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The urban informal economy, local inclusion and achieving a global green transformation



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ABSTRACT

The green economy is widely promoted as a 21st century solution to sustainable development. The role of cities in pursuing this agenda is increasingly recognised. Yet, the informal economy, which so many urban dwellers and workers in low- and middle-income countries depend upon, is seldom considered. This paper examines the opportunities and barriers that the urban informal economy pose for making economies greener, and the risks that such attempts pose for vulnerable informal dwellers and workers. In contemplating how this group can be included in the transition to a greener economy, the different schools of thought on informality are reviewed, with a focus on recent thinking that relates urban informality to conflicting processes of inclusion and exclusion. The paper then considers a set of action areas aimed at leveraging the positive contributions that informal dwellers and workers can make in the transition to an economy that is not only greener, but also more inclusive. Leveraging these contributions will require recognising and supporting women's unpaid reproductive work (including community organising and strategizing around environmental improvements) and applying the principles of inclusive urban planning.

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1. Introduction

The green economy is promoted by international agencies as a solution to the world's triple crisis (OECD, 2012; UNEP, 2011b, 2015; World Bank, 2012). This crisis is held to combine the 2008 financial crisis and its legacy, the emerging crisis of climate change, and the persistent crisis of global poverty. The green economy is marketed as advantageous because it places the market economy at the centre of the solution, with green investments creating sustainable economic opportunities (Brand, 2012; Brockington, 2012).

International agencies are now promoting the role of cities in this transition based on their ability to innovate, create employment, generate wealth, enhance quality of life and accommodate people within smaller ecological footprints than other settlement patterns (Grobbelaar, 2012; Hammer, Kamal-Chaoui, Robert, & Plouin, 2011; Simon, 2013; UNEP, 2011a). However, these debates have largely ignored the informal economy, even though it accounts for the majority of non-agricultural employment in low- and

middle-income countries (ILO, 2013). They have tended to emphasise the dynamic ability of cities to create new green jobs and economic opportunities, while ignoring the barriers that prevent informal dwellers and workers from entering the formal economy.

This paper examines the opportunities and barriers that the urban informal economy presents for attempts to make low and middle-income economies greener. It assesses the risks and opportunities that such efforts pose for the poorest and most vulnerable dwellers and workers who depend on the urban informal economy. The paper builds on a larger literature review published by the International Institute for Environment and Development (IIED) (Brown, McGranahan, & Dodman, 2014).

The first section outlines key features of the urban informal economy relevant to social and economic inclusion on the one hand, and greening on the other. The second section examines the barriers and opportunities that the urban informal economy poses for the green economy, and vice versa. The third section reviews the different schools of thought on informality and contemplates how adherents of these schools might approach greening inclusively. The fourth section presents a set of action areas aimed at leveraging

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the positive contributions that informal dwellers and workers can make to greening, with an emphasis on women's unpaid reproductive work and pro-poor urban planning. The article concludes with some thoughts on what this implies for the green economy and related global environmental agendas.

2. Key features of the urban informal economy

The informal economy is generally understood to include economic activities that fall largely outside the purview of official regulation, whether because the regulations do not apply or through some combination of weak enforcement and evasion (Sinha & Kanbur, 2012). The urban informal economy includes a wide array of activities, from street vending to domestic service, from home-based enterprises to the informal employees of formal enterprises, and from waste picking to urban agriculture.¹ While those operating in the informal economy are often open to sanction for not conforming to official regulations, informal economic activities should not be confused with the illegal goods and services (ILO, 2002b: 12).

There are four features of the urban informal economy that make it particularly important for building economies that are greener and more inclusive. Firstly, the informal economy is not only large, especially in terms of employment, but is growing. No serious attempt to transform the global economy, socially and environmentally, can ignore it. Secondly, relations between local authorities and the informal sector are usually strained, and often dysfunctional. Improving these relations is critical if green economy agendas are to be pursued inclusively. Thirdly, the informal economy displays enormous variation in environmental performance. While there is potential for engaging it constructively, engagement must be discriminating. Fourthly, the informal sector is not only critically important to many of the poorest households, but is highly gendered, with important implications for the pursuit of both social and environmental agendas.

2.1. Persistent growth

Following its 'discovery' by Hart (1973) in a study of Accra, the informal 'sector' was commonly viewed as a marginal and transitory phenomenon that inevitably would be absorbed by the modernising urban industrial sector. Despite this view, however, the informal economy has grown persistently, and is still where the majority of the world's population lives and works (ILO, 2013; Vanek, Chen, Heintz, & Hussmanns, 2014).

Ongoing trends indicate that the non-agricultural informal economy is expanding in urban areas, especially in countries experiencing rapid urbanisation (Elgin & Oyvat, 2013; Mitlin & Satterthwaite, 2013; Potts, 2008; UN-Habitat, 2003). According to recent statistics, informal employment, which includes informal employees in formal enterprises, accounts for more than half of non-agricultural employment in most of the world's 'developing' regions, and considerably more in those regions amid their urban transitions: 82 per cent in South Asia, 66 per cent in Sub-Saharan Africa, 65 per cent in East and Southeast Asia (Vanek et al., 2014).

Statistics on the contribution of the informal economy to national and regional incomes are somewhat less impressive and more uncertain, but demonstrate that the informal economy is

important to overall incomes and to employment. Schneider and Enste (2013) estimate that in the 2000s, the "shadow economy" accounted for 19 percent of gross domestic product (GDP) in OECD countries, 30 percent in transition countries and 45 percent in developing countries. Such estimates are sometimes taken to represent the contribution of the informal sector (as in Benjamin, Beegle, Recanatini, & Santini, 2014: 6), despite their rather different definitions and foci. Charmes (2012: 119) used labour and national account statistics from the United Nations to estimate that the informal economy account for as much as 50–70 percent of non-agricultural employment at a regional level, and that the informal sector (which does not include informal employment by formal enterprises) contributes between 25 and 50 percent of non-agricultural GDP.

