

Infrastructure: A Game Changer for Women's Economic Empowerment

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Section A

1. Introduction

1.1 DFID's Infrastructure and Cities and Economic Development (ICED) Facility

Launched in January 2016, ICED aims to improve the way DFID's infrastructure and cities initiatives across the world contribute to poverty reduction and to rapid, resilient and inclusive economic growth. ICED is a demand-driven facility which offers UK and international DFID team technical advice for large-scale programming in the urban and infrastructure sectors, addressing the complex challenges of resilience, inclusion, governance and fragility. ICED approaches infrastructure planning as a continuum from policy and planning through to investment and implementation. The programme underpins DFID's new Economic Development Strategy and is an ambitious response to the constraints to growth identified in the Inclusive Growth Diagnostics (IGDs) (ICED, 2016).

ICED sits within DFID's broader commitments to economic and human development, and has been designed to support infrastructure development that can lead to inclusive growth. For this purpose, ICED aims to incorporate issues of sustainability, accessibility, efficiency, distribution and gender from the outset (Ibid). ICED acknowledges that infrastructure investment in itself does not result in inclusive growth but integrated planning and innovation can play an important role in promoting women's economic empowerment.

1.2 This Report: Scope, Expected Outcomes and Issues

Gender and inclusion is central to ICED. Building on the Gender and Inclusion strategy (see 1.3) this report seeks to identify tangible opportunities for infrastructure and urban investments to impact women's economic empowerment, setting out clear opportunities for ICED to engage in.

The scoping report has been prepared to guide both the ICED team, as well as DFID more broadly, on some key intervention points around infrastructure and cities and women's economic empowerment. The scoping paper has also been used to inform a briefing note on the importance of infrastructure as an enabler for women's economic empowerment, which has been submitted to the UN High Level Panel on Women's Economic Empowerment report authors. This provides a key opportunity for ICED to position DFID as a key player on these issues, and to demonstrate infrastructure's critical role in enabling women's economic empowerment.

This report identifies key sectors that can promote women's economic empowerment, namely:

- transport
- energy
- affordable housing/informal settlement upgrading
- water and sanitation
- ICTs

In each of these sectors, the report highlights key issues, practical examples of good practice, and opportunities for ICED to engage on this agenda, both through its work supporting DFID country offices in programming, through research and knowledge management and through work on policy influencing. The report also highlights the importance of simultaneous investment in ‘soft’ infrastructure, such as social services, education, healthcare, childcare services, labour rights and disaster-risk reduction as means to develop transformative and holistic approaches to women’s economic empowerment.

The report draws on a desk-based literature review and consultation with experts within and beyond DFID and the ICED team (see Annex C for a list of experts consulted) as well as background papers commissioned by the UN High Level Panel on Women’s Economic Empowerment (HLP)¹. It is also informed by discussions at a London consultation event around the HLP at the Overseas Development Institute (ODI); and two online ‘roundtable’ discussions around unpaid care work and WEE, organised to feed into the HLP.

It is divided into two sections, A and B. Section A provides a broad overview of key issues, opportunities and conditions relating to women’s economic empowerment and infrastructure. Section B goes into further detail on specific sectors that ICED is engaged in and maps opportunities for impact.

Section A

- 1 introduces the ICED gender and social inclusion strategy.
- 2 explores concepts of WEE, and highlights constraints to WEE in urban contexts (as well as more broadly in terms of infrastructure provision).
- 3 outlines opportunities for WEE – particularly as they relate to infrastructure development, and highlights conditions to their success.

Section B

- 4 identifies key sectors and entry points for WEE in the field of infrastructure and urban development.
- 5 explores opportunities for women’s economic empowerment in financing infrastructure.
- 6 touches upon complimentary investments beyond ‘hard infrastructure’.

There are also a number of Annexes which are likely to be of interest including:

- Specific opportunities for ICED by region and output
- Examples of best practice

