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## Informal the New Normal

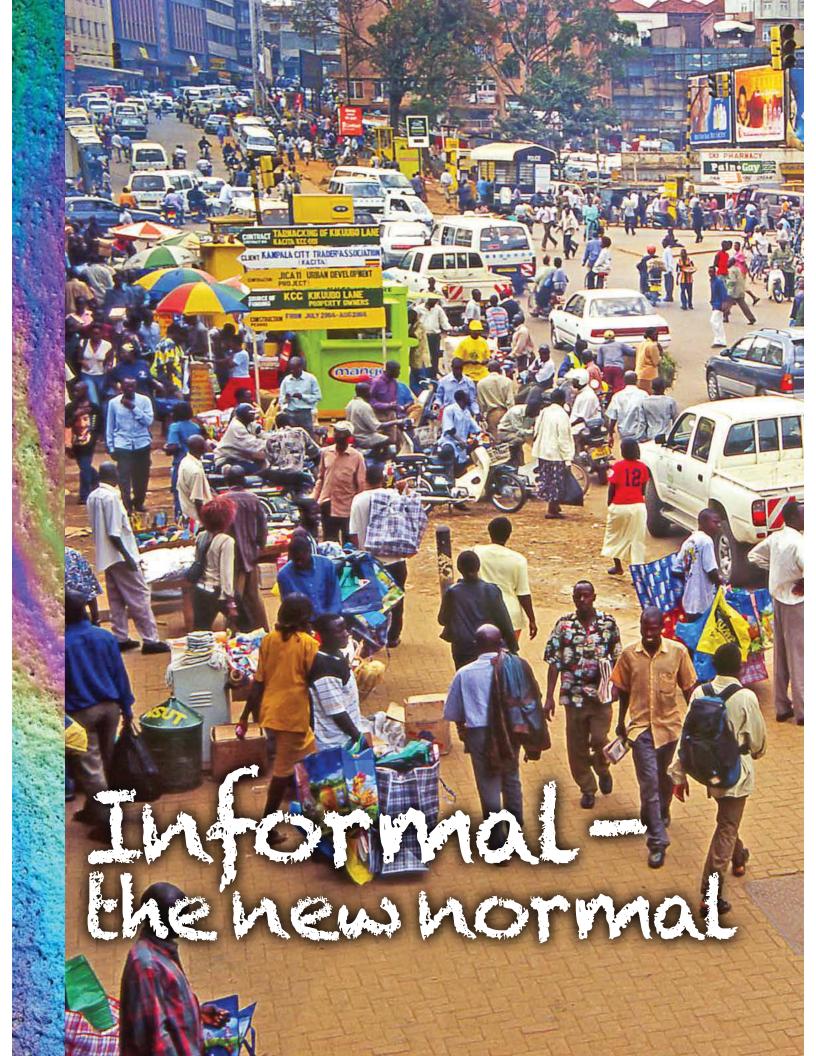
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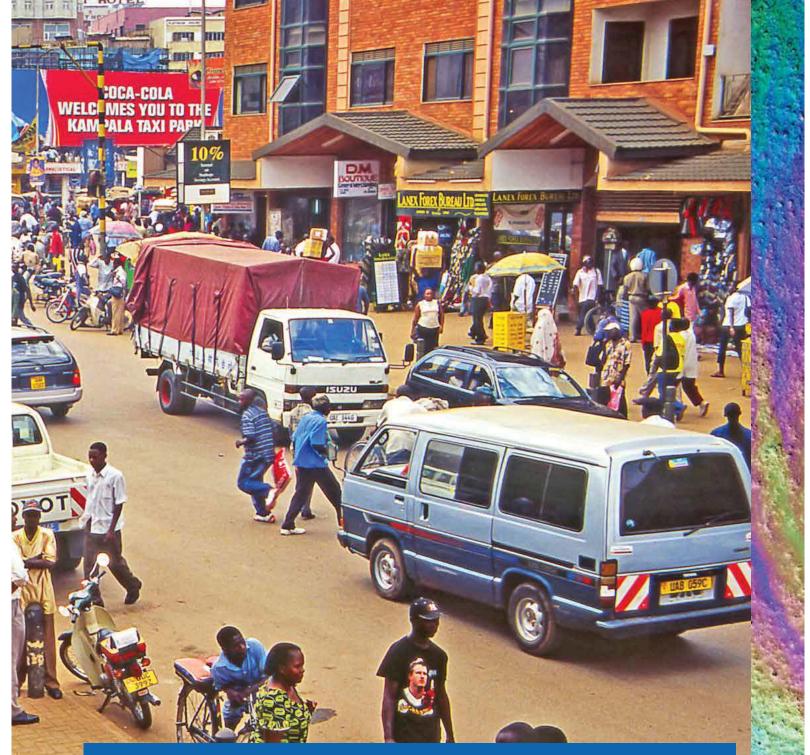
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## Publication Info

Published in *Knowledge and Innovation in Africa: Scenarios for the Future*, ed. Shirin Elahi and Jeremy de Beer, 2013, pages 88-101.