By the 1990s, the persistence of the informal economy shifted the debate towards looking to informal activities for opportunities for poverty reduction and economic growth (for example, Rakowski, 1994; Tokman, 1989). This shift has yet to occur in the green economy debate, however. As Benson (2014) points out, this raises questions about whether greening requires formalisation through new or existing regulations, and whether such regulations are even appropriate given their exclusionary tendencies. Building on Benson, this paper argues that the green economy agenda must engage constructively with the urban informal economy if it is to have any meaningful impact on the transition to an economy that is not only greener, but also inclusive of disadvantaged women and men.

2.2. Great diversity in environmental performance

The different segments of the urban informal economy vary enormously in their environmental performance. On the one hand, Benson (2014) examines the untapped potential of greening a number of informal activities that benefit the poor, including waste management (through efforts to prioritise the 3Rs of Reduce, Recycle and Reuse); agrifood markets (through the use of green technologies by smallholder farmers to increase their yields); artisanal mining (through incentivizing cleaner technologies and processes); energy delivery (through enabling biomass energy markets); and housing and infrastructure (through upgrading). Benson shows that many of these informal activities are not necessarily more harmful to the environment than formal activities, and that informal activities can be more sensitive to environmental degradation and the impacts of climate change, and hence more proactive in finding solutions.

On the other hand, there are numerous examples of informal activities that are neither green nor environmentally just. Informal but hazardous activities, such as battery reconditioning, place both workers and the surrounding public at risk, even as they conserve resources. Yet the drive for sustainability, and now green economies, continues to emphasise long-term environmental security without fully considering the pressing need to improve the unacceptable living and working conditions of the urban poor (Dodman, McGranahan, & Dalal-Clayton, 2014; McGranahan, Jacobi, Songsoe, Surjadi, & Kjellén, 2001). Moreover, the common misconception that the urban poor are responsible for most environmental degradation in cities may mean that local governments will either continue to neglect this need or adopt policies that are even more exclusionary (e.g. 'slum' clearance). In reality, however, there is strong evidence to suggest not only that the consumption patterns of higher-income groups (linked to high use of renewable and non-renewable resources, and high levels of biodegradable and non-biodegradable waste generation) are responsible for most environmental degradation as well as greenhouse gas emissions in cities, but also that environmental burdens (linked to physical

¹ Most statistics used to assess the urban informal economy exclude agriculture, as most agriculture is rural and the data are not disaggregated into rural and urban. Similarly, statistics on the non-agricultural part of the informal economy is often taken to reflect the urban informal economy, although many such activities are also prevalent in rural areas.

hazards, biological pathogens, and chemical pollutants) in low-income settings are significant contributors to urban poverty (Hardoy, Mitlin, & Satterthwaite, 2001; McGranahan et al., 2005; Satterthwaite, 2003, 2008).

The challenge of greening economies is therefore not just to get certain informal segments to contribute more effectively to greening, but also to transform certain unsustainable and unjust segments and spaces (including the home, work environment and neighbourhood) so that they are at very least safer and more inclusive, and ideally greener as well. In some cases, this may involve formalisation, in other cases it may not, but in virtually all cases it will require taking both socio-economic and environmental goals seriously and making difficult trade-offs.

2.3. Bad relations with local authorities

Local authorities are inclined to view informal vendors and producers as illicit or even 'illegal', to the extent that their processes and arrangements do not conform to regulatory frameworks, and may interfere with the formal economy. Informal vendors and producers are inclined to view local authorities as an obstacle rather than an ally, to the extent that they are treated without respect, especially if they are regularly moved or fined.

As most of the literature makes clear, however, informal workers and operators, many of whom also live in informal settlements, should not be seen as evaders of regulations designed in the public interest. As Hart (2006) – the first to identify the informal sector – has observed, the sheer scale of urban informality reflects a large gap between the bureaucratic regulatory systems of the government and economic realities of most citizens. This gap can be attributed in large part to the many regulatory regimes designed for cities that policymakers would like to have, but not for the cities that most of their populations live in, or could afford to live in. This applies to low-income informal settlements, which "... often contravene existing building codes, zoning regulation and even property laws – at least in part because the codes regulations and laws were not developed with the needs of the urban poor in mind, let alone with their involvement" (McGranahan, Mitlin, & Satterthwaite, 2008: 77). Much the same could be said of many informal economies.

If the poorest residents and workers cannot afford to conform to regulations, authorities may not enforce the regulations because they sympathise with their financial plight – a concern perhaps reinforced by fear of disturbances, attendant social and economic losses, and the difficulty of enforcing punitive regulations. After a point, however, enforcement failure tends to corrode the regulatory system. Good regulations are forged in the struggle between regulated and regulator. With no such struggle, the distance between the rule and the feasible realities is likely to grow.

Alternatively, officials can also be notoriously unsympathetic to those living and working in poverty. Formal regulations can be a means of harassment. This can become a particular problem when urban officials and elites believe that their cities are being degraded by excessive rural-urban migration. In such circumstances, strict regulations often become a means to try to keep out those who cannot afford to live up to acceptable standards, even if they end up having to live and work in even worse conditions elsewhere. Even unsympathetic officials can often be resisted, however, and informality can be the uneasy compromise between authorities that would rather informal residents and workers were not in the city at all, and the informal residents and workers who would like to be fully accepted.

When relations between local authorities and informal dwellers and workers are bad, using environmental regulations to drive the economy in a green direction could force the informal economy

further underground, or undermine it in ways that are harmful to those dependent upon it. Even informal activities that produce clear environmental benefits (including many of those outlined above) are likely to find it difficult to adhere to environmental regulations, particularly if these regulations are promulgated primarily in consultation with the formal private sector. More generally, it is hard to imagine a transformation towards a greener and more inclusive global economy without better relations between many local authorities and those operating in the informal sector.

2.4. Highly gendered

Although more women are engaged in paid employment than ever before, they tend to be more concentrated than men in lower-quality, lower-paid, irregular and informal employment (Chant, 2013; Chant & Pedwell, 2008; Chen, 2010; Chen, Vanek, & Carr, 2004; Heintz, 2010; Herrera, Kuépié, Nordman, Oudin, & Roubaud, 2012). Table 1 presents the share of non-agriculture employment that is informal in 10 cities. In each city, the women's share is higher than the men's. Since women are still significantly less engaged in paid employment generally, there are still likely to be more women than men in informal (non-agricultural) employment in many or all of these cities (see Brown et al., 2014: Table 2). In all regions, however, figures for the share of women in the informal economy and in the overall economy would be much higher if unpaid care work (typically carried out by women in the home and in communities) was included (Antonopoulos, 2009).

Women face numerous disadvantages in the urban economy attributed generally to their restricted mobility and use of space; limited skills and work experience; minimal access to capital; discrimination in the home and labour market; limited representation in formal governance structures; additional responsibilities involving unpaid domestic and care work (e.g. cooking and cleaning, fetching water, caring for the sick and injured, tending to children, etc.), and secondary roles (often underpaid or unpaid) in family businesses (Chant, 2013; UN-Habitat, 2013). Many women in cities face additional disadvantages arising from a combination of low-income, inadequate and expensive accommodation, limited access to basic services (often monetised), exposure to environmental hazards, and high rates of crime and violence (Tacoli, 2012). The additional burdens on domestic and care work created by these conditions have led many women to engage in income-generating activities in or around the home, often in home-based enterprises (HBEs) in informal settlements (Gough, Tipple, & Napier, 2003; Lawson & Olanrewaju, 2012; Rogerson, 1991).

While women's work for the market economy and their work for the unpaid care economy are often treated as separate, the temporal and spatial overlaps between them in the urban informal

Table 1
Informal employment as percentage of non-agricultural employment in 10 cities.

Cities	Total	Women	Men
Niamey	76.2	83.4	71.9
Ouagadougou	80.2	86.9	75.4
Bamako	82.1	91.1	74.9
Dakar	79.8	88.0	73.9
Abidjan	79.0	89.7	69.8
Lomé	83.1	90.3	75.1
Cotonou	81.2	89.3	72.1
Antananarivo	63.0	67.1	59.5
Lima	58.5	63.9	53.8
Hanoi	46.2	48.3	44.4
Ho Chi Minh City	53.4	55.1	52.0

Data from: Herrera et al. (2012).

Table 2
Key features of the major schools of thought on the informal economy.

School of thought	General view and focus	Causal roots of informal economy	Policy implications	Major influences
Dualist	The informal economy is a pre-modern sector acting as an intermediate space between the mainstream formal system and complete unemployment. Focused on 'survivalist' activities by the working poor with few (if any) links with the formal economy.	Labour supply far exceeding the demand brought about by industrialisation.	More state regulation designed to foster informal productivity and more appropriate forms of access to resources, including capital, in addition to the removal of unnecessary state restrictions.	(Hart, 1973; ILO, 1972)
Legalist	The informal economy is a market-led response by entrepreneurs to excessive state regulation (as opposed to a temporary condition of excess labour supply). Focused on 'plucky' micro-entrepreneurial activity.	Excessive state regulation.	Less state regulation and more free market policies designed to enable/unlock the growth potential of informal entrepreneurs (particularly through the legalisation of informal property rights).	(de Soto, 1989; de Soto, 2000)
Voluntarist	The informal economy is a result of producers and traders who choose to operate informally after weighing the costs and benefits of informality versus formality. Focused on opportunistic informal producers and traders.	Efforts to avoid taxation and costly regulation in the formal economy.	Bringing of informal firms and their workers into the formal regulatory environment in order to increase the tax base and reduce unfair competition to formal businesses.	(Levenson & Maloney, 1998; Maloney, 2004)
Structuralist	The informal economy is an attempt by formal sector capital, acting with the complicity of the state, to reduce wages and enhance flexibility by exploiting unprotected informal workers. Focused on vulnerable workers exploited by formal sector capital.	Capitalist growth in the context of economic crises.	More regulation of commercial and employment relationships between the informal and formal economies in order to address unequal relationships between 'big business' and subordinate producers.	(Castells & Portes, 1989; Moser, 1978)

Source: Derived from Chen (2012: 4–6).

economy make them difficult to distinguish (Chant, 2013; Rakodi, 1991; UN-Habitat, 2013). This also applies to women's involvement in collective efforts to improve living and working conditions in informal settlements. For example, many women affiliated with Slum/Shack Dwellers International (SDI)² are leading upgrading projects (see Patel & Mitlin, 2010) that benefit the economy by reducing the environmental problems that worsen reproductive work burdens and that often spill over to effect small enterprises and the labour force (Tacoli, 2012), addressing the development deficits that underpin climate vulnerability in the home, workplace and neighbourhood (Dobson, Nyamweru, & Dodman, 2015; Jabeen, Johnson, & Allen, 2010; Satterthwaite, Huq, Pelling, Reid, & Lankao, 2007), and creating employment and skills development opportunities for low-income communities (Goodenough & Klug, 2005). Women's savings groups also provide micro loans to small enterprises run by poor women and men (Archer, 2012; Patel & Mitlin, 2010).

These efforts illustrate the value of women's labour outside the market (including community organising and strategizing around environmental improvements) in contributing to the performance of the economy, including the extent to which it is green and inclusive. However, the International Labour Office (ILO) – the international agency dedicated to the informal economy and its statistics – excludes the reproductive or care economy from its definition³ “because the informal economy is defined as part of the market economy: that is, as producing goods and services for sale or some other form of remuneration” (ILO, 2002b: 12). Even the recent path-breaking *Recommendation Concerning the Transition from the Informal to the Formal Economy* adopted by the General Conference of the ILO (2015) fails to acknowledge the role of women's unpaid reproductive work, despite some mention of the

need to provide “childcare and other care services” (p. 14) as a means of reducing gender inequalities. This omission may have a certain statistical logic, but risks further devaluing women's unpaid reproductive labour – a concern long voiced in urban development circles (Chant, 2013; Rakodi, 1991; Tacoli, 2012; UN-Habitat, 2013) – while overlooking its role in the transition to a greener economy, and the importance of adequate economic compensation for this.