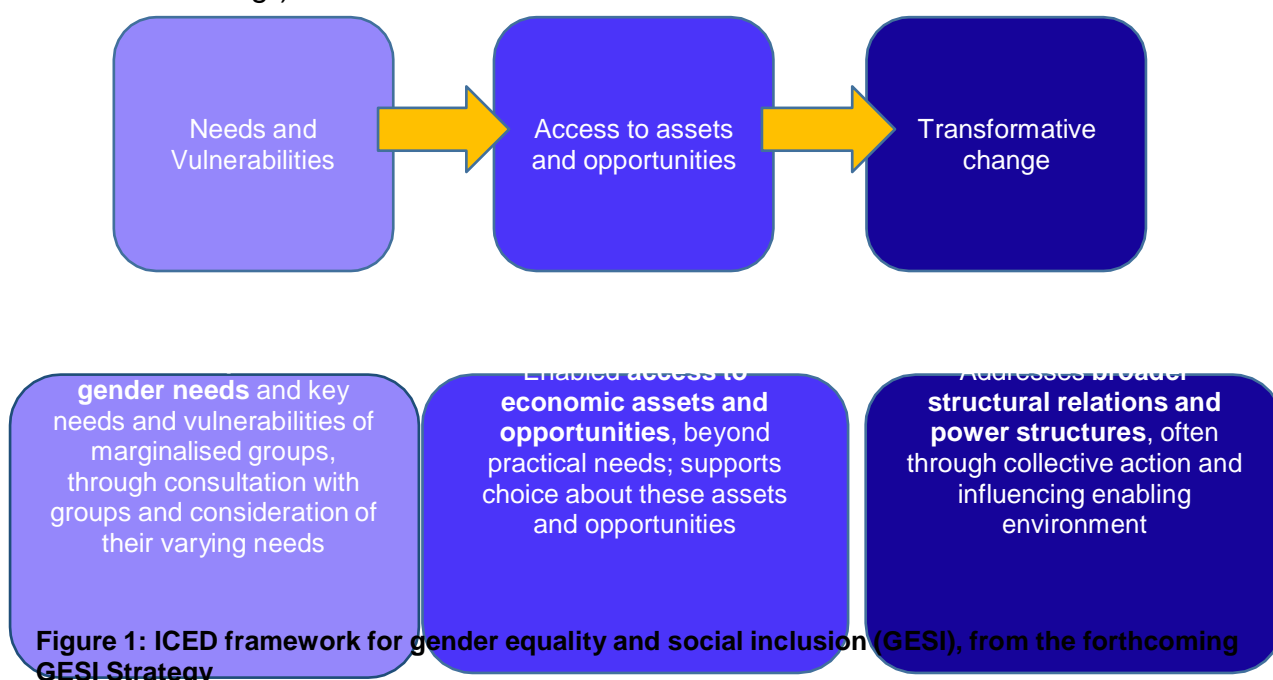
1.3 ICED commitments to gender equality and social inclusion

The ICED Gender and Social Inclusion (GESI) Strategy presents a vision of an inclusive and gender-sensitive programme that ensures interventions improve livelihoods and access to opportunities for marginalised groups, as a central part of broader economic development. The GESI Strategy sees investments in infrastructure and cities as potentially transformative opportunities to impact on poverty reduction.

¹ Most of which we are not able to cite here, as they are for internal HLP purposes

The strategy has been developed to compliment DFID’s strategic vision for **women and girls, and in its commitments to inclusive economic development**. In its Strategic Vision for Girls and Women (2013), **DFID identifies economic empowerment as one of four, inter-linked ‘game-changing’ pillars** of its vision for gender equality, alongside girls’ completion of primary and secondary education, ability to live free from violence, and universal sexual and reproductive health and rights.

The ICED GESI strategy is underpinned by a simple evolving framework that shows the continuum of gender and inclusion outcomes to which interventions can aspire, ranging from, at the most basic level, responding to the needs and vulnerabilities of marginalised groups (and thereby complying with the International Development Gender Equality Act, 2014), through to transformative programming, which moves beyond responding to basic needs and the empowerment of individual women, to collective action capable of challenging fundamental, structural inequalities (ICED, 2016- forthcoming²).



Within its broader commitment to GESI, ICED has specifically identified WEE as a key priority policy area for “delivering targeted research and evidence of the impact of infrastructure on empowerment to feed into commitments linked to the UN and other processes DFID has a leadership role in” (ICED, 2016: 11). ICED also aims to support DFID with its goals to incorporate a strong gender component in all its investments in economic development, growth and resilience. Prioritizing women’s economic empowerment as a key area will also assist DFID with its engagement with the UN High Level Panel on Women’s Economic Empowerment.

² This framework draws upon a conceptual framework developed by Moser (2016)

2. Women's Economic Empowerment

2.1 What do we mean by Women's Economic Empowerment?

Women's economic empowerment is "about economic equality: such as closing the gender pay gap, increasing job opportunities, or access to loans. But it's also about breaking down barriers that hold women back: from discriminatory laws to an unfair share of home and family care. And it's a game-changer for development: because when more women get the chance to work, it makes their families, communities & countries wealthier." UN High Level Panel

Women's economic empowerment is not just about access to economic opportunities and assets.

Rather, women's economic empowerment should be understood as a process whereby women gain the ability to participate in economic activities, access economic resources and advance economically, as well as the agency and power to make and act on economic decisions and control economic resources (ICRW, 2011).