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This is a world where ...

dynamic informalities cross every aspect of African societies and ideas constantly recombine within communities built upon interpersonal trust, triggering innovations adapted to relentless change.

Except for ...

those people unable to establish local grassroots relationships, who fail to build thriving businesses or wield social influence.

Can I help you? Yes, you are right. You won't find these designs anywhere else in the market. Each one is unique. I produce my fashions from home, and my mother and two cousins sew my designs for me. I get the materials from Italy and China, some also from America. The buttons I usually get from a friend on the coast, but I always look out for different styles. The jewellery mostly comes from South Africa and the shoes are all best Nigerian leather. Everything comes from someone I know. We know each other, trust each other and help each other, so I can guarantee you top quality.

Don't worry, if it doesn't fit, we can make something up for you by tomorrow or the next day. Otherwise, I can show you something similar from my sister's stall. She is just around the corner, but I will take you, it's not easy to find things now because we're just starting again.

Some big shots, so-called developers, they put money in government pockets and then think they can do what they like. They had these big graders... trucks... and came to break down our stalls.<sup>1</sup> They said we all had to go because they have "official papers" from the government and we were trespassing. Trespassing! When my family has had a stall here for years! We paid our rents every week – just ask the head of our Traders' Association. We lost everything, but we could fight back, we know where to get help and our customers fight for us.

We told them they could not do this... we traders and our customers. We must all live and we don't know these developers with their big centres. You don't even know who supplies their products. No, they are expensive and they don't know the people. We know the people and we can do things to keep prices that our customers can pay. We can teach those others, but they don't listen. We made them listen and now because everyone said they would not let them come here, we are back.

With the market, we can make a living for ourselves and our families. We can do it ourselves, find the best deals and work together so everyone can afford to come to our shops. We all help each other.

> The men in suits were back yesterday, and they were talking about health and safety and new planning regulations. But do you think they will provide us with cheaper water and electricity? That costs me almost 20% of the money I make! And then government wants us to pay them – for what? We take care of ourselves. They just give us paper. But I am talking too much. You want to buy the original. You can see my work in the papers ... stars, they wear my designs. They all come to me and you can too, my sister.



I work in the Ministry of Finance. It is a job, it pays the bills, and I must not complain. But this job is a burden: a heavy weight on my life.

I pay my taxes, even though they take more and more every year. Everybody wants more from the government, and they complain because they don't like what they see, but where are those who put their hands I must work. The government seems to be a in their pocket and pay the taxes?

I have been doing this job for 15 years now. Every year we give the international people all this information so that they can rank our country about what they call "the cost of doing business". Our minister says we are doing the right thing to increase efficiency and meet global standards. I used to be proud of our ranking, but now I look around me, and it seems that no one takes notice. On the news, they argue that the costs of regulations and tax are too much and too complicated – that the only thing that matters is jobs.

My children say that education is pointless, that you only need to know the right people to get anywhere. I have spent my life trying to push for change, but the world I imagined doesn't exist.

Now we don't really have borders between our countries, all the rules have changed. Nothing is stable any more. It's even the same at work. I hear talk about us merging with the other countries in this region, so I might also not have a job tomorrow!

I thought I could help to change things for the better. But now, I just work, because joke that others are laughing at. I am now part of that joke.



#### INFORMALISATION IS HERE TO STAY

In the 2030s, government and "the people's economy" seem to operate in different worlds.<sup>2</sup> The key drivers of life in Africa lie in the informal economy, outside the formal, regulated sectors of society.<sup>3</sup>

Most people earn part or all of their livelihoods through informal activities, and get the goods and services they need within a social network "defined by norms and institutions that are in essence non-economic".<sup>4</sup> Africa's labour, livelihood, political and social needs are met by informal organisations, businesses and supply chains, by informal skills transfer, by informal innovation approaches to intellectual property, and by informal provision of social services

of social services. In some cases this has happened to fill the gaps left by a state, which is no longer supplying adequate services or an enabling environment for bigger business; in others, because regulations governing the licensing and registration of businesses are unnecessarily onerous.<sup>5</sup> Citizens have turned towards informal mechanisms for meeting their needs and entrepreneurs are just getting on with doing business.<sup>6</sup>