The highly gendered character of the informal economy has implications for attempts to achieve more inclusive and green economies. For example, attempts to achieve such economies through formalisation could further increase the burdens on women if nothing is done to make the formal economy more supportive of them. Even if such attempts try to be more inclusive by engaging with women's informal and unpaid collective contributions to community management, they would need to take account of the severe time-poverty many women working in the informal economy face. As Elson (1991) showed decades ago, the “gender blindness” of structural adjustment and its neglect of the care economy amounted to male bias, and the same could hold a fortiori for the efforts to achieve a green economy if they too neglect the unpaid care economy.

3. Schools of thought on informality

There remain entrenched views on why the informal economy is so pervasive and what the state should do about it. This is captured by several different schools of thought on the informal economy, each with their own views and focuses, causal theories, policy implications and influential researchers (Table 2).

While this table focuses on the contradictions between these different schools, the literature associated with each is full of important, if contrasting, insights. The economic reformist school was the first to recognise the importance of the informal economy, and how its presence confounded the conventional rhetoric of planning. The legalist school has emphasised the entrepreneurial potential of parts of the informal economy, identifying some of the negative ways in which the state has inhibited this potential through excessive regulation and failing to provide the legal basis – and in particular the property rights – for informal producers to compete and accumulate capital. The voluntarist school has

² SDI is a confederation of country-level organisations of the urban poor from 34 countries throughout Africa, Asia and Latin America (<http://www.sdinet.org/>).

³ The ILO (2002a: 53) defines the informal economy as referring to “...all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements”, while restricting these activities to the sale of legal goods and services. Subsequent revisions to the ILO definition now include unregistered and unprotected labour in formal enterprises to capture the employment relations of the working poor (see Chen, 2012).

emphasised the negative parts of the informal economy, pointing to some of the dangers associated with the failure of the state to engage constructively with small enterprises and low-income workers. The structuralist school has pointed to those segments of the informal economy with close links to formal enterprises, and the ways in which parts of the informal economy can serve powerful private interests in the formal economy more than informal workers themselves. Whatever school one favours, it is important to recognise that their generalisations tend to apply more to some parts of the informal economy and less to others, and that important research has been undertaken within each school.

Although issues of inclusion are central to much of the research on the informal economy, achieving a green economy is not. The following points are suggestive of how each school might engage with these agendas:

- **Dualists** may be inclined to advocate more explicit recognition of the urban informal economy and its dynamics as a precondition for achieving a greener economy. Approaches that focus solely on the formal economy, and ignore the extent to which actual practices depart from formally accepted arrangements and practices, are unlikely to succeed. They risk ignoring a wide range of urban informal activities that need to be encouraged or changed if greener economies are to be achieved. As long as the informal economy is large, and especially if it is growing, it is critical to find better ways of supporting its green aspects and reducing its environmental burdens – and this will not be achieved simply by promulgating more formal but unrealistic regulations.
- **Legalists**, often of neoliberal persuasion, may be inclined to advocate market and property based solutions to environmental problems in the urban informal economy. They are more likely to focus on those disadvantaged segments where enterprises and workers lack the legal basis for economically efficient production, and point to the negative environmental consequences of resulting economic inefficiencies. They would emphasise the importance of tapping the innovative potential of informal enterprises through stronger property rights for those operating in the urban informal sector, achieving greater productivity (enhancing inclusion), and greater efficiency and resource efficiency (enhancing the greening of the economy). They might also argue that stronger property rights within the informal sector would provide producers with a better basis for engaging around public environmental issues and regulations. But they would probably be reluctant to advocate environmental regulations except where these can be thoroughly justified economically and implemented efficiently.
- **Voluntarists** may be inclined to advocate extending environmental regulations as part of a necessary formalisation process, leading to a better regulated economy, with fewer environmental burdens. They would likely emphasise segments that are not so disadvantaged, along with the environmental burdens that arise as the result of allowing an important part of the economy to persist outside of formal regulatory frameworks and compete ‘unfairly’ with formal enterprises. And formalisation would reduce the trade-off between inclusion and green goals, by helping to secure social protection and benefits for the previously informal workers.
- **Structuralists** may be inclined to advocate measures making large formal enterprises more accountable for the environmental damage brought about by their informal partners. They would be inclined to emphasise situations where, for example, more formal enterprises are contracting out environmentally damaging activities to informal enterprises whose practices are not being regulated. Under such circumstances, informal

enterprises are not so much competing with formal enterprises as serving them. The structuralists would also pay attention to how processes like globalisation can influence the role of informality, compromising the capacity of the state to respond to environmental problems.

3.1. *The emergence of an inclusionist school*

Another school of thought has begun to emerge from a growing body of literature on the economic and political linkages between formality and informality. Two of the approaches that Meagher (2013) identifies in the literature are of interest here: pro-poor urban planning (MirafTAB, 2009; Watson, 2009a, 2009b; see also Walnycki et al., 2013) and collective organisation (Lindell, 2010; Mitlin, 2008). The pro-poor urban planning and collective organisation approaches are included because they pay specific attention to gender and environmental dynamics involving informality. They also support an emerging post-colonial framework promoting a new epistemology of planning that is capable of engaging with informality as a dominant mode of urban development rather than as an unplannable ‘state of exception’ (Roy, 2005; for a review see Brenner & Schmid, 2015).

This paper thus adds a fifth ‘inclusionist’ school of thought to bring the pro-poor urban planning and collective organisation approaches more explicitly into the debate (Table 3). While there are some tensions between the two approaches, we believe they are similar enough to justify combining into one. Both approaches emphasise the role of organised citizens and grassroots collectives in reconfiguring the power relations that determine the terms upon which poor women and men are included or excluded from living and working in the city, with a focus on actions that take place outside, or in partnership with, the state.

There are, however, varying degrees and forms of inclusion and exclusion that need to be considered. For example, what is affordable in cities (particularly in terms of land, housing and services) is often inadequate, and what is adequate is often unaffordable (for a treatment of this tension in relation to low-cost sanitation, see McGranahan, 2015). There are also adverse forms of inclusion whereby the poor are included under such unfavourable terms that they may prefer less constrained exclusion (indeed, inclusion can be disempowering and inequitable – see Hickey & du Toit, 2007: 3). Generally, however, the terms are used to refer to situations where people want to be included in the state, markets and civil society, and to avoid exclusion. In this way, the two approaches outlined here support the negotiation of more forms of inclusion advantageous to the public in general and the poorest groups, in particular. This is intended to lead to greater acceptance by and support from officialdom, but not necessarily to formalisation.

While what we are defining as the inclusionist school is not overtly environmental in orientation, it contains insights directly relevant to the goal of greening the economy in an inclusive manner. The implicit suggestion from the collective organisation side is that in order to achieve this objective, organisations formed by the urban poor must leverage their power to prioritise and respond to environmental problems.

The implicit suggestion from the pro-poor urban planning side is that collective organisation needs to be supported along with other means of rendering the zones of contestation between the informal and formal sectors more favourable to those less well-represented in formal arenas. In contrast to the legalist school, the inclusionist school would resist any attempts to place stronger property rights at the centre of a reform agenda; in contrast to the voluntarist school, it would resist the notion that formalisation is

Table 3
The emergence of an inclusionist school of thought on the informal economy.

School of thought	General view and focus	Causal roots of informal economy	Policy response	Major influences
Inclusionist	The informal economy is a result of anti-poor policies and regulations and systems of governance that exclude the poorest informal producers and traders from accessing formal employment, basic urban services and space in the city to both live and work. Focused on the political agency of poor informal dwellers and workers in cities.	Anti-poor policies and regulations, and increasingly neoliberal systems of urban governance.	Collective mobilisation among informal residents and workers as a counter-hegemonic practice of resistance and inclusion. Holding local governments accountable to urban poor dwellers and workers in the process.	(Lindell, 2010; MirafTab, 2009; Mitlin, 2008; Watson, 2009a; Watson, 2009b)

inherently beneficial to either disadvantaged groups or the environment; and in contrast to the structuralist school, its collective organisation side would be sanguine about the potential for resisting the economic dominance of large formal enterprises. Like the structuralist school, however, the inclusionist school would recognise the constraints of resisting domination and oppression within broader capitalist economic systems, but would emphasise the political agency of poor women and men to co-produce grassroots solutions in partnership with the state and civil society, as exemplified by SDI affiliates (see Mitlin & Satterthwaite, 2013) and alliances of informal workers (see Lindell, 2010).

4. Possibilities for fostering local inclusion in global environmental agendas

The diversity of the urban informal economy and its varied relations with formal arrangements and regulations defies simple generalisations about how a greener economy can be achieved. The challenge of finding solutions is further compounded by the range of planning and governance capacities across different urban centres, both internationally and intra-nationally (Dodman & Satterthwaite, 2008; UN-Habitat, 2009). Moreover, there are informal enterprises that deserve support, and others that do not. There are regulations that deserve to be enforced, and those that should not exist. There are governments interested in optimising the potential of the informal economy, others more concerned with suppressing or exploiting it. There are informal enterprises and workers willing to engage in environmental improvements, others that are not. Within this variety, there is enormous scope for engaging the urban informal economy in the transition to a greener economy, but no simple solutions to apply.

What follows are principles that can at best help to guide the search for local solutions. Importantly, these solutions entail a strong role for local governments in reforming regulatory frameworks, encouraging more collaborative governance arrangements, and supporting more inclusive urban planning approaches. Many local governments do not currently have the capacity to take on this role, highlighting a key priority area for the green economy agenda.

4.1. Strengthen the contribution of formal regulations by recognising their limitations

Well-designed and enforced regulations can be used to support urban economic opportunities for the poorest segments of society, and to shift the economy toward more environmentally desirable pathways. However, desired behaviours cannot simply be regulated into being, and attempts to do so can be counterproductive and exclusionary. Indeed, urban informality often arises in response to unrealistic, inappropriate or unenforceable regulations. Small enterprises run by poor women and men with limited access to capital are prone to falling foul of regulatory systems, particularly when these systems are designed with larger and better resourced

enterprises in mind, are intentionally exclusionary, or are developed in response to more powerful interests. In order to adapt regulatory systems to support the urban informal economy in the transition to a greener economy, it may be necessary to:

- Prune the regulatory systems that are meant to apply to informal enterprises, reducing duplication, facilitating compliance, and recognising the rights and contributions as well as the obligations and burdens of small, capital-poor enterprises;
- Assess regulations in terms of their actual effects rather than assuming compliance, and align the regulatory system with the local capacity to implement the regulations equitably;
- Identify and prioritise areas where regulations can help to create a greener economy, benefiting all segments of society and not just the more powerful; and
- Adapt and develop new regulations in collaboration with those affected, including disadvantaged residents and workers.

4.2. Collaborate with informal residents and workers to coproduce green outcomes

Since many of the activities undertaken in the urban informal economy are ill-suited to formal regulatory systems, it is important for local governments to find alternative means of engagement. By adopting a more collaborative approach, it should be possible for local governments to coproduce green outcomes in partnership with green informal segments, as with the work of WIEGO (2013) with waste pickers. Ideally, such coproduction would shift urban politics toward inclusivity, and create the basis for the sort of city-wide collective action needed to achieve these outcomes.

Organisations of informal residents and workers, and women's organisations in particular (see Kabeer et al., 2013), can play an important role in supporting such action. Opportunities to support these organisations as well as to build the capacity of local governments are increasing as new mechanisms for financing the green economy transition, including more funds for mitigating climate change, become available. However, the power relations, gender dimensions and distributional effects within organisations that represent informal residents and workers need to be better understood to ensure that collaborative efforts do not further marginalise women and other vulnerable groups (Meagher, 2013).

4.3. Recognise and support women's unpaid reproductive labour in coproducing green outcomes

The vital role played by women's unpaid reproductive labour in a value-producing economy is increasingly recognised (Chant, 2013; Rakodi, 1991; Tacoli, 2012; UN-Habitat, 2013). There is potential to involve women in promoting green outcomes through informal upgrading and housing improvement at the household and neighbourhood scales. However, reproductive labour

(including community organising) remains excluded from the conventional definition of the informal economy. This omission risks missing important opportunities not only to promote these outcomes, but also to redress the burdens (particularly those arising from poor environmental conditions in and around the home, and from the severe time poverty that many women face) that constrain women's productive labour and that reinforce gender disadvantages among poor urban women (Tacoli, 2012). The overlap between informal productive and reproductive labour further suggests that these forms of work ought to be considered together, not separately.

4.4. Encourage segments of the urban informal economy that already promote green outcomes, and discourage those that do not

The different segments of the urban informal economy can and should be treated differently, not just through regulations, but also through other public and civil society processes. Informal economic activities that are environmentally deleterious should be held to account. Conversely, informal economic activities that promote environmental improvements (e.g. well-run water vending) should be supported and protected from being put out of business. In almost all cities, there should be ways of shifting the informal economy to contribute to greener economies. Further research is thus required to better understand the environmental performance of different informal activities so that urban policymakers and civil society practitioners can make informed judgements about which activities deserve support, and which do not.

4.5. Upgrade informal settlements to be greener

The gendered division of labour in and around the home has revealed the interconnections between urban economic and spatial informality and the need to address them together. Many informal enterprises (including many HBEs) are located in informal settlements where workspaces are often embedded in living spaces, and vice versa, at the household and neighbourhood scales (Kudva, 2009). In addition, many of those working in the urban informal economy outside of informal settlements (including informal employees in formal enterprises) commute from informal settlements. Many of the challenges faced by governments working with informal enterprises are also encountered while working with residents of informal settlements, and many of the more successful strategies of collaboration (between alliances of informal workers and local authorities) and coproduction (between organised communities and local authorities) bear similarities in addressing political exclusion and anti-poor practices (see Satterthwaite & Mitlin, 2014: 52 and 58 respectively).

4.6. Apply the principles of inclusive urban planning to the urban informal economy

“So long as informal workers are not recognized as economic actors and not incorporated into economic and urban planning, they remain outside the protective arm but within the punitive arm of government” (Dimova & Nordman, 2014: 391; paraphrasing Chen, 2014). On the other hand, some planning regimes are sufficiently biased that recognition also brings punishment. Thus, from a planning perspective, the urban informal economy needs to be both recognised and incorporated in a manner that gives full recognition to the rights of the people who depend on this economy for their livelihoods. The application of more pro-poor urban planning and collective action, such as that discussed above, could be an important first step toward economies that are not only greener, but also more inclusive.

5. Conclusion

The current formulation of the green economy relies on capital invested by private enterprises and the expansion of markets, primarily in the formal sector, to deliver green jobs and technological improvements (e.g. low-cost green energy) to those who need them (Brockington, 2012; Cock, 2014). While the need to adopt a pro-poor orientation is acknowledged (UNEP, 2011b: 20), the role of the informal economy in supporting the lives and livelihoods of the world's poor is often ignored. For example, a recent report by UNEP (2015) on building inclusive green economies in Africa makes no mention of the informal economy. Such omissions call into question whether those championing ‘inclusive green growth’ (for example, OECD, 2012; World Bank, 2012) are really concerned with inclusion.

The informal economy is extremely diverse, and the informal economy is not generally amenable to the same sort of policies as the formal economy. Access to capital is very limited and existing regulatory systems are poorly adapted to the realities of the informal economy, and the needs of those who depend on it. If informal economies are ignored when attempts are made to green the formal economy, activities that undermine these environmental goals may be displaced to the informal economy, as it is less regulated. However, if the response is to impose regulations designed with the formal economy in mind, those working in or dependent on the informal economy are likely to suffer. The heavily gendered and largely unpaid care economy, not officially even considered part of the informal economy, is also likely to be adversely affected by policies that, whether intentionally or unintentionally, burden the informal economy and informal settlements.

Engaging with the informal economy is likely to require a consultative and negotiated process, of the sort advocated by proponents of pro-poor urban planning and inclusive urban development. There are parallels here to the sort of formal private sector engagement advocated in relation to the green economy, but for reasons outlined above the appropriate processes and forums are likely to be quite different.

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References

- Antonopoulos, R. (2009). *The unpaid care work-paid work connection*. Geneva: Policy Integration and Statistics Department, International Labour Office.
- Archer, D. (2012). Finance as the key to unlocking community potential: savings, funds and the ACCA programme. *Environment and Urbanization*, 24, 423–440.
- Benjamin, N., Beegle, K., Recanatini, F., & Santini, M. (2014). *Informal economy and the World Bank*. Washington DC: World Bank.
- Benson, E. (2014). *Informal and green? The forgotten voice in the transition to a green economy*. Discussion Paper. London: International Institute for Environment and Development.
- Brand, U. (2012). Green economy – the next oxymoron? No lessons learned from failures of implementing sustainable development. *GAIA – Ecological Perspectives for Science and Society*, 21, 28–32.
- Brenner, N., & Schmid, C. (2015). Towards a new epistemology of the urban? *City*, 19, 151–182.
- Brockington, D. (2012). A radically conservative vision? The challenge of UNEP's towards a green economy. *Development and Change*, 43, 409–422.
- Brown, D., McGranahan, G., & Dodman, D. (2014). *Urban informality and building a more inclusive, resilient and green economy*. Working Paper. London: Human Settlements Group, International Institute for Environment and Development.

- Castells, M., & Portes, A. (1989). World underneath: the origins, dynamics, and effects of the informal economy. In A. Portes, M. Castells, & L. A. Benton (Eds.), *The informal economy: Studies in advanced and less developed countries* (pp. 11–37). Baltimore: John Hopkins University Press.
- Chant, S. (2013). Cities through a “gender lens”: a golden “urban age” for women in the global South? *Environment and Urbanization*, 25, 9–29.
- Chant, S., & Pedwell, C. (2008). *Women, gender and the informal economy: An assessment of ILO research and suggested ways forward*. Geneva: International Labour Office.
- Charmes, J. (2012). The informal economy worldwide: trends and characteristics. *Margin: The Journal of Applied Economic Research*, 6, 103–132.
- Chen, M. A. (2010). Informality, poverty and gender: evidence from the global South. In S. Chant (Ed.), *The international handbook of gender and poverty: Concepts, research and policy* (pp. 463–471). Cheltenham: Edward Elgar.
- Chen, M. A. (2012). *The informal economy: Definitions, theories and policies*. WIEGO Working Paper No. 1, August 2012. Women in Informal Employment: Globalizing and Organizing.
- Chen, M. (2014). Informal employment and development: patterns of inclusion and exclusion. *European Journal of Development Research*, 26, 397–418.
- Chen, M. A., Vanek, J., & Carr, M. (2004). *Mainstreaming informal employment and gender in poverty reduction: A handbook for policy-makers and other stakeholders*. London: Commonwealth Secretariat.
- Cock, J. (2014). The ‘green economy’: a just and sustainable development path or a ‘wolf in sheep’s clothing’? *Global Labour Journal*, 5, 23–44.
- Dimova, R., & Nordman, C. J. (2014). Understanding the links between labour and economic development. *European Journal of Development Research*, 26, 387–396.
- Dobson, S., Nyamweru, H., & Dodman, D. (2015). Local and participatory approaches to building resilience in informal settlements in Uganda. *Environment and Urbanization*, 27, 1–15.
- Dodman, D., McGranahan, G., & Dalal-Clayton, B. (2014). *Integrating the environment in urban planning and management: Key principles and approaches for cities in the 21st Century*. Geneva: United Nations Environment Programme.
- Dodman, D., & Satterthwaite, D. (2008). Institutional capacity, climate change adaptation and the urban poor. *IDS Bulletin*, 39, 67–74.
- Elgin, C., & Oyvatt, C. (2013). Lurking in the cities: urbanization and the informal economy. *Structural Change and Economic Dynamics*, 27, 36–47.
- Elson, D. (1991). Male bias in macro-economics: the case of structural adjustment. In D. Elson (Ed.), *Male bias in the development process* (pp. 164–190). Manchester: Manchester University Press.
- Goodenough, C., & Klug, N. (2005). *Study on “employment aspects of slum upgrading” practices and opportunities identified in two South African case studies*. Geneva: ILO.
- Gough, K. V., Tipple, A. G., & Napier, M. (2003). Making a living in African cities: the role of Home-based enterprises in Accra and Pretoria. *International Planning Studies*, 8, 253–277.
- Grobbelear, S. (2012). *Urban patterns for a green economy: Clustering for competitiveness*. Nairobi: UN-Habitat.
- Hammer, S., Kamal-Chaoui, L., Robert, A., & Plouin, M. (2011). *Cities and green growth: A conceptual framework*. OECD Regional Development Working Papers 2011/08. Organisation for Economic Co-operation and Development.
- Hardoy, J. E., Mitlin, D., & Satterthwaite, D. (2001). *Environmental problems in an urbanizing world*. London: Earthscan.
- Hart, K. (1973). Informal income opportunities and urban employment in Ghana. *The Journal of Modern African Studies*, 11, 61–89.
- Hart, K. (2006). Bureaucratic from and the informal economy. In B. Guha-Khasnobis, R. Kanbur, & E. Ostrom (Eds.), *Linking the formal and informal economy: Concepts and policies* (pp. 21–35). Oxford: Oxford University Press.
- Heintz, J. (2010). Women’s employment, economic risk and poverty. In S. Chant (Ed.), *The international handbook of gender and poverty: Concepts, research and policy*. Cheltenham: Edward Elgar.
- Herrera, J., Kuépié, M., Nordman, C. J., Oudin, X., & Roubaud, F. (2012). *Informal sector and informal employment: Overview of data for 11 cities in 10 developing countries*. WIEGO Working Paper No. 9. Women in Informal Employment: Globalizing and Organizing.
- Hickey, S., & du Toit, A. (2007). *Adverse incorporation, social exclusion and chronic poverty*. CPRC Working Paper 81. Manchester: School of Environment and Development, University of Manchester.
- ILO. (1972). *Employment, incomes and Equality: A strategy for increasing productive employment in Kenya*. Geneva: International Labour Office.
- ILO. (2002a). *Resolution concerning decent work and the informal economy*. Geneva: International Labour Office.
- ILO. (2002b). *Women and men in the informal economy: A statistical picture* (p. 60). Geneva: International Labour Office.
- ILO. (2013). *Women and men in the informal economy: A statistical picture*. Geneva: International Labour Office.
- ILO. (2015). *The transition from the informal to the formal economy*. Geneva: International Labour Office.
- Jabeen, H., Johnson, C., & Allen, A. (2010). Built-in resilience: learning from grass-roots coping strategies for climate variability. *Environment and Urbanization*, 22, 415–431.
- Kabeer, N., Milward, K., & Sudarshan, R. (2013). Organising women workers in the informal economy. *Gender & Development*, 21, 249–263.
- Kudva, N. (2009). The everyday and the episodic: the spatial and political impacts of urban informality. *Environment and Planning A*, 41, 1614–1628.
- Lawanson, T., & Olanrewaju, D. (2012). The home as workplace: investigating home based enterprises in low income settlements of the Lagos Metropolis. *Ethiopian Journal of Environmental Studies and Management*, 5, 397–407.
- Levenson, A. R., & Maloney, W. F. (1998). *The informal sector, firm dynamics and institutional participation*. Washington D.C.: World Bank.
- Lindell, I. (2010). *Africa’s informal workers: Collective agency, alliances and trans-national organizing in urban Africa*. London: Zed Agency.
- Maloney, W. F. (2004). Informality revisited. *World Development*, 32, 1159–1178.
- McGranahan, G. (2015). Realizing the right to sanitation in deprived urban communities: meeting the challenges of collective action, coproduction, affordability, and housing tenure. *World Development*, 68, 242–253.
- McGranahan, G., Jacobi, P., Songsore, J., Surjadi, C., & Kjellén, M. (2001). *The citizens at risk: From urban sanitation to sustainable cities*. London: Earthscan.
- McGranahan, G., Marcotullio, P., Bai, X., Balk, D., Braga, T., Douglas, I., et al. (2005). Urban systems. In R. Hassan, R. Scholes, & N. Ash (Eds.), *Ecosystems and human well-being: Current status and trends* (pp. 795–825). Washington D.C.: Island Press.
- McGranahan, G., Mitlin, D., & Satterthwaite, D. (2008). Land and services for the urban poor in rapidly urbanizing countries. In G. Martine, G. McGranahan, M. Montgomery, et al. (Eds.), *The new global frontier: Urbanization, poverty and environment in the 21st Century* (pp. 77–98). London: Earthscan.
- Meagher, K. (2013). *Unlocking the informal economy: A literature review on linkages between formal and informal economies in developing countries*. WIEGO Working Paper No. 27. April 2013. Women in Informal Employment: Globalizing and Organizing.
- MirafTAB, F. (2009). Insurgent planning: situating radical planning in the global south. *Planning Theory*, 8, 32–50.
- Mitlin, D. (2008). With and beyond the state — co-production as a route to political influence, power and transformation for grassroots organizations. *Environment and Urbanization*, 20, 339–360.
- Mitlin, D., & Satterthwaite, D. (2013). *Urban poverty in the global south: Scale and nature*. London: Earthscan.
- Moser, C. (1978). Informal sector or petty commodity production. *World Development*, 6, 1041–1064.
- OECD. (2012). *Inclusive green growth: The future we want*. Paris: OECD.
- Patel, S., & Mitlin, D. (2010). Gender issues and shack/slum dweller federations. In S. Chant (Ed.), *The international handbook of gender and poverty: Concepts, research, policy* (pp. 379–384). Cheltenham: Edward Elgar.
- Potts, D. (2008). The urban informal sector in sub-Saharan Africa: from bad to good (and back again?). *Development Southern Africa*, 25, 151–167.
- Rakodi, C. (1991). Women’s work or household strategies? *Environment and Urbanization*, 3, 39–45.
- Rakowski, C. A. (1994). Convergence and divergence in the informal sector debate: a focus on Latin America, 1984–92. *World Development*, 22, 501–516.
- Rogerson, C. (1991). Home-based enterprises of the urban poor: the case of spazas’. In E. Preston-Whyte, & C. Rogerson (Eds.), *South African informal economy* (pp. 336–344). Cape Town: Oxford University Press.
- Roy, A. (2005). Urban informality: toward an epistemology of planning. *Journal of the American Planning Association*, 71, 147–158.
- Satterthwaite, D. (2003). The links between poverty and the environment in urban areas of Africa, Asia, and Latin America. *The ANNALS of the American Academy of Political and Social Science*, 590, 73–92.
- Satterthwaite, D. (2008). Cities’ contribution to global warming: notes on the allocation of greenhouse gas emissions. *Environment and Urbanization*, 20, 539–549.
- Satterthwaite, D., Huq, S., Pelling, M., Reid, H., Lankao, P.R., Adapting to climate change in urban areas: the possibilities and constraints in low- and middle-income nations, Human Settlements Discussion Paper SeriesIn: *Theme: Climate change and cities –1 2007*, International Institute for Environment and Development; London
- Satterthwaite, D., & Mitlin, D. (2014). *Reducing urban poverty in the global south*. Abingdon, Oxon: Routledge.
- Schneider, F., & Enste, D. (2013). *The shadow economy : An international survey*. Cambridge: Cambridge University Press.
- Simon, D. (2013). Climate and environmental change and the potential for greening African cities. *Local Economy*, 28, 203–217.
- Sinha, A., & Kanbur, R. (2012). Introduction: informality—concepts, facts and models. *Margin: The Journal of Applied Economic Research*, 6, 91–102.
- de Soto, H. (1989). *The other path: The economic answer to terrorism*. New York: Basic Books.
- de Soto, H. (2000). *The mystery of capital: Why capitalism triumphs in the west and fails everywhere else*. New York: Basic Books.
- Tacoli, C. (2012). *Urbanization, gender and urban povety: Paid work and unpaid carework in the city*. Urbanization and Emerging Population Issues Working Paper 7. London: International Institute for Environment and Development.
- Tokman, V. E. (1989). Policies for a heterogeneous informal sector in Latin America. *World Development*, 17, 1067–1076.
- UN-Habitat. (2003). *The challenge of slums: Global report on human settlements 2003*. Nairobi: UN-Habitat.
- UN-Habitat. (2009). *Global report on human settlements 2009: Planning sustainable cities*. Nairobi: UN-Habitat.
- UN-Habitat. (2013). *State of women in cities 2012–2013: Gender and the prosperity of cities*. Nairobi: UN-Habitat.
- UNEP. (2011a). *Cities: Investing in energy and resource efficiency*. Geneva: United Nations Environment Programme.

