for African producers and directors.

Indeed, one strongly promoted vision for Africa's post-hopeless era is exactly this – a vast sea of new consumers. This paradigm achieved wild popularity in books such as C.K. Prahalad's *The Fortune at the Bottom of the Pyramid* (2004) and Stuart Hart's *Capitalism at the Crossroads: the Unlimited Business Opportunities in Solving the World's Most Difficult Problems* (2005). Prahalad, Hart and others noted that, by the turn of the millennium, large, often trans-national corporations appeared to have saturated their markets for products and services in Europe, North America and Japan. But a very large number of people – notionally, one billion – were outside established consumer markets. If companies could change their marketing strategies, they could penetrate these new markets and safely navigate the "crossroads" that capitalism was seen to face.

Favourite examples were repackaging detergent into small amounts and harnessing large numbers of women entrepreneurs to sell the product across rural villages, opening up new markets for cellular phones, and developing new models for selling and financing building products. A matching enthusiasm for microcredit, best represented by Mohammed Yunus' Grameen Bank, suggested ways in which these new consumers could be financed. And Diawara, despite his enthusiasm for the genre, shows how Nollywood movies play to these forms of consumerism: "One of the main goals of Nollywood is to make available, in the films, the entirety of consumer objects that the spectator desires. Thus, Nollywood enables Nigerians to enter the capitalist system of consumption and erases the difference between the West and Africa."

Of course, Bottom-of-the-Pyramid enthusiasm was fostered by the prevailing belief that economic cycles were a thing of the past and that the new millennium would be characterized by endless growth – a dream shattered by the collapse of world financial markets in 2008. But perceptive critics pointed at the time to the basic unsoundness of a model that assumed that economic development could be driven by consumption alone. Aneel Karnani, for example, branded the Bottom of the Pyramid model as "a harmless illusion and potentially a dangerous delusion". While the link between micro-packaged detergent and movies such as "Blood Diamonds" may be unusual, Karnani, Diawara and others show that one image of Africa's post-hopeless future is of a massive, cut-price hypermarket that enables unprecedented volumes for sales of products and services.

This brings us to the question of innovation. In the Base-of-the-Pyramid world, innovation happened in the north. Africa was without hope because it was without the capacity to consume.

And what is innovation? It shares with many key concepts the paradox that once its importance is recognized, its meaning

seems to drain away. This is because valuable concepts are invariably over-used to the point that they become signifiers of nearly everything, and consequently of almost nothing. So, let's keep it straightforward: innovation is the process of turning ideas into useful outcomes. Innovation is a pathway, not an event. It includes big science – space travel, the human genome, digital technologies – and also small things such as paperclips and ballpoint pens. Far more often than not, sustainable innovation comes from the cumulative effects of implementing small scale, useful ideas over quite long periods of time.

The importance and potential of what we could perhaps call "incremental innovation" was evident in the first round of proposals to the newly-established Investment Climate and Business Environment Research Fund. It was both a privilege and a particular opportunity for me to be invited to take part in the award of the first set of grants when we met here in Dakar in January 2007. For, although numerous reports had been written about development and opportunity in Africa, there were, and are, remarkably few collections of case studies of what has happened, what works and what does not.

The ICBE project offered support for work that would improve opportunities for investment and business in Africa; in other words, that would advance conditions that enable and support the innovation that drives economic growth. Some 250 applications came in from a swathe of Francophone and Anglophone countries, clearly showing that this was something that a lot of people had been thinking about. Many of the projects could be mapped as clear "innovation pathways".

For example, in both Benin and Nigeria, the poor quality of seed stock was identified as a critical limitation on the productivity of smallholdings in semi-urban areas. This was exacerbated by weak links between private sector importers and distributors and inadequate public sector infrastructure. In Uganda, the fisheries industry is booming, with inward investment over ten years up to 2005 estimated at $10m and exports growing from 4,751 tons worth $5.3m in 1991 to 36,600 tons ($143m) in 2005. Fisheries exports now contribute about 12% of Uganda's GDP. About a million people are involved in fishing and fish processing but, despite the growth in the value of the industry and government policies, most live at or below the poverty line. The research supported by the ICBE fund was for a close investigation of the full supply chain to identify why this successful export industry was not resulting in sustainable development. In Cameroon, electricity supply was privatized in 2001; the University of Yaoundé has been finding out whether this has been promoting economic development, as was intended. In Mali, Ghana, Tanzania, Senegal and Zambia, the UN's Rural Energy Enterprise Development initiative promotes and supports clean energy technology and services; the ICBE project has been finding out how this has benefited rural and peri-urban customers. These projects combine a focus on product innovation (new varieties of seed stock, fishing technologies, energy production) with a recognition of the significance of process innovation (marketing and distribution systems, supply chains, energy sales and distribution). A common theme is the need for innovative public policy that connects small-scale rural and peri-urban livelihoods with successful large businesses such as electricity supply, commercial farming and fish production and export.

The Ugandan fisheries case, however, serves to remind us that neither measures of economic growth such as Gross Domestic Product nor the concept and practices of innovation are inherently benign. For the *Economist* newspaper, the World Bank's prediction that sub-Saharan Africa's GDP will increase by 5.1% in 2011 (in contrast to Europe's 1.3%) signals a shift in the centre of economic gravity. But this does not in itself indicate sustainable, broad-based economic development, since all GDP as a measure does is to add up all products and services bought and sold, regardless of what they are. The success of commercial fish exports in Uganda is very good for the country's GDP but has previously brought little benefit to the million or so people working in fishing and processing. Famously, the 1989 Exxon Valdez oil spill resulted in extensive damage to Alaska's environment and local livelihoods, but contributed to an increase in the USA's GDP because of the expenditure on products and services to clean up the mess; this year's Deepwater Horizon disaster may well have the same effect.

Most books on innovation celebrate it as the key component in creativity and entrepreneurship. But, again, innovation is not inherently beneficial. For example, fast food franchises have been highly innovative in developing cheap products that are high in carbohydrates and unsaturated fats and which are marketed through carefully researched and original campaigns. Their success has been widely imitated; an entrepreneurial take-away near where I live successfully offers battered and deep-fried chocolate bars. However, these successful business practices place a direct burden on public health systems and reduce life expectancy, requiring in turn effective innovation in health services. Criminals innovate. Auschwitz was a model of both product and process innovation.

It is not coincidental that the enthusiasm for Bottom-of-the-Pyramid approaches came at the zenith of the case against the role of the state. The argument – explicitly made – was that the state had failed across the developing world, and that its role should diminish in favour of multinational corporations competing for market share and to the benefit of the new "bottom billion" segment of consumers. This now seems very dated, but it is sobering that it was an orthodox view less than five years ago. And, of course, there is nothing benign about the market either. Following the 2008 banking crisis and the collapse in property markets, substantial amounts of speculative investment moved into commodities derivatives, including world food supplies. There is increasing evidence that this speculation contributed to sharp increases in food prices, with disastrous consequences in poorer countries. The World Development Movement estimates that, by 2008, speculators held long positions (which depend on price rises for their financial return) on 65% of the world's contracts for maize supply, 68% for soybean supply and 80% of the world's wheat production. As Jayati Ghosh, professor of economics at Jawaharlal Nehru University, New Delhi, puts it, "from about late 2006, a lot of financial firms – banks and hedge funds and others – realized that there was really no more profit to be made in US housing market, and they were looking for new avenues of investment. Commodities became one of the big ones – food, minerals, gold, oil. And so you had more and more of this financial activity entering these activities, and you find that the price then starts rising. And once, of course, the price starts rising a little bit, then it becomes more and more profitable for

others to enter. So, what was a trickle in late 2006 becomes a flood from early 2007" (quoted in "The Great Hunger Lottery", World Development Movement, 2010).

Economic growth measures such as GDP, innovation processes and the market are, then, amoral in the true sense of the term; as concepts, they do not incorporate any specific ethical position or purpose. Any ethical direction that they do have is provided by their context. For example, a government may have a policy position that GDP should have broad and sustainable benefits (the position that the ICBE support project for the Uganda fishing industry sought to advance). Innovation pathways may be directed to a common good, such as improved seed stock for small scale farmers. Markets may be regulated to limit perverse outcomes, as the World Development Movement advocates for food supply derivatives.

Making this rather obvious distinction between instruments and their contexts directs attention to the role played by institutions and, in particular, what is now generally known as the Third Sector; organizations that work between, and interact with, the private and state sectors. For cinema in Africa, one such Third Sector is FESPACO – the Pan-African film festival held in Ouagadougou, Burkina Faso. By using Pierre Bourdieu's concept of habitus, Diawara shows how film genres emerged and are shaped, here around the seminal influence of Ousmane Sembène. In the case of the ICBE Research Fund, the Third Sector organization is TrustAfrica, which is focused on securing the right conditions for democracy, developing African resources and fostering enterprise that will result in broadly shared prosperity. In turn, all ICBE supported projects, as is commonly the case, are grounded in universities, research institutes or similar organizations, which validate and situated the work through their own reputations, resources and governance structures. This network of interlinked organizations has a key role in ensuring the value of the outcomes of the innovation pathways that drive economic development.

The role of context in effective innovation is strikingly evident in the four-decade history of BRAC, one of the world's largest and most effective Third Sector organizations. Founded in 1971 as the Bangladesh Rehabilitation Assistance Committee (and renamed the next year as the Bangladesh Rural Advancement Committee), BRAC started work in Tanzania and Uganda in 2006, and then in Southern Sudan in 2007. This organization has set up microfinance, education and health programmes that support and enable innovation in agriculture, livestock and poultry production, and plans to work in up to fifteen sub-Saharan African countries. BRAC's approach is to set in place the conditions necessary for effective innovation through education programmes that enable people to use microfinance effectively in adopting and pursuing innovation.

Long-term Bangladeshi cases have shown how innovation pathways can be built step-by-step, providing people with small but critical economic margins that enable further investment in development. Here, for example, is the twenty year track of cumulative actions that have enabled the growth of broad-based poultry and maize industries in Bangladesh. In working with the poorest village communities to find viable ways in which microfinance could be coupled with food production that would give small but consistent surpluses, it was clear that poultry production could be improved. From 1975 to 1978, experimentation with cross-bred chickens and imported high-yield eggs and chicks resulted in multiple failures due to local environments, disease and poor feed quality. Out of this first phase of consultation, research and reflection came a poultry farm for breeding stock appropriate to Bangladeshi needs and a vaccination programme to counter disease.

By 1979, BRAC had a small but comprehensive poultry industry in place, with a model farm, trainers, vaccines, stocks of hens, cocks and fertile eggs, and microfinance to enable expansion through networks of rural villages. But this first set of innovations led to further barriers. Poor, slow road systems resulted in damage to eggs and incubation failures. This was countered by training a network of specialist chick rearers and a dedicated transport network. As improved poultry production began to expand through networks of villages, though, available stocks of chicken feed proved inadequate. This impelled the next set of innovations: experimentation and development of new breeds of maize, the development commercial maize production, and the training and financing of feed merchants. By 1991, BRAC had trained and financed 95 feed merchants and 11,000 chick rearers who supplied 750,000 high-yield chicks to 3,500 villages. They were supported by some 9,000 trained vaccinators, who vaccinated 12.6m chicks and mature birds in that year. Some fifteen years after its launch, more than 200,000 women were involved in the poultry programme, supported by US $8m in microfinance.

BRAC has moved on again from this broad platform of engagement to establish a commercial maize and milling industry, which results in income that reduces dependency on international aid funding. What the story of poultry farming in Bangladesh shows is scores of ideas, experiments, failures and eventual successes over more than fifteen years. The germ of this innovation pathway lay in what people in the most economically marginalized villages already knew – that they couldn't improve the yield of their existing resources within the constraints of their circumstances. And the role of the organization – in this case BRAC – in providing direction and what can be termed network benefits is crucial. The outcome of this innovation pathway is a viable market economy in eggs, poultry and maize, broad-based economic development and a significant contribution to Bangladesh's headline GDP through commercial production. In many respects, ICBE-supported work in Uganda is seeking to reverse-engineer the fisheries industry to achieve development benefits similar to poultry farming in Bangladesh. We need more case studies such as these that reach beyond the quick and easy headlines and their assumption, to discern the deeper, longer-term conditions for success.

It has been a long and perhaps tenuous chain of association from film in Berlin and Ouagadougou to fisheries in Uganda and poultry farming in rural Bangladesh. What I hope I have shown is that effective innovation is often a long series of small advances that, together, constitute a pathway; that there is little real value in spectacular assertions, whether new paradigms such as the Bottom-of-the-Pyramid or summary dismissals of an entire continent by the *Economist;* and that purpose and direction, ethics, is provided by the context of organizations, whether the state or the Third Sector.

It is appropriate that Manthia Diawara's examination of African cinema is framed as a travelogue, moving from New York to Burkina Faso, to Berlin, and from Ghana

by road to Nigeria. For Diawara, the key to the future of cinema in Africa is its struggle to break the West's monopoly "by stealing from Hollywood the star system, the dress style, the music, by remaking Western genre films, and by appropriating the digital video camera as an African storytelling instrument. Nollywood is, in a sense, a copy of a copy that has become original through the embrace of its spectators". The corollary of breaking existing monopolies over this and any other form of innovation will be to shatter the assumption of a unitary "Africa" that can be written off a decade ago with a single word – "hopeless" – and then rehabilitated ten years later with a single editorial reversal.

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