Africa's informalisation represents a form of "glocalisation."<sup>7</sup> Economies and societies are global/local hybrids, with multiple identities and diverse organisational forms. These are in constant flux – organic, dynamic, explosive, unpredictable and improvisational. In general, this world has resilience and an internal order, but there are pockets of chaos in some countries. Where overseas development aid has shrunk, the impacts on the formal sector have been profound. Even in countries not plagued by warfare or overt formal sector breakdown, there are those in government and business, or in the informal sector itself, who see rising informality as a convenient cover for corruption and criminality. Historically, the informal economy was seen as an undesirable element of developing country economies that would gradually fade away.<sup>8</sup> In the 2030s, notwithstanding efforts to re-establish the primacy of the formal sector, with greater or lesser success in different contexts and countries, the informal economy is a "permanent feature" in Africa.<sup>9</sup>

#### What do we mean by "the informal sector"?

Informal economic activities are typically defined as those outside or beyond government regulations such as taxation, registration or licensing. Formal activities tend to be defined as those within the reach of government regulations or agencies.<sup>10</sup>

The International Labour Organisation characterises the informal sector as:

"consisting of units engaged in the production of goods or services with the primary objective of generating employment and incomes to the persons concerned. These units typically operate at a low level of organisation, with little or no division between labour and capital as factors of production and on a small scale. Labour relations – where they exist – are based mostly on casual employment, kinship or personal and social relations rather than contractual arrangements with formal guarantees."<sup>11</sup>

Informal *employment* is a distinct concept. In 2003, statisticians agreed on a standard definition for informal employment, for inclusion in countries' national accounts: "the total number of informal jobs [...] whether carried out in formal sector enterprises, informal sector enterprises, or households, during a given reference period".<sup>12</sup>

The activities of formal sector enterprises, informal sector enterprises or households are variously legal, not underground, underground or illegal, and any combination of these. Illegal production activities include drug trafficking, for example. Underground production is concealed from public authorities and may contravene some laws, but can nevertheless comply with others – an example is the sale of legal goods or services without tax declaration.<sup>13</sup>

with differences in productivity across firms and workers, as well as with differences in the nature of regulations and the degree to which they are enforced. Whether informality is the result of exit. exclusion, uneven enforcement, or low firm productivity is still a matter of debate.

The extent of

informality varies

World Development Report 2013: Jobs



#### Ends of the continuum<sup>14</sup>

	INFORMAL	FORMAL
Labour	Intensive	Automated production
Entry	Low barriers	High barriers
Size of the business	Small (five or fewer staff)	Large (over five staff)
Skills acquisition	Mentors (apprenticeship)	Formal education
Adaptability to market	Indigenous culture	"Western" approach

#### **A RECOMBINANT CONTINUUM**

The most formal enterprises pay taxes and adhere to governmentmandated standards and regulatory frameworks. The most informal entities are far removed from government oversight and regulation, and some may even conduct illegal or illicit activities. Between the two are a mix of actors whose characteristics are complex and often difficult to measure or place at a point along the continuum. Some of the most dynamic and sustainable are those operating near the middle of the continuum. They are properly constituted, organisationally and in terms of their business operations, but are still outside most government oversight mechanisms - and in some cases they vacillate between formal and informal status.15

A dualistic framing of the formal and informal sectors may serve an explanatory purpose, but the situation in different countries reflects permutations of economic production, distribution and employment relations on a continuum.<sup>16</sup> Multiple forward and backward linkages between the formal and informal activities create interactive, symbiotic dynamics.

# HOW "MUCH" INFORMALITY IS THERE?

In 2009, the OECD estimated that the informal sector<sup>17</sup> represented 43% of official GDP in Sub-Saharan Africa, almost equivalent in size to the formal sector.<sup>18</sup> Since then, the contribution of the informal sector has grown across Africa, including in North Africa. While a large proportion of this remains informal agricultural activities, nonagricultural informal enterprises are increasing their share of GDP.

## WHAT IS GOING ON WITH GOVERNMENT?

Some national states are weakening to the extent of becoming sidelined as role players in the body politic, which are inadequate in providing governance – a self-accelerating spiral. There are some self-interested efforts to preserve the fading function and diminishing relevance of the nation state, but they generally do not succeed.

The informal economy is based on cash or barter, and microloans instituted within the network, rather than on transactions via a formal banking system. Small, electronic transactions made via mobile phone systems occur across formal/informal boundaries. Larger economic transactions cannot easily be monitored, so there is little ability to control inflation or drive monetary policy. Greater informalisation involves avoiding the reach of centralised governance via activities such as tax collection and formal business registration.

Globalisation not only pulls upwards, but also pushes downwards, creating new pressures for local autonomy. [...] [T]he nation becomes not only too small to solve the big problems, but also too small to solve the small ones.<sup>19</sup>

Anthony Giddens, sociologist

Tax revenues have shrunk to the point where many government functions have become financially unsustainable and are not being performed. In some countries, there is a deterioration in state provision of quality infrastructure and administration, as well as co-ordination of essential services. Government finds it difficult to enforce health and safety standards, labour standards, building



Photo above left: Pecold/Shutterstock Photo above right: M R /Shutterstock regulations, wages and working conditions. While regulations might well be on the statute books, without well-functioning institutions such as courts, collateral registries and credit information bureaus, formal sector systems cease to work effectively.

When people cannot see high levels of productive public sector services, they are more likely to try to avoid paying taxes, thus increasing the tax burden on the formal sector, ultimately leading to higher taxes and lower quality of social goods. *Ad hoc* legal and policy infrastructures are, paradoxically, an efficient environment for informal sector players who are resilient and adaptable.

### PUSHES AND PULLS INTO INFORMALITY Of Where foreign companies were

economy exists not because of government, but despite government.<sup>20</sup>

The people's

South African National Traders Alliance attracted to the continent by rapid liberalisation policies and privatisations, they did not use labour-intensive methods and did not always employ significant numbers of local workers. Some African economies fostered African businesses at scales, which compete effectively in the formal globalised market with multinationals, but this is the exception. Globalisation thus reinforced the shift to small-scale, informal livelihoods in Africa.

In each country, different factors have contributed to the drift to a relative predominance of the informal sector. The labour market has taken to the markets

**6 6** [E]mployment in the informal sector is no longer a journey, but has become the destination of many.<sup>21</sup>

Donald Sparks and Stephen Barnett, researchers on the Sub-Saharan Africa informal sector

Africa's high population growth rate<sup>22</sup> has had a significant impact on levels of informality. The "youth bulge", the growing participation of women in the workforce, and the impacts of improvements in health care have meant the formal sector cannot absorb all the available labour.<sup>23</sup>

With mounting cost pressures and little state monitoring, jobs within formal businesses are becoming more transitory and insecure, and working conditions and health and safety conditions are worsening. Lack of state enforcement leaves semi- or unskilled workers most vulnerable to exploitation or risks, such as the collapse of unsafe structures.

With formal sector unemployment rapidly growing, informal sector activities represent a survival strategy for the people involved and for their households.<sup>24</sup> Graduates from formal education turn to the informal sector either to seek employment or to start their own enterprises. "[I]nformal jobs can also be transformational."<sup>25</sup>

It is not just a lack of formal opportunities that pushes people to the informal. As formal processes become increasingly rule-bound or unfulfilling, the informal sector becomes more appealing.





### "The policy challenge is to decrease the costs of working informally and to increase the benefits of working formally.<sup>30</sup> Martha Alter Chen, International Co-ordinator of Women in Informal

Employment: Globalising and

Organising

### Government devolved to local level

Municipal governments hold the potential to be more effective than centralised, national governments at managing the day-to-day complexities of the informal world. In 2012, a study by the South African Local Government Association noted that "municipalities and city councils across the continent have started to recognise the importance of the informal economy and that its negation is often impeding economic growth and sustainable livelihoods".<sup>26</sup> Some cities in Africa have risen to the challenges posed by the informal economy, bv:27

- acknowledging its importance and presence
- facilitating changes in attitude towards the informal sector
- bridging the relationship and communication gap between it and local government
- dealing with the sector's complexity and diversity
- having the right skills, capacity and structures within local government to engage with it
- including informal economy issues in local government policies, regulations and planning processes, including by-law guidelines for the informal economy
- actively engaging the informal economy in developing local economic development policies
- "managing upwards" to get national departments to support local government efforts with regard to the informal economy.

Its dynamism, versatility and room for innovation and entrepreneurship have made the informal sector not just a necessity, but an attractive choice for many people.

adapted technologies run a small-scale operation

without a lot of paperwork.

### **Bypassing bureaucracy**

The barriers to and ease of doing formal business are high in many African countries, based on factors such as the time firms spend in meetings with tax officials, or informal payments to public officials to "get things done". Trends shown in the World Bank's Ease of Doing Business ranking, using data collected since 2003, have not improved. The ranking ranges from 1 to 185, with the highest being the least business-friendly environment. In 2010, the OECD average was 30, the Middle East and North Africa 92, while Sub-Saharan Africa's average was 139.28

### Satisfaction more guaranteed

In areas of social services such as health care, non-state actors have filled the vacuum created by poor government delivery or coordination. New forms of informal institutions and organisations have emerged not only because government service delivery is unsatisfactory, but also because informal services are tailored and closer (including literally) to what people want.

### **FEATURES OF INFORMALITY**

Sourcing, production and selling is mostly done within families or other trusted social networks working together. These networks identify opportunities to supply the goods and services that are needed and wanted. The new informal organisations are constantly changing as the environments and needs of particular communities evolve. They use labour-intensive methods, which provide more employment, can absorb or shed labour, and are cheaper than capital-intensive production. The situation is "simultaneously a market for culturally defined goods, a pool of reliable low wage labour, and a potential source for start-up capital".29

Getting going is easier

It is easy to start and run informal income-generating activities, because people can:

- get a small amount of money to start from people they know
- use skills acquired outside the formal school system and without needing a qualification
- rely on indigenous resources and



Photo above left: Eric Miller Photo above right: Jeffrey Attaway

#### The position of women

With the oversupply of labour, women's entry into, security within and working conditions in formal employment remain more tenuous than for men. Studies in the early 2000s found that informal activities involving women tended to require lower-level skills and provide lower incomes when compared to men.31 Informal employment in agriculture and activities linked to domestic life were always dominated by women. Now, women are present in a wider range of informal economic activities and are able to command earning parity with men.

#### Agreeing to loose rules

Informal or semi-formal economic, political and social bodies have rudimentary governance functions, based on unwritten or semiformalised rules and regulations. Despite the lack of formality, people participating in these groupings have a good understanding of the stipulations and the social consequences of going against them.

#### Multiple memberships

To meet their technical, financial and spiritual needs, individuals living and operating in these informal communities tend to belong to more than one informal organisation. For instance, a farmer might belong to the local farming organisation as well as a women's lending or credit group. The same woman might belong to the local

#### **Telecommunications in Somalia**

War in Somalia in the 1990s destroyed every phone line in the country. In 1994, the first private telecommunications company, Telecom Somalia, opened, followed by NationLink Telecom and Hormuud Telecom. In an environment devoid of formal regulation, these enterprises co-operated to create a flourishing, financially lucrative mobile and landline network. Despite rivalry, in 2005 the three companies signed an interconnectivity agreement to set prices and collectively expand their network access. They also co-operated to set up the Global Internet Company to provide internet infrastructure. Characterised by the World Bank as "economic enablers", these operators could install a telephony landline in just three days, provided unlimited local calls for a monthly fee of \$10, charged the lowest international rates on the continent, and provided 3G services. However, the formal-informal dynamic re-emerged, and government sought to reassert control over the unregulated environment.

**6** They made a remarkable effort to expand the country's telecommunications, but lack of regulatory laws led to the misuse of our spectrum. Our aim is not to interfere with the telecommunications companies but to put in place regulatory laws that can uphold the interests of consumers and suppliers.

Abdullahi Ilmoge Hirsi, then-Minister of Information, Posts and Telecommunications, 2013

informal organisation affiliated with a church.

#### Trust, the new currency

Group trust is a defining element of the functioning and maintenance of these informal groups. It is trust – and the desire to trust and be trusted – that sustains the informal rules, more than fear of the repercussions of breaking them. "Outsiders" can earn trust to gain entry into the informal collective, which gives the groups a mix of closed and open dynamics. The trust element allows some of these informal or semi-formal structures to have a national or even global reach, for example into the diaspora.

#### **INFORMAL SECTOR SUCCESSES**

#### Health provision

In some arenas, the informal sector is well able to provide services, primary health being one. Traditional, unlicensed medicinal Sataricom MEPESA MEPESA De TREZ ENTERPRISES L Longonot

M-Pesa is a cellphone-based financial services system, which allows users with an identity document to deposit, withdraw, and transfer money, and access microfinancing. Photo: Jeremy de Beer

practices operating at local levels are key providers of health care. There is also a second set of actors: small clinics operated by individual private medical practitioners who are not part of a franchise or any national health care system. These clinics are unregulated, or minimally regulated, and also make some use of traditional medicinal compounds and practices.

#### Finance

Formal banking institutions and systems are faltering in many African countries, not least because of knock-on effects of financial crises in the "declining" countries. The vacuum left behind is being filled by innovative financial systems and products from within the informal sector. Informal financial organisations and networks now dominate the management and transfer of funds.

#### Artisanal apprenticeships

Many learn their trade via informal apprenticeships provided on an unstructured and informal basis to "someone who knows someone" who needs help. Within this milieu, the concept of ownership of ideas is anathema: artisans work in close proximity to each other and actively share and collaborate.

One such example is provided by informal sector mechanic-engineers in Uganda. In many African countries, the roads are often rough and full of potholes. They are not suited for imported cars designed for perfect tarred roads. The cars often break down and spare parts are very expensive. In Uganda, a cadre of informal mechanics developed innovative ways to overcome the shortage of certain critical parts. These informal artisans are recognised as problem solvers who are able to improvise with new and used parts to create novel solutions.

# CRISS-CROSSING REGIONAL CONTRACTS

The power of national governments is undermined from both above and below by globalisation's "reinforcement of both supranational and subnational regionalism" and by the "ongoing flow or cascade of globalisationregionalism-subregionalism".32 Losing their grip on national governance, governments enter into ad hoc economic, trade and governance agreements with any and as many partners as possible. This creates a complex web of plurilateral and regional agreements, paradoxically further undermining the autonomy and function of nation states.

#### MOVING THROUGH POROUS BORDERS

Informal intra-regional trade can be:

- unregistered businesses and traders that operate entirely outside the formal economy
  registered companies fully
- evading official border-

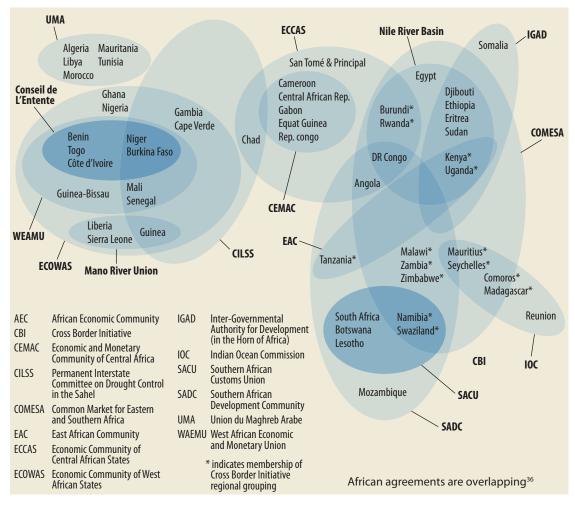
### Uganda's electric vehicle

In November 2011, Uganda's President Museveni launched the prototype KIIVA electric vehicle to much acclaim. The car was designed fit for purpose for Ugandan roads and future plans included an electric bus. The vehicle was developed by a team under Professor Tickdori at the Makerere University's Centre for Research in Transportation Technologies. What is less well known is that both detail design elements and production of the car were the result of both formal and informal sector inputs. It was built by Gatsby Garage, a formal sector entity which is run by the university's College of Engineering, Design, Art and Technology. The garage operates as a semi-formal sector entity as well, drawing on the expertise of informal artisans to supplement skills and solutions that elude formally trained designers as well as academic researchers. The manager of the Gatsby Garage acts as point of reference, introducing informal sector mechanics with particular specialities to formal sector researchers and students from the university. There are now efforts from the university researchers to proactively and systematically identify informal sector artisans and co-opt them into the formal research and innovation centres.34

Kawooya, D. Informal-formal sector interactions in automotive engineering, Kampala relatives by training them and giving them hands-on skills to produce stuff or repair work, they will likely become a burden in future. or social misfits, or probably engage in criminal activities due to poverty and lack of skills to find jobs. Besides, I was helped by a relative, so it's imperative that I do the same for young relatives and friends.<sup>35</sup>

If I don't help

Ugandan artisan (Open A.I.R. interview)



crossing posts and trade-related regulations and tariffs

 registered firms partially evading trade-related regulations and tariffs by illegal practices such as under-invoicing

Multiple regional agreements, which create both economic integration and contradictory rules, make it easier for informal traders situated near national boundaries to move goods through gates and gaps in borders. Where national and regional trade strategies have embraced the benefits of legitimate informal cross-border trade rather than criminalising it, the potential to improve food security and poverty at a regional level is being realised. In some parts of Africa, informal trade links revive pre-colonial trading geographies, particularly where language groups span borders.

#### LIMITING OR DRIVING DEVELOPMENT?

Where governance of the formal informal economies have become dislocated, the formal sector is increasingly irrelevant. When it comes to humanitarian issues and social programmes, international agencies and non-governmental

In 2013, UNCTAD estimated that for the SADC regional economic zone, informal cross-border trade amounted to as much as 30–40% of total intra-SADC trade, which would equate to \$17.6 billion annually.<sup>40</sup> The value of Ugandan exports via the informal economy to neighbouring DRC, Kenya, Rwanda, the Sudan and Tanzania was estimated at \$790 million in 2009 and \$520 million in 2010. Trade barriers dismantled by or through regional agreements are bodies are facilitating what already happens through informal trade. organisations are stepping into the breach to assume responsibility. While the formal sector is not necessarily shrinking, the informal sector is growing more quickly. Such growth comes more from the proliferation of micro-enterprises than the scaling-up of particular businesses.