- UNEP. (2011b). *Towards a green economy: Pathways to sustainable development and poverty eradication*. Geneva: United Nations Environment Programme.
- UNEP. (2015). *Building inclusive green economies in Africa: Experience and lessons learned 2010–2015*. Geneva: United Nations Environment Programme.
- Vanek, J., Chen, M., Heintz, J., & Hussmanns, R. (2014). *Statistics on the informal economy: Definitions, regional estimates & challenges*. Cambridge MA: Women in Informal Employment: Globalizing and Organizing.
- Walnycki, A., Nyamweru, H., Dobson, S., Chitekwe-Biti, B., Masimba-Nyama, G., & Fieuw, W. (2013). *Partnerships for progressive pro-poor city planning*. Briefing. London: International Institute for Environment and Development.
- Watson, V. (2009a). 'The planned city sweeps the poor away...': urban planning and 21st century urbanisation. *Progress in Planning*, 72, 151–193.
- Watson, V. (2009b). Seeing from the south: refocusing urban planning on the globe's central urban issues. *Urban Studies*, 46, 2259–2275.
- WIEGO. (2013). *Waste pickers: The right to be recognized as workers*. Cambridge MA: Women in Informal Employment: Globalizing and Organizing.
- World Bank. (2012). *Inclusive green growth: The pathway to sustainable development*. Washington D.C.: World Bank.