These changes in power and agency can be broken down into changes across four key types of power, as the individual and collective levels (VeneKalsen and Miller, 2002; Taylor et al., 2014): power *within*, power *to*, power *over*, and power *with*:

- **Power within:** the knowledge, individual capabilities, sense of entitlement, self-esteem, and self-belief to make changes in their lives, including learning skills for jobs or to start an enterprise.
- **Power to:** economic decision-making power within their household, community, and local economy (including markets) not just in areas that are traditionally regarded as women's realm but extending to areas that are traditionally regarded as men's realm.
- **Power over:** access to and control over financial, physical and knowledge-based assets, including access to employment and income-generation activities.
- **Power with:** the ability to organise with others to enhance economic activity and rights.

2.2 Why Focus on Women's Economic Empowerment

Economic empowerment is one of four, inter-linked 'game-changing' pillars of DFID's vision for gender equality.

Within the field of economic empowerment, DFID calls for a 'broadening' of the scope of its work, "from [a focus on] control of key assets, to removing barriers that prevent girls and women from contributing to and benefiting from economic development, including through business, jobs and incomes" (DFID, 2013: 2).

The Strategic Vision also identifies the importance of the enabling environment, to ensure that economic institutions work for girls and women, e.g. through infrastructure

that benefits women; markets that enable women to trade; responsible businesses that provide safe, quality employment; etc. (DFID, 2013).

Whilst not named explicitly, WEE is also indirectly considered in DFID's Economic Development for Shared Prosperity and Poverty Reduction Strategic Framework (DFID, 2014), in its commitment to ensuring growth is inclusive, and benefits women and girls. The framework highlights the importance of access to finance, markets and land for low-income groups, as well as the need to increase employment opportunities and access to jobs tackling discriminatory social norms, investing in skills, and supporting active labour market policies.

Women's economic empowerment is also at the heart of Sustainable Development Goal 5: 'Achieve Gender Equality and Empower All Women and Girls'³.

This includes a discussion not only of individual women's economic empowerment, but also of structural or transformative changes around the sharing of unpaid care and domestic work, and rights to economic resources.

These commitments to WEE have manifested in a recently launched High Level Panel (HLP) on Women's Economic Empowerment, which is convened by UN Women, with support from the DFID Secretary of State for International Development, a founding member of the HLP. The Panel, comprised of influential leaders from various fields of government, business, academia, and civil society, will make action-oriented recommendations on how to improve economic outcomes for women in the context of the Global Goals for Sustainable Development, promoting women's leadership in driving economic growth, seeking to galvanize political will power.

In the following section, we explore further how investments in infrastructure and urban development (including ICED) can leverage these entry points in order to contribute to women's economic empowerment.

2.2 How does Women's Economic Empowerment link to economic growth?

Women's economic empowerment is an important goal in its own right, as a means to increase women's income and decision-making power in her household and community. **However, understanding the relationship between WEE and economic development** is also important here, given the ultimate goals of ICED: sustainable pro-poor economic growth.

Investments in urban and infrastructure development present key opportunities for economic growth, and, alongside this, for women's economic empowerment. While there is no simple linear relationship between urbanisation and economic growth, it has been shown that potential of urbanisation to promote growth is likely to depend on how conducive the infrastructure and institutional settings are. Removing barriers to

³ In discussion around the recognition and sharing of unpaid care and domestic work (target 5.4); ensuring women's participation and equal opportunities for leadership in economic life (target 5.5); and reforming law to ensure women's equal rights to economic resources, land, financial services, inheritance and natural resources (5.a)

rural–urban mobility may enable economic growth, but the benefits will be much larger with supportive policies, markets and infrastructure investments (Turok, 2013).

There is two way relationship between women’s economic empowerment and growth. Although this is not always straightforward:

- **Women’s economic empowerment can contribute to economic growth** (Chopra, 2015);

Compelling ‘business case’ arguments have been made, showing the positive knock-on effects WEE can have for women’s families, communities and even for their countries’ GDP (Woetzel et al., 2015). Women’s access to employment and education opportunities reduces the likelihood of household poverty, and resources in women’s hands have a range of positive outcomes for human capital and capabilities within the household (Kabeer, 2012).

- **But, economic growth does not necessarily impact on women’s economic empowerment.**

Some of the fastest growing developing countries show the least signs of progress on basic gender equality outcomes. Formal regular waged work has the greatest transformative potential for women, but this potential has remained limited because of the lack of creation of decent jobs, and because of segmentation of labour markets (Kabeer, 2012). Women’s access to economic resources is critical, both in contributing to growth and on the other, in ensuring the gender equity of growth outcomes. However this is not the only issue that requires addressing. Gendered rules, norms, roles and responsibilities at the household and community level also have an influence on women’s ability to engage in labour markets, as do the attitudes and rules set by institutional actors (Kabeer, 2102).