Informal businesses are limited by their small size – they are unable to realise economies of scale, have less access to inputs and cannot leverage formal business relationships. These factors inhibit productivity and efficiency gains in the sector.<sup>37</sup> Unregulated activities may also deter investment in some circumstances.<sup>38</sup> A lack of formal protection for property rights – both of and by informal practitioners – may be impeding scalable innovation in the formal sector.<sup>39</sup>

Looking at informal economies in that light, it is understandable that some economists and politicians hold the view that policy should aim for informal firms to "graduate" through a linear progression into the formal sector, as the best way to add to overall economic growth. Efforts persist to emancipate informal sector actors from the constraints perceived to repress their own economic potential. Formal sector firms are much easier to regulate and control.

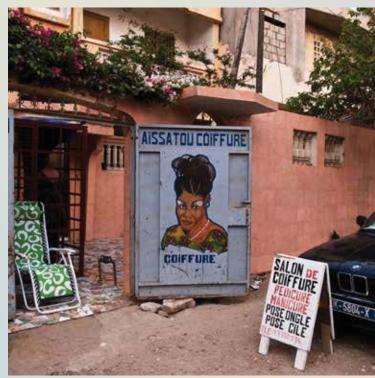
However, the informal economy has expanded beyond control and is now outside the influence of national politicians. In most countries, informal activities are playing a critical role in alleviating poverty, increasing employment, producing goods for the low-income majority, improving competition in the economy, supplying the formal sector, and fostering adaptation and innovation. Genuine engagement to tap the potential of informal economic activity is proving to be the better path.

#### CO-EXISTING INFORMAL/ FORMAL CONNECTIONS

Informal economic, political and social-cultural activities and structures far outpace the formal. But the formal sector still matters, especially at the local level, to provide critical government and business infrastructures. Countries that are manifesting a symbiosis between informal and formal sectors are performing best.

Many formal private companies maintain footholds in the informal economy, for example retail chain shops supply goods to informal vendors on credit without security. Public sector entities work with and support informal sector actors. Indeed, in some cases the public sector has become a major source of demand for the output of informal businesses, providing an engine for their growth and transferring skills and capital. The informal sector attracts and benefits from both formal and informal education systems, since both supply labour possessing the skills and competencies needed to work and thrive in the informal sector.

A few countries are teetering on the brink of collapse. African nations or regions that have



experienced prolonged periods of failed government and lawlessness reveal the dangers when formal structures break down almost entirely. In the absence of strong state security mechanisms, the potential exists for conflict and violence. Informal economic, political and social power can become concentrated in the hands of groups most prone to violent coercion and its corollaries – forced labour, trade in illegal goods, and terrorising of local populations.

#### INNOVATION AND INTELLECTUAL PROPERTY IMPLICATIONS

#### Policy for chaos or vibrance

Throughout Africa, there are contrasting policy responses to the informality predominating on the continent. Is it possible to support informality while at the same time maintaining a stable nation state?

Because it cannot be comprehensively regulated, the informal sector is still perceived by some as a threat to the bureaucratic structures of the formal economy. There are real challenges posed by tilting too far into informality, including issues of corruption and white collar crime, including insecurity from crime, and/or terrorism.

The inventiveness and adaptability of the informal sector presents nation states with opportunities to develop novel means of capturing the vibrancy and value of the sector, perhaps through nurturing the links with the formal sector and developing new channels for this symbiosis. There are many initiatives to devise out of the box alternatives to mainstream models of taxation, registration and public service. While chaotic at times, the result potentially provides employment for all and is also inclusive, adaptable and insulated from global economic shocks.

## Recalibrated science, technology and innovation policies

Around the turn of the 21st Century, African science, technology and innovation (STI) initiatives began to seriously consider how innovation could help transform the continent. Leading thinkers examined how the right innovation systems could best tap Africa's indigenous resources for socio-economic development, while misguided policies merely replicated



outdated Western models that were no longer relevant to the global economic realities.41

have clearly shifted to embrace the informal sector - or at least to acknowledge its vital role alongside the formal sector. Changes in national innovation systems to give due attention to the informal sector are now key to the health of African

economies. Paramount is the need to better understand how innovation in the informal economy happens By the 2030s, Africa's STI policies (or does not happen), how informal sector innovation interacts with socio-economic development, and how to channel this dynamism for collective benefit.

# uncertainties

- How to avoid dysfunction while managing the "organised chaos" that exploits instead of suppresses the informal sector's virtues?
- How to determine the level of government best suited to deliver essential public goods and services?
- Is there a digital or formalised equivalent to the face-to-face interpersonal networks of trust based on proximity?
- Can any intellectual property protections be enforced if informal strategies don't ensure fair competition?

Open A.I.R. case studies included the informal automotive sector engineers in Kampala who worked on the KIIVA car prototype for Makerere University, Nigerian producers of leather textile goods, and the value chains for Ghanaian cocoa and Ethiopian coffee. The companion volume to this Open A.I.R. scenarios publication, Innovation and Intellectual Property: Collaborative Dynamics in Africa, reports signs of movement by relatively non-formalised actors towards informal or semi-formal appropriation strategies, such as trade secrets and first-mover advantages (for informal automotive engineers and mechanics), and collective certification marks or geographic branding (for textile and agricultural producers).

# Valuable knowledge

Valuable knowledge is related to interpersonal linkages with other networks, either formal or informal. Know-what and know-why are of little use without the trusted relationships to exploit knowledge for social or economic gain. This *know-who* is highly contextualised, tacit knowledge. It is acquired by informal *learning* rather than formal *education*; significant self-learning is achieved by tinkering, fiddling and mending. Literacy is always important, of course, but equally so are social and practical problem-solving skills.

The informal sector has a unique understanding of the needs and aspirations of those at the base of the pyramid, as well as of how to access local materials, find appropriate fabrication techniques and access local distribution channels. Apprenticeships, or informal learning systems, provide the primary avenue for gaining entry to the informal sector. Learning based on hands-on skills and improvisation is more effective in imparting the skills needed to effectively function in informal activities, be they in business or other spheres.<sup>42</sup> Enterprising "graduates" whose flexibility enables them to navigate the informal sub-sectors they are trained to serve are best positioned for success. The fluidity of the informal sector and its activities demands these kinds of flexible individuals more than the graduates of formal education systems, whose expertise and trades are narrowly defined by academic disciplines. Many formally trained graduates are unsuited for the informal sector because formal institutions are not oriented towards training informal workers.<sup>43</sup>

# Innovation and creativity

Grassroots innovation is informal, rapid and highly competitive. It is user-generated by individuals and communities who solve problems. Based on symbiotic relations between formal and informal sectors, innovations in some informal spheres adapt products and processes from formal markets. Artisans involved in metal fabrications, for instance, reuse old machines or parts as inputs into new products. Likewise, formal sector innovators draw on problem-solving techniques improvised by their informal sector counterparts.

Informality results in a vibrant environment, but material constraints make it unlikely that entrepreneurs will move above the radar into the formal economy – assuming that is the goal, which often it is not. Innovation systems are based on the relationships between entrepreneurs, their customers and suppliers, forming clusters based on physical proximity and face-

to-face relationships. Where you are determines who you see, who you know and who you trust. Innovation systems are, therefore, local, regional or sometimes "glocal", absorbing global innovations and adapting them to requirements.

Sharing of knowledge, expertise and innovations is a defining characteristic of the informal sector, so in this way innovation systems are "open". However, sharing is restricted to trusted networks and typically based on face-to-face interactions. Openness comes from *ad hoc* idea sharing between groups with interpersonal proximity, and innovation will come from the organic circular flows between them. While everyone has an equal opportunity, those who are most adaptable are most likely to succeed.

# Intellectual property

Knowledge governance is based on dynamic social norms. Informal rules are enforced by personal relationships and self-interest, where the greatest risk is reputational. Those within interpersonal networks cannot afford to compromise their relationships or they will be ostracised by peers – a far more serious sanction than any IP infringement lawsuit might bring. Identity is tied to place and one cannot afford to be excluded.

Formal IP rights, like copyrights, patents and trademarks, are relatively meaningless without the means to register or enforce them. But IP is by no means irrelevant: the forms that matter are those that can be obtained simply and cheaply (or freely), and enforced by social or cultural expectations rather than by legal contracts. Here, the emphasis is on "appropriation" strategies instead of formal IP protection.

Trade secrets and confidential information provide valuable competitive advantages to informal entrepreneurs. Rapid evolutions of new ideas bestow a first-mover advantage. Customers are attracted to the fastest innovators. The most innovative entrepreneurs and micro-enterprises emerge from particular locales, providing another layer "protection". Some formal modes of protection, however, do matter. Moral rights are relevant, as people take pride in *their* intellectual creations. Branding is also key, so groups may seek efficient ways of protecting reputations and retaining customers' trust. Collective branding schemes work because individuals in the informal sector need not worry about registration, enforcement or other formalities; those functions are more efficiently administered by others.