

# Sustainable business practices in Kenya's informal economy: an emerging taxonomy of approaches

Andreou, Nicholas and Calvanese, Enrico

15<sup>th</sup> November 2017

## Abstract

While the sustainable development agenda recognises that the economy plays a pivotal role in sustainable development, the informal sector, made up of millions of micro-businesses, has traditionally been viewed as a barrier to development. Emerging ideas have challenged this perception and actors are now considering whether the informal sector can indeed play a role in sustainable development. This paper aimed to explore what approach informal sector entrepreneurs took to sustainability issues as a means of providing evidence for this debate. Data taken from 30 informal sector entrepreneurs and one government representative were analysed using thematic analysis. The findings, presented in an emerging taxonomy, indicate that contrary to traditional thinking, there were numerous examples of entrepreneurs running their businesses in sustainable ways. Moreover, there were a range of approaches that provided interesting insights for policy makers moving forward.

## Sustainable development and the economy

Over the last few decades, the development agenda has matured, progressing from simplistic models of economic growth (Sachs, 2015; Mabogunje, 1980) to a more holistic understanding of development. The Brundtland Report (WCED 1987) was instrumental in this sense, defining sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” broadening the scope to environmental, social and political issues. Through the Millennium Development Goals (MDGs) and more recently the Sustainable Development Goals (SDGs), sustainable development has been set as the cornerstone of development (Briassoulis 1999).

The SDGs are understood as a set of goals that simultaneously address environmental, economic, social and political issues (Atkinson et al., 1997; Pearce, Barbier, & Markandya, 1990). In this paper, the focus is exclusively on social and environmental sustainability as these are the areas least explored in emerging economies. Moreover, non-economic threats have begun to dominate the global agenda. For example, until 2010, there were no environmental risks in the World Economic Forum's list of top five global threats (in terms of likelihood or impact). In 2017, 2 out of the 5 main global risks in terms of likelihood, and 3 of out 5 in terms of impact, were related to environmental issues (WEF 2017).

Alongside the sustainable development movement, there has been a recognition that economic and non-economic issues are interlinked. For example, the United Nations Environment Programme introduced the idea of a “Green Economy” which “results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities” (UNEP 2011: 1). This recognises that to achieve sustainable development it is necessary to first create an economic environment conducive to sustainable development goals.

Similarly, Sen (1975) argued that encouraging enterprise to offer decent work was the fastest way to achieve development. He argued there were three primary reasons for this: the production

aspect (i.e. decent work improves the productivity of a nation); the income aspect (i.e. fair wages improve spending power of workers); and the recognition aspect (i.e. decent work promotes a sense of fairness and wellbeing amongst the workforce which is important from a psychological and social perspective).

UNEP's Green Economy and Sen's arguments provide neat example of how enterprises can directly and indirectly drive sustainable development in a holistic sense (i.e. through both financial and non-financial mechanisms), often with minimal trade-off. In focusing on enterprises in their development agenda, governments, international organisations, NGOs and other actors have focussed almost exclusively on the formal sector and particularly on large multinationals.

However, emerging economies are defined by huge swaths of informal micro-businesses. These businesses have largely been excluded from current thinking. In the social/labour dimension, two examples include the International Labor Organization's 'Decent Labour' initiative (ILO 2002) or the World Health Organisation's 'Healthy Workplaces Framework' (WHO, 2010), which focus predominantly on larger organisations, although more recent work has attempted to translate the principles of these to the informal sector. Similarly, UNEP (2011:2) identifies the main drivers of change as "national regulations, policies, subsidies and incentives, and international market and legal infrastructure and trade and aid protocols". Most of these would not reach the informal sector or even be relevant to it. However, the informal economy might have a critical role to play in sustainable development.

### **The informal economy/sector**

In sub-Saharan Africa, the informal economy accounts for up to 63.6% of GDP (Charmes, 2016), with an average of 41% (Schneider, 2002), which translates in 70% of employment. As such, it is a sizeable component of the economy, which if leveraged correctly, could be a powerful force for sustainable development. However, Maloney and Saavedra-Chanduvi (2007: 21) note that while there is no agreed upon definition of the informal sector, the multitude of definitions are almost always negative: "*unprotected workers, excessive regulation, low productivity, unfair competition, evasion of the rule of law, underpayment or nonpayment of taxes, and work "underground" or in the shadows*".

Given this understanding of the informal economy, it is no surprise that the default approach from key actors has been to formalise the informal economy or in other words, abolish the informal economy (Sepulveda and Syrett, 2007; SBC, 2004; Tokman, 2007). This approach has been tried, but largely has failed. Benson (2014), in a review of such attempts, explains how standards and certifications, taxation and pricing, and public procurement, have all previously failed to bring about desired outcomes through formalisation of previously informal activity.

At the same time as these failed policy approaches, western economies have been undergoing a transformation. That is, the proportion of the economy made up of formal business has been shrinking while informal work has been growing (McKinsey Global Institute, 2004; EC, 1998, 2002). The sharing economy has been particularly instrumental in this shift. Cogent arguments are also being presented for the benefits of an informal economy. For example, the informal sector possesses a flexibility and creativity that allows it to respond more quickly to the demand and needs of the market (Ezeah et al., 2013) and can supply to the shortfalls of the formal economy (Briassoulis, 1999). This has challenged the assumption that a developed economy must exclude an informal economy.

Given the difficulty in formalising the informal sector and the recognition that a burgeoning informal sector is not an issue in itself, governments and other stakeholders have begun to consider a version of development that includes an informal sector. There is even some empirical evidence to support the idea that development can occur without formalisation of the informal sector. Chambwera et al. (2011) note that India has enjoyed a growth rate in GDP of about 6.5% annually throughout the 2000s, but the informal economy remained constant at approximately 93% of the workforce.

Therefore, there is an argument that a new approach is required. Alter Chen (2012: 20) summarises this position well: *“What is needed, most fundamentally, is a new economic paradigm: a model of a hybrid economy that embraces the traditional and the modern, the small scale and the big scale, the informal and the formal.”* An example of this is informal sector recycling. While formal sector waste management is a net cost, informal waste management is a net profit. Rather than a nuisance, individual waste collectors are a benefit that in some sub-Saharan countries contribute to the recovery of 20% of municipal waste (Gunsilius, 2010). The exclusion of the informal sector in this case would result in unsustainable interventions, increased costs, or reduced performance. For instance, in Egypt the rate of waste recovery dropped when waste management was handed over to the formal sector (Gunsilius, 2010).

It seems development is at a crossroads when it comes to the informal sector and an important decision needs to be made. Namely, does the development trajectory for emerging economies include or exclude the informal sector, and, if the informal sector is included, what is the best way of facilitating the informal sector to be a force for positive sustainable development?

### **The present paper**

The decision of whether to include or exclude the informal sector lies on whether it can contribute positively to sustainable development in a holistic sense. The informal economy has a considerable weight in terms of contributing to economic sustainability and many millions of poor people depend on it for their livelihoods (Benson, 2014). However, the research on environmental and social sustainability is extremely limited. The assumption is that the informal sector is socially and environmentally unsustainable through harsh approaches to labour and the environment.

Overall, as noted by Benson (2014, p.34) *“understanding how informality operates [...] is an urgent knowledge gap to fill.”* As such, researchers have called for further research into understanding the informal sector (Newell et al., 2014). This is perhaps best summed up by Ruzek (2015, p.32): *“With more research, studies and raw data, perhaps the informal sector can light the way toward sustainability”*.

This paper attempts to partially address this knowledge gap. The question posed is: what are the business practices that informal, micro-entrepreneurs engage in to run their business and what is their approach to (environmental and social) sustainability? This will shed light on whether recent claims that the informal sector can exist within a developed economy are realistic. If there is evidence that the informal sector can operate in a social and environmentally sustainable manner, this would strengthen the argument for maintaining the informal sector. Conversely if the informal sector is made up of businesses that are largely damaging to the environment and society, with little opportunity for change, a more radical approach may be required.

If there were to be a role for the informal sector in a developed economy, the information generated by this research question would also be helpful for stakeholders to think about next steps. I.e. what are the needs of the informal sector when it comes to promoting more sustainable practices.

A similar question has been posed in formal economies of developed nations: can multinationals play a positive role in the sustainability agenda or not. To answer this question, several theories, models, taxonomies and frameworks have emerged to explain different stages of sustainability practices and maturity within economies or organisations (see Maon et al., 2010, for a review). The approach taken to the present question about the informal economy is inspired by this method. As such, this paper will present a taxonomy of approaches entrepreneurs take to sustainability which emerged from the data.

## **Method**

To explore the research question posed above, interviews were conducted with 30 informal sector entrepreneurs spread across the Rift Valley in Kenya (Nakuru, Njoro, Eldoret and Kisii). This was supplemented by an expert interview with a member of local government in Nakuru.

Interviews were semi-structured and based on themes which emerged during the project pilot. These themes were generated through a combination of top down and bottom up process. To begin with, the research team conducted a review of established guidance and norms around social and environmental sustainability. These tools included ISO 26000 (ISO, 2016), the Global Reporting Initiative (GRI, 2013), the United Nations Global Compact (UNGC, 2015), etc. From this normative list, researchers visited informal sector businesses and conducted interviews and observations to refine the list of themes to what was appropriate in an informal micro-business context. The following themes were deemed as relevant:

Labour themes:

1. Presence or type of agreements/contracts with employees
2. Work schedules (working day/week, night shifts, regular/irregular hours etc.)
3. Health, safety and wellbeing of employees
4. Discrimination at work (across all practices: recruitment, remuneration, working hours, termination of employment etc.)
5. Protection of human rights (absence of forced and child labour)
6. Provision of development opportunities (training, increased responsibilities, etc.)
7. Conflict resolution/disciplinary

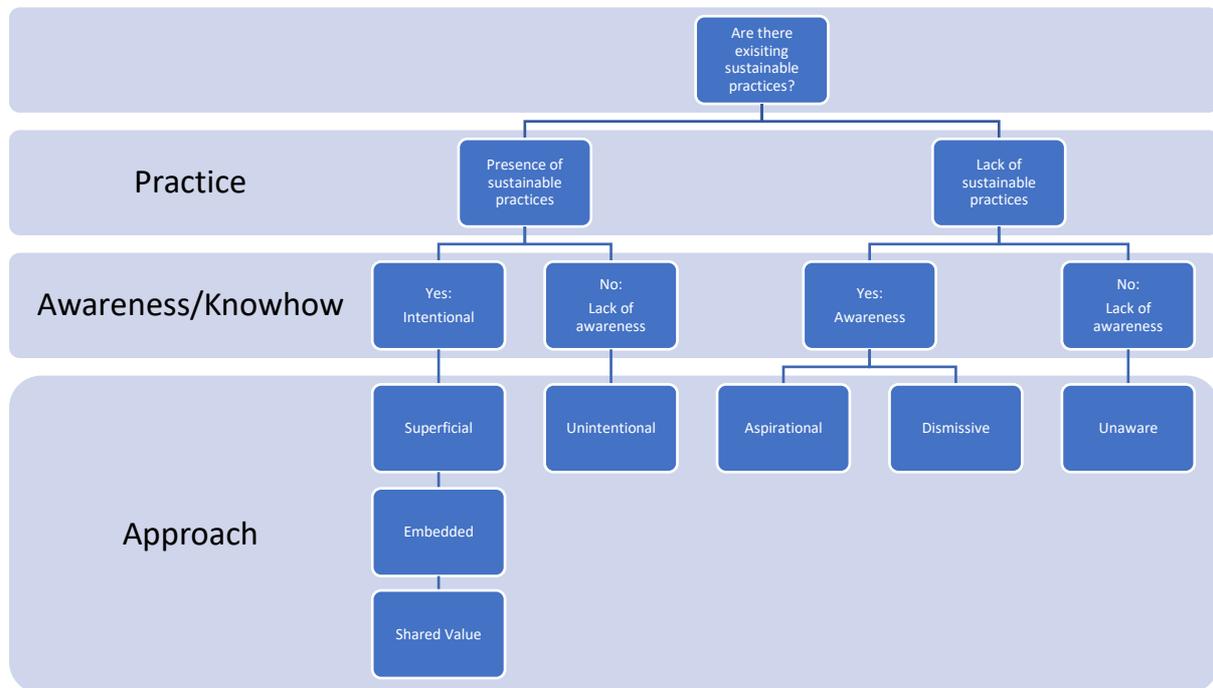
Environmental themes:

1. Natural resource consumption
2. Energy consumption
3. Waste management

Interviews were conducted and analysed by researchers in Balloon Ventures' Insight & Impact team. Thematic analysis was used to extract emerging themes from the interview transcripts (Braun and Clarke, 2006). The aforementioned themes were used to guide the analysis. Any relevant information in the transcripts was coded under these themes or emerging themes. Following this, the coded data was then re-examined to refine themes. An additional researcher coded samples of the extracted data to ensure consistency and validity of the coding process. Analysis of reports was performed using Nvivo10.

Through this process, themes regarding the approach of the entrepreneur to these issues (i.e. the level of engagement) emerged. Refining these themes eventually led to the taxonomy presented in the findings section around which the findings are presented.

## Findings



The taxonomy presented explains the findings emerging from the data describing the approach to sustainability that entrepreneurs took in running their businesses. Working from the top down, the first dichotomy observed was whether sustainable business practices were present in the business or not. Below that, is a second dichotomy, whether awareness and knowhow of sustainability issue were present in the entrepreneur. Awareness relates to whether entrepreneurs understand the broad objective related to a set of practices, or theme of sustainability. For example, did they understand that conserving resources was important for environmental sustainability. Knowhow related to a step more than this, namely, whether the entrepreneur understood what actions they could take to work towards this goal. For example, did they recognise the ways in which their business contributed to resource consumption and strategies they could use to minimise this consumption. These two concepts are considered together, as in practice they often went hand in hand.

The combination of the above dichotomies resulted in several categories in the ‘Approach’ section. Each category characterises a given entrepreneur’s approach to a practice or set of practices. These were specific to practices rather than an entire organisation or business. For example, the entrepreneur’s approach to waste disposal might be classified as dismissive or aspirational (etc.), but their approach to a different issue might be categorised as embedded. This reflects the fragmented nature of practices in the informal sector, namely, that no business was uniform in their approach with the different areas of sustainability that were considered. They could be highly engaged in some aspects and disengaged in others. Below, each of the categories (from right to left) is described in more detail.

### ***Unaware***

In this case, the entrepreneur did not conduct any sustainable business practices in the area being explored, nor did they understand the importance of the area of sustainability or how they could contribute to it. For example, Lucy a charcoal vendor replied the following when asked about whether she thinks of the environment when going about her daily activities: *"I have never thought about the environment and my business"*. Solomon, who owns a series of print shops, responded in a similar way: *"That one I don't think a lot about, I don't think my business affects the environment"*.

A subtler indication of the lack of awareness is given by Jane, a charcoal seller. When asked if she was worried about the environmental damage caused by the charcoal trade she replied: *"I always worry about that. When I put charcoal in the home, people complain about headaches. So I tell them to open the windows and increase ventilation."* This suggests that the way Jane understands environment is in the immediate vicinity of a place rather than the natural environment. Even when attempting to explain further there was little indication that Jane understood environment as the natural environment which might require protection.

Interestingly, a lack of awareness only appeared to be a challenge when considering environmental issues. Almost all entrepreneurs understood the need to strengthen their communities via social sustainability and recognised the importance of using their business as a vehicle for this, for example through the provision of jobs. One possible reason for this is that the impact on the community of unsustainable business practices is fairly obvious and there is a short time delay between action and consequence. Both, are not the case in environmental issues.

Where entrepreneurs were aware of environmental issues, there were often explicit reasons why this was the case, rather than an intuitive understanding being gleaned through their everyday environment. Lucy, who ran an alternative fuel business commented on the role of education in awareness of environmental issues: *"By profession I am a teacher and I usually teach a subject called science and it has a unit on environment conservation. We also know the effects of cutting down trees, it brings a lot of soil erosion and the fertile soil is carried away. I know that and it is ingrained in me."*

### ***Dismissive***

Moving to the next categories, if sustainable practices were lacking but awareness and knowhow were present, there were two further categories. In the first instance people might recognise the importance of sustainable business practices but deliberately choose not to engage with them: dismissive; or they may aspire to start acting in a more sustainable way: aspirational.

There were few cases of the entrepreneurs' approach to themes being dismissive. One example is Jeremiah, a carpenter. He recognised the impact his line of work might have on the environment and the need to protect it: *"Trees make good environment - so we need to plant trees."* However, when asked if he had taken any steps to do this, replied: *"We buy timber we do not buy trees. I do not know how to cut trees or to plant trees"* explaining that he did not feel it was his responsibility to contribute to protecting the environment because it was not his business that was directly affecting the environment (but rather the timber suppliers).

Similarly, Peter, a charcoal seller, was aware of the environmental damage created by deforestation and the need to regulate the industry. Yet, when asked about the involvement of his business, he denied any link with deforestation and carbon emission and uses the profit he makes to justify his actions: *"We think about profit. Who thinks about that [environmental damage]? It's only the government and that is the national government because they have employed the Kenya Forestry*

*[Commission] and everything to do that. They are the ones who are supposed to do that.*” Peter is clearly aware of the damage generated by the charcoal trade, but externalises any responsibility to address this to other actors.

An interesting question is why some entrepreneurs did not feel the need to take ownership of sustainability challenges. Entrepreneurs who did take positive approaches to sustainability often referred to experiencing the negatives of unsustainable practices as motives for doing things differently. This is clearest in the social arena. For example, Solomon who owned a series of print shops, noted that he was driven to treat his employees fairly because of how he had been treated by former employers: *“This is from my own experience, when I was working previously, we could see we are overworking and not paid anything. For example, here when we are working a lot, you are supposed to leave at 8 but when they leave at 12, I have to pay them for those hours so I feel comfortable. When I was [working overtime] previously, they didn’t do it and I felt hurt in my heart. I could feel so bad, so here I cannot do that.”* Therefore, it might be that entrepreneurs who do not perceive the negative consequences of unsustainable practices are less likely to act to mitigate them.

### ***Aspirational***

Far more common were aspirational businesses. As in the dismissive category, entrepreneurs here were aware of sustainability issues and did not conduct sustainable practices, but rather than be dismissive, their intention and desire was to act in a more sustainable manner. For example, Pamela commented on her aspirations regarding using an alternative to charcoal for energy: *“I have wished to, but I have not known how I can do it. I have my brother who does biogas but the problem why I have not involved him because I felt I do still not have that resource, that money for putting it up”.*

There were several reasons why entrepreneurs were aspirational rather than actually conducting the practices. As indicated above a key driver was affordability. The local council representative commented: *“There is a lot of awareness creation. Most people who use firewood know that it has an impact on the environment. It is only that they have no other means for their energy. They know the impact, but it is the only way that they can afford [energy]. [Renewable energy] will take time, because it is a bit expensive in its formative time. But after it has been established, the long-term benefits are better than exploiting the forests for charcoal.”*

Sometimes the issue was a lack of opportunity within the business, particularly on social elements. Victor, a school owner noted: *“If I can get an opportunity to employ people, I would really love to employ. There are a lot of youths who are not employed and that is where I would like to create employment.”* In other instances, a lack of skills was the challenge. As Bernard notes: *“Skills are the most important, and then materials, we can’t source them from the farm. If it is compost manure we might have the resource here, but we don’t have the knowledge. So it’s challenging.”*

Another factor which emerged was lack of access to key requirements for acting in a more sustainable manner. One example was a lack of infrastructure to dispose of waste in a sustainable manner, the norm in Kenya being to burn waste. When asked whether there were alternatives to this practice, Solomon, a print shop owner, noted: *“I don’t have another idea of what to do with this waste, we don’t have recycling companies here which I know they can do it”.* Similarly, Mary, a clinic owner, noted *“Unlike Nairobi where there is collection, here there is no one to collect, you cannot just put on a piece of land, so you have to burn”.*

### ***Unintentional***

The above three categories (unaware, dismissive and aspirational) make up the right side of the presented taxonomy, where sustainable practices were absent. On the left side of the taxonomy are the categories where sustainable practices were present. As above, the first dichotomy was

whether awareness and knowhow were present. In cases where they were absent, these practices were categorised as unintentional. This occurred when the conducted practice(s) had synergies with other desirable outcomes, usually profit maximisation.

Instances of an unintentional approach to sustainability were very common. One example, was Felix, who runs an advertising agency using cyclists pulling billboards mounted on trailers. When discussing offering equal employment opportunities to males and females, he noted: *"We have had female riders, at least 7, they are quite good. It is important for hiring, I give priorities to the ladies"*. However, when exploring why he tried to ensure a gender balanced workforce, social sustainability was clearly not at the forefront of his mind: *"It is important for our image. We show that we don't just hire, but we are very clear on gender. The ladies create bigger impact, people are like 'oh there are ladies riding these bicycles'."*

Similarly, when discussing the eco-friendly bulbs Mary used in her clinic, she noted: *"I am very careful, I only use it when there is a client and here I have used a special bulb, it charges itself, after you turn off the electricity it stays on"*. However, once again when exploring why, a clear financial driver emerged: *"I bought them for economic purposes, if you don't think about the economic you find yourself in problems"*.

### ***Superficial***

In cases where awareness and knowhow were present, there were a further three categories: superficial, embedded, or shared value. Practices were categorised as superficial when they did contribute to sustainability, but they were not approached in a systematic or structured manner. These might be one-off initiatives or completely unrelated to the business the entrepreneur was running.

An example of superficial practices was provided by Jane who runs a small farm in Nakuru and sells charcoal. When discussing benefits that she offers to her employees, Jane noted: *"Sometimes we are given by the government, drugs to give to the children. I always give to them [her employees] and tell them to go and give them to their children. Things like that. I always give them a health talk, I tell them about nutrition."* Jane trained as a nurse and so she draws on what resources she has available to contribute to the sustainability of her community through looking after her employees. This captures the essence of the superficial category. Entrepreneurs are contributing to sustainability, but not structurally through the activities or practices that their business requires to run (e.g. remuneration). Instead they use resources and opportunities available outside of the business and use the business as a vehicle to deliver them.

### ***Embedded***

Embedded practices were practices which made up the day to day running of the entrepreneur's business and the entrepreneur had intentionally acted to make them more sustainable. Embedded socially sustainable practices were quite common.

One example was Solomon, who runs a collection of print shops outside of the technical college where he trained. When it comes to recruiting employees, he noted the following: *"I was looking for a good employee and for a person who is needy [in need of work]. I had two students who have a great need for fees, and said to me "It's my humble request that you give me some work to do so I can pay the fees". And because for me I like for the business to be a blessing to people and the community, those people we agreed that next term we work with them. This is the place that I learnt from and when I see them they are also my brothers. This business should be a blessing to me, to the community and to everybody."*

A similar view was purported by Ben, a farmer. When asked if he considered someone's background important in hiring decisions, he noted: *"The background matters a lot - we need to help those people who are underprivileged."* Another example was Felix, who runs an advertising agency using cyclists pulling billboards, mounted on trailers. When discussing remuneration for employees he noted: *"Now we pay 700 shillings per day. We started at 400 and now we can pay more so we pay 700, plus 100 for lunch. And outside of towns we pay 1,000 KSH including lunch. By the way, if they need accommodation we give them another 800. They didn't demand it – but we wanted to do it. If they spend it not that is none of our business"*.

Cases of embedded environmentally sustainable practices were less common although still many. Bernard noted that the main reason to adopt a biogas system was: *"To help the environment, we don't want to help destruct the environment"*. A similar view was shared by Victor and the same motivations led him to the choice of materials for his school. He said: *"Schools normally use manila papers and manila papers are basically manufactured from trees. So when I use canvas material, it is a polythene material and it is environmentally friendly."*

### **Shared value**

The shared value category is somewhat distinct from the rest because it related to the business model rather than a set of practices. That is, these businesses were established explicitly to benefit the community through the business model (rather than just using the business to create sustainability).

Shared value models were rare, yet they were more common than expected. One example was Pamela, who runs a tailoring business with the explicit purpose of making a profit to subsidise an orphanage and school for the needy: *"I started a school which was also an orphanage. I decided, actually I don't have anyone to help me, sponsors or anyone. So, I decided this tailoring thing that I used to do, let me do it for the school. So I started tailoring."* In this case, Pamela's business was not driving sustainability in itself but through a subsidising model she was able to contribute positively to her community.

Another example was Lucy who uses the waste from charcoal (mainly charcoal dust), combined with soil and water, to create fire briquettes as an alternative to pure charcoal. There were two main environmental drivers for Lucy: *"We discovered the waste is being thrown all over, the waste from the charcoal, it's littering all over destroying our environment. So we introduced reusing it. We started collecting the waste. We are also going to be rescuing plants. People are not going to cut so many plants in order to make the charcoal which is used as fuel."*

However, even where shared value models were present, the financial aspect of the business was clearly key. Sammy operates a recycling business, he suggested that the motivation for doing so was partly environmental: *"When I collect, I help the environment because those bottles, sometimes they drop it everywhere, but when we go and collect it, we clear the environment and leave it clean."* It was also clear that Sammy was attracted to the financial aspect of recycling. When discussing one of his friends who opened up a similar business he noted: *"he is a taxi motorbike driver. When he carries people by taxi, he gets almost 500. But when he comes to recycling, he can get 1000. That is enough to feed his family."*

### **Discussion**

The purpose of the research was to identify the status of sustainability practices in the Kenyan Rift Valley's informal sector. The goal behind this was to better understand whether the development trajectory for emerging economies could include the informal sector rather than excluding it as per mainstream thinking.

Given the negativity surrounding the definitions of the informal sector, one might have expected sustainable practices to be largely absent in informal sector businesses. The hypothesis being that a lack of resources, awareness and a pressure to generate income, combined with a lack of regulation and enforcement would lead to a focus on profit maximisation at the expense of long-term sustainability. The present findings indicate that while this is sometimes the case, there are also several cases where entrepreneurs are engaged in sustainable business practices.

The superficial and embedded categories illustrate that entrepreneurs consciously attempt to use their businesses as vehicles for sustainability. These approaches were commonly found suggesting that this is not a one-off phenomenon but rather something that may be widespread in the informal sector. In the case of the shared value category, entrepreneurs went a step further, deliberately setting up their businesses for the purposes of sustainability. Taken together this is an important finding. Under the right circumstances, the informal sector is seemingly capable of becoming more sustainable. This suggests there is a role for the informal sector in sustainable development moving forward. Future research should seek to validate this finding and researchers should explore what a hybrid model of the economy, including both informal and formal businesses, would look like and how it would operate. At the same time policy makers can draw lessons from this research to prioritise certain actions. These are discussed in the policy recommendation section below.

While it was not the direct purpose of this study to explore why entrepreneurs engaged in sustainability practices or not, the emerging themes provided some interesting insights. Awareness and knowhow emerged as important factors. Awareness related to whether entrepreneurs understood the broad objective related to a set of practices, or theme of sustainability (e.g. conserving resources to protect the environment). Knowhow related to whether the entrepreneur understood what actions they could take to work towards this goal. While awareness and knowhow were not required for sustainability practices to exist (e.g. the unintentional category) or sufficient to drive sustainable practices (e.g. the dismissive category), entrepreneurs who were consciously engaged in sustainable practices referred to their awareness of broader sustainability challenges and understanding of the role that they could play in mitigating these through their business.

This finding is intuitive and also grounded in existing research. Throughout the psychology literature there are models explaining decision making and behaviour change. A common theme across these models is the need for a definition of the problem or need (Robbins and Judge, 2007). Without this first step, there is no decision to be made or behaviour change to be enacted. This links to the awareness theme in this paper. Without an awareness of sustainability issues, it was impossible for entrepreneurs to identify the problem they were trying to solve and therefore be *consciously* acting sustainably (i.e. notwithstanding the unintentional category). Similarly, these models refer to a stage whereby the actor collects or assess alternative options. Once again, this stage is critical, in that without it, no decision can be reached or action changed. It links closely to knowhow, because if entrepreneurs do not understand how they could use their business to respond to the need, they cannot take any action. As such, stimulating awareness and knowhow are significant to generate conscious sustainability practices.

However, an interesting finding was that awareness and knowhow were important but not a limiting factor when it came to engaging in sustainable business practices (i.e. it was not a necessary requirement). Outside of conscious efforts, the unintentional category illustrated that there are entrepreneurs who engage in sustainable practices in the pursuit of other objectives (usually profit maximisation). On the one hand this finding is positive because it illustrates that there are other ways to encourage sustainable practices in the informal economy even if

entrepreneurs are not aware of the sustainability implications of them. On the other hand, however, these practices are contingent on other motives. If the synergistic benefits were to dissipate the sustainable practice would also dwindle. For example, in the case of recycling due to financial benefits, if the entrepreneur were to improve their financial situation, the need for recycling would cease and the practice would stop. This is an important point, and the presence of these practices should not be misrepresented as evidence of sustainability thinking on behalf of the entrepreneurs (Benson, 2014).

Awareness and knowhow were also not sufficient for practices to be observed. In two categories awareness and knowhow were present, but sustainable practices were not: the dismissive and aspirational category. In the dismissive category, a key factor appeared to be a lack of sense of ownership. I.e. entrepreneurs did not feel they were responsible for enacting change. Instead, it was broader groups like government or their agencies who entrepreneurs felt should be responsible for promoting positive change. This suggests that on top of awareness and knowhow, there also needed to be a sense of ownership of the issue. This is superficially supported by some quotes in which entrepreneurs who were carrying out sustainability practices noted that they had experienced negative consequences of unsustainable practices (e.g. harsh working hours) and were not willing to be a part of continuing that trend. Many spoke about being able to see the needs in their community and feeling responsible for addressing them. A dismissive approach was uncommon, an interesting finding in itself, but more so given that in the developed world non-compliance with sustainability principles is often due to a dismissive approach (Gunningham et al., 2004; Kagan & Scholz, 1984).

The category of aspirational entrepreneurs is perhaps most interesting and valuable from a practical perspective. This category represented entrepreneurs who wanted to do things more sustainably but for a number of reasons, did not. The findings emerging from the interviews suggest that financial considerations, lack of skills to implement, lack of businesses opportunity, lack of access to things like technology or infrastructure are all important in supporting entrepreneurs to act in a sustainable manner.

In summary, those that engaged in sustainability practices either were aware of the broader sustainability challenge and the role that they could play within that and were motivated to take action, or were pursuing another goal which was synergistic with sustainability (e.g. energy conservation). Those that did not, were either unaware of sustainability issues and how they could address them or were aware but either through choice or a lack of resources, did not take any measures.

It is important to note that the findings presented here should not be taken as an indication that the informal sector operates in a socially and environmentally sustainable way. Such an assessment was not possible given the methods used. What the findings do suggest is that there are examples where this is the case and therefore this provides evidence in support of the idea that the informal sector can be leveraged as a force for sustainable development if supported in the right way. Recommendations for how this can be better achieved are discussed below.

## **Policy implications**

The findings discussed above provide useful insights to policymakers in designing policies that respond to the current needs of the Kenyan informal sector. Awareness and knowhow were key, they set up the need and available options for the entrepreneurs to act. In the case of social sustainability, most entrepreneurs understood the need to act and how they could offer value to their communities. However, there was still progress that could be made with subtler areas of

social sustainability (for example entrepreneurs recognised that jobs were important to offer to the community, but sometimes they would only offer them to specific groups). Regarding environmental issues, there was a clear need for greater awareness and knowhow around how entrepreneurs could mitigate environmental risks. Policy makers could respond to this need through awareness raising initiatives (e.g. campaigns) or broader education programmes. Some evidence of the effectiveness of this emerged in the data. In particular, there seemed to be almost no resources for entrepreneurs once they became aware of an issue to help them understand how they could combat it.

Financial constraints were a commonly discussed barrier to a positive approach to sustainability, especially when thinking about changes which incurred a one-off cost (e.g. set up costs). Subsidies for these costs or incentives designed to lessen the immediate burden of sustainable practices (e.g. low-interest financing) would enable aspirational entrepreneurs to move towards more sustainable practices. There were examples in the data which supported this conclusion. In some cases, entrepreneurs were able to take an embedded or shared value approach to a sustainability issue only through government financial support.

The unintentional approach to sustainability was more widespread than anticipated. This could be leveraged for a short-term gain in sustainability in the informal sector. Policy makers could incentivise entrepreneurs to create and offer sustainable products and services which offer profit maximising opportunities to entrepreneurs. The data from this research suggests that where synergies with profit maximisation are present, entrepreneurs will happily adopt sustainable practices. In order to create long-term conscious sustainability in the informal sector however, the other recommendations would need to be enacted as well.

### **Limitations**

The major limitation in this research is the fact that data is collected through interview and is therefore self-reported data on the practices and perceptions of informal entrepreneurs towards sustainability. There are several issues with this including acquiescence bias, social desirability bias, etc. Some of the findings may be questionable based on this (for example the fact that so few entrepreneurs presented themselves as dismissive of sustainability issues is particularly questionable). As an initial enquiry into this research question, an exploratory method was chosen which fit the purposes of the research. The authors believe that the main findings are a useful starting point and this warrants further research utilising other approaches to validate the findings presented here.

### **Conclusions**

The purpose of the research was to identify the approach of Kenyan informal sector entrepreneurs to sustainability issues. The goal behind this was to better understand whether the development trajectory for emerging economies could include the informal sector rather than excluding it as per mainstream thinking.

The findings illustrate that several approaches existed, however most of these were positive. The superficial, embedded and shared value approaches illustrate that entrepreneurs are consciously acting in a sustainable manner. The unintentional approach also suggested that entrepreneurs will act sustainably if that practice carries other benefits with it such as profit maximisation. Even where there were cases of no sustainable practices, entrepreneurs were mostly aspirational, limited by factors including financial resources, infrastructure and implementation knowledge.

Taken together, these findings suggest that if supported in the right way, the informal sector could have an active role to play in sustainable development moving forward. Future research should validate the findings here, considering other dimensions of the informal sector (e.g. economic and political) as well and begin to map out what hybrid economies that include both the formal and informal sector look like (Beer et al., 2016).

Based on the emerging findings, there are several steps policymakers can take to promote more sustainable practices in the informal economy. These include awareness raising and education initiatives, financial incentives such as financing and subsidies, and in the short term incentivising sustainability by providing sustainable products with positive externalities.

These are aligned with broader policy objectives. For example, the ministry of energy of Kenya has set ambitious goals in terms of energy provision, such as total energy coverage by 2030. To transform these goals into reality the use of non-renewable resources is required (Newell et al., 2014) which requires buy in and adoption from end users. The presented taxonomy can help policymakers better understand the perception and needs of informal sector entrepreneurs. It can be used by policymakers to ensure compliance, mutual advantages and common benefits given by policies that are tailored on the needs of individual actors.

### **List of references**

- ALTER CHEN, M. (2012), 'The Informal Economy: Definitions, Theories and Policies', (WIEGO Working Paper No. 1), Cambridge MA, Women in Informal Employment: Globalizing and Organizing.
- ATKINSON, G., DUBOURG, R., HAMILTON, K., MUNASINGHE, M., PEARCE, D., and YOUNG, C. (1997), *Measuring sustainable development: Macroeconomics and the environment*, Aldershot, Edward Elgar.
- BENSON, E. (2014), 'Informal and Green? The forgotten voice in transition to a green economy'. (Discussion Paper, March 2014), London, International Institute for Environment and Development.
- BEER, J., FU, K., and WUNSCH-VINCENT, S. (2016), 'Innovation in the Informal Economy', in E. Kraemer-Mbula and S. Wunsch-Vincent (eds), *The Informal Economy in Developing Nations Hidden Engine of Innovation?*, Cambridge, Cambridge University Press, 53-87.
- BRAUN, V. and CLARKE, V. (2006), 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3 (2), pp. 77-101.
- BRIASSOULIS, H. (1999), 'Sustainable Development and the Informal Sector: An Uneasy Relationship?', *Journal of Environment & Development*, Vol. 8, No. 3, 213-237.
- CHAMBWERA, M., MACGREGOR, J. and BAKER, A. (2011), 'The Informal Economy. A primer for development professionals on the importance of the informal economy in developing countries', (published by International Institute for Environment and Development, London).
- CHARMES, J. (2016), 'The Informal Economy: Definitions, Size, Contribution and Main Characteristics', in E. Kraemer-Mbula and S. Wunsch-Vincent (eds), *The Informal Economy in Developing Nations Hidden Engine of Innovation?*, Cambridge, Cambridge University Press, 13-44.

EC (EUROPEAN COMMISSION) (1998), On undeclared work, COM (1998) 219, Brussels, EC.

EC (2002), Commission calls on governments to do more to fight the shadow economy, Press release IP/02/339, Brussels, EC.

EZEAH, C., FAZAKERLEY, J. A. and ROBERTS, C.L. (2013), 'Emerging trends in informal sector recycling in developing and transition countries', *Waste Management*, 33, 2509-2519.

GRI (GLOBAL REPORTING INITIATIVE) (2013) 'G4 Sustainability Reporting Guidelines', Amsterdam, GRI.

GUNNINGHAM, N., THORNTON, D. and KAGAN, R. A. (2004), 'Motivating Management: Corporate Compliance in Environment Protection' *Law & Policy*, 27(2), 289–316.

GUNSILIUS, E. (2010), 'Role of the Informal Sector in Solid Waste Management and Enabling Conditions for its Integration. Experiences from GTZ', (paper presented at Transwaste Workshop on the Informal Sector, Geneva).

ILO (INTERNATIONAL LABOUR ORGANIZATION) (2002), 'Decent work and the informal economy', Geneva, ILO.

ISO (INTERNATIONAL ORGANISATION FOR STANDARDIZATION) (2016), 'ISO 26000 and the SDGs', Switzerland: ISO

KAGAN, R. A. and SZHOLTZ, J. T. (1984), 'The "Criminology of the Corporation" and Regulatory Enforcement Strategies', in HAWKINS, K. and MANNING, J. M. (eds.), *Enforcing Regulation*, Boston, Kluwer-Nijhoff, 67–95.

MABOGUNJE, A. L. (1980), *The Development Process: A Spatial Perspective*, Hutchinson, London.

MALONEY, W.F. and SAAVEDRA-CHANDUVI, J. (2007), 'The Informal Sector: What Is It, Why Do We Care, and How Do We Measure It?', in Perry, G., Maloney, W., Arias, O., Fajnzylber, P., Mason, A., Saavedra-Chanduvi, J., *Informality: Exit And Exclusion*, Washington, The World Bank.

MAON, F., LINDGREEN, A. and SWAEN, V. (2010), 'Organizational Stages and Cultural Phases: A Critical Review and a Consolidative Model of Corporate Social Responsibility Development' *International Journal of Management Reviews*, 12, 20-38.

MCKINSEY GLOBAL INSTITUTE (2004), 'The hidden dangers of the informal economy', *The McKinsey Quarterly*, No. 3, 4 October ([www.mckinseyquarterly.com](http://www.mckinseyquarterly.com)).

NEWELL, P., PHILLIPS, J. and PUEYO, A. (2014), 'The Political Economy of Low Carbon Energy in Kenya', IDS Working Paper 445, Brighton.

PEARCE, D., BARBIER, E. and MARKANDYA, A. (1990), *Sustainable development: Economics and environment in the third world*, Aldershot, Edward Elgar.

ROBBINS, S. P. and JUDGE, T. A. (2007), *Organizational Behavior*, Upper Saddle River, Pearson Prentice Hall.

RUZEK, W. (2015), 'The Informal Economy as a Catalyst for Sustainability', *Sustainability*, 7, 23-34.

SEN, A. (1975), *Employment, technology and development. A study prepared for the ILO within the framework of the World Employment Programme*, Oxford, Clarendon Press.

SACHS, J.D. (2015), *The Age of Sustainable Development*, New York, Columbia University Press.

SBC (SMALL BUSINESS COUNCIL) (2004), *The informal economy: Making the transition to the formal economy*, (Report to the Small Business Council), London.

SCHNEIDER, F. (2002), 'Size and measurement of the informal economy in 110 countries around the world', (World Bank Working Paper), Washington, World Bank.

SEPULVEDA, L. and SYRETT, S. (2007), 'Out of the Shadows? Formalisation Approaches to Informal Economic Activity', *Policy & Politics*, 35, 87-104.

TOKMAN, V. (2007), 'Modernizing the Informal Sector', (UN Department of Economic and Social Affairs (DESA) Working Papers No. 42), New York, UN.

UNEP (UNITED NATIONS ENVIRONMENT PROGRAMME) (2011), 'Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication - A Synthesis for Policy Makers', St-Martin\_Bellevue.

UNGC (UNITED NATIONS GLOBAL COMPACT) (2015), 'A Global Compact for Sustainable Development' New York: UNGC

WCED (WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT) (1987), 'Our Common Future', (Report of the World Commission on Environment and Development to the United Nations, New York).

WEF (WORLD ECONOMIC FORUM) (2017), 'The Global Risks Report 2017', Geneva.

WHO (WORLD HEALTH ORGANIZATION) (2010), *Healthy workplaces: a model for action: for employers, workers, policymakers and practitioners*, Geneva, World Health Organization.