As such, it is important to highlight that such investments will not *automatically* yield positive outcomes for women and other marginalised groups. As UN Habitat (2013) and Chant (2013) argue, while urban women enjoy some advantages over their rural counterparts (such as higher labour force participation rates, and reduced intimate partner violence), barriers to female “empowerment” remain widespread in the global South, especially among the urban poor.

Women do not automatically benefit from the economic growth and prosperity of cities nearly as much as they contribute to this growth (what UN Habitat refer to as the ‘major hiatus between gendered inputs and gendered outcomes in urban contexts’). As such, a much wider view of what constrains women’s economic empowerment is needed, in order to identify interventions points and opportunities for impact.

2.3 Constraints to WEE that relate to infrastructure and cities

A woman’s experience of urban and infrastructure development and their trajectories towards economic empowerment will depend on many different factors.

These include: where she lives, largely determined by household wealth; education levels; her age and position in the life cycle; her household profile and care responsibilities, e.g. whether she is married, head of household, a mother, or has other care responsibilities; her citizenship or refugee status; her ethnicity; her health; and her social networks (Pozarny, 2016; Chant and McIlwaine, 2016; Tacoli and Satterthwaite, 2013). Her physical location and profile impacts on what public spaces and economic opportunities she can access as well as her work burden, considering physical access, legal access, and how social norms may hinder her access.

For example, poor women face different challenges to higher-income women, who are more likely to have greater access to education and the ability to hire domestic workers (Tacoli and Satterthwaite, 2013; Chopra, 2015). And poor women who live in slums face overcrowding, insecurity, lack of security of tenure, poor water and sanitation, health and transport services (UN Habitat, 2013). These issues of intersectionality should not be overlooked when it comes to constraints and opportunities that women face.

On the whole, however, **cities – especially in low-income countries – are becoming more violent, with violence against women and girls (VAWG) on the rise** (Chant and McIlwaine, 2016: 137). Recent evidence shows that one in three women will experience gender-base violence in their life, with higher rates in cities than in rural areas: one study⁴ found women in cities were twice as likely as rural women to experience violence; a recent study by ActionAid surveying 2500 women in four countries found even higher rates, with 89% of women in Brazil, 86% in Thailand and 79% in India reporting having experienced harassment or abuse in public in their city (UN Habitat, 2013; McIlwaine, 2016; ActionAid, 2016).

Here younger women and adolescents, elderly women, women who live in poor communities and/or precarious dwellings where break-ins are easy, recent migrants, and women who transgress gendered norms, e.g. by living on their own (Chant and McIlwaine, 2013; ActionAid, 2016) are particularly at risk. Lesbian women may also be at higher risk of violence: in Quito, 90% of lesbian women report having experiencing public violence, perceived to be due to homophobia (Chant and McIlwaine, 2016). **There are particularly high rates of violence in public spaces** such as around toilets, at schools, in bars and in secluded areas such as narrow lanes (UN Habitat, 2013). And **women in certain occupations may be exposed to increased violence**—such as sex workers or factory workers, where sexual harassment on the way to and at work is commonplace (Tacoli and Satterthwaite, 2013; Better Work, undated). A survey of 540 female sex workers in Dhaka, for example, found that 49% had been raped and 59% beaten by police in the last year (Chant and McIlwaine, 2016). Studies from Nigeria have shown that girls and young women who work as street hawkers in the informal economy are exposed to high rates of sexual harassment (Taylor et al., 2014b).

Urbanisation does not cause increased violence or insecurity, per se, but a range of factors—such as limited access to secure housing and infrastructure—come together in cities to create situations where violence is more likely (McIlwaine, 2016). **In insecure urban environments, the violence women experience can be**

⁴ UN Habitat, 2006, cited in McIlwaine, 2016.

exacerbated by a lack of safe infrastructure or inadequate services (Taylor, 2011).

Some of the key constraints to women’s economic empowerment – particularly as they relate to infrastructure and cities - are described in the table below (UN Habitat, 2013):

Constraint	Description
<ul style="list-style-type: none"> • Time 	<p>There is a strong yet inverse link between the amount of time that women and girls spend on unpaid care work and their economic empowerment (Chopra, 2015). Women are most likely to bear the burdens of time and energy intensive activities in the household economy (World Bank, 2006). Restricted access to productive assets means that many of women’s tasks require significant time inputs, for domestic chores to income earning activities. Research has demonstrated the economic value and importance of these efforts, even though they are normally excluded from standard national estimates of productive activity (Antonopoulos, 2009).</p>
<ul style="list-style-type: none"> • Mobility 	<p>Limitations to women’s physical mobility can inhibit opportunities for business expansion, access to wider job opportunities, and potential for improved earnings. It also has the potential to impact on social mobility and the ability to form networks and participate in decisions at the community and local level.</p>
<ul style="list-style-type: none"> • Discriminatory social norms and practices 	<p>Social norms and the perception of what is and isn’t ‘women’s or men’s work’ can have a strong impact on women’s ability to fulfil earning potential and take on more highly skilled and productive jobs.</p>
<ul style="list-style-type: none"> • Violence against women and girls / threats to personal safety 	<p>The perceived and actual risk of gender-based violence has a significant impact on women’s economic participation. It has been estimated that violence against women and girls costs the global economy US\$8 trillion annually (What Works, 2015)¹. Unsafe market spaces, transport and public space expose women workers and traders to violence, and limit their economic opportunities (Taylor, 2011; UN Women, 2015). Even worse, the perception of such risks can lead to girls and their families giving up economic ambition in the formative stages of their lives and perpetuating exclusion from education and other socio-economic activities.</p>
<ul style="list-style-type: none"> • Lack of formal recognition of and support to women’s unpaid 	<p>Literature suggests that even though women in low-income countries are increasingly engaged in paid work, this has not been accompanied by a redistribution of unpaid care work between men and women (Pozarny, 2016). For example, some evidence shows that in some urban areas,</p>

<p>reproductive work</p>	<p>when women enter into paid labour, it is their daughters who take up the burden of unpaid care work, which can impact on these girls' education, and perpetuates the 'intergenerational transmission of traditional gender roles and inequalities' (Pozarny, 2016).</p>
<ul style="list-style-type: none"> Occupational segmentation which confines women to low paid and poorly remunerated work, including their over-representation in the informal sector⁵ 	<p>Women's informal work encompasses a wide range of activities not covered by legally enforceable job contracts. Informal work lacks social protection and job security and the worker may be exposed to unsafe working conditions or personal violence. It often yields erratic earnings and a low implicit wage rate and the work may not be carried out in a dedicated workspace. Informal jobs include service providers such as domestic workers or waste pickers, home-based production workers, vendors, and own-account (or self-employed) workers, operating a microenterprise.</p> <p>There has been a significant increase in women's participation in informal work in the past 30 years. A recent WIEGO study (Herrera et al., 2012), about informal workers in 11 cities in ten low-income countries highlights that in all cities except Hanoi, more than half of the employed labour force is in informal employment, with particularly high rates in West Africa (e.g. 76.2% in Niamey and 83.1% in Lomé). These workers face myriad challenges: insecure work, erratic earnings, limited access to finance, few protections against loss of work or income, often working outside the reach of government regulation and protection, and most either invisible or under-counted in official statistics (Herrera et al., 2012; Chen, 2001; ILO, 2013).</p>
<ul style="list-style-type: none"> Credit constraints 	<p>70 percent of women-owned SMEs in developing countries are not served or are underserved by financial institutions. Credit constraints can act as a dominant factor behind gender differences in firm size and performance (World Bank, 2014). Given that financial and regulatory services are often critical in the transition from informal to formal sectors (DCED 2012), addressing constraints to financing is a key priority.</p>

⁵ WDR 2012; UN Women 2015

3. How can infrastructure have an impact on women's economic empowerment?

Infrastructure investments across sectors have the potential to impact on women's economic empowerment, when designed both in a gender-sensitive manner, but also in a way that explicitly seeks to impact upon women's economic empowerment. The importance of intentionality in this regard cannot be overemphasized.

Well-designed infrastructure investments in water, sanitation, electricity, roads, safe transportation, affordable housing, ICTs, manufacturing and service sectors⁶, and public and community spaces have the potential to:

- Impact direct, indirect and induced job creation within both the formal and informal economy;
- Reduce the risk of violence for women, girls and vulnerable groups;
- Promote women's mobility and employment prospects;
- Reduce women's care burden;
- Improve household health and well-being;
- Facilitate access to markets;
- Enhance productivity of existing activities;
- Provide increased and more stable incomes;
- Protect communities from natural and human-made disasters;
- Yield new opportunities through labour market participation, particularly in the construction sector

Critically, given the size and reach of large infrastructure projects, there is significant potential for such impacts to be achieved at scale.

The issue of direct, indirect and induced outcomes (both positive and negative) around women's economic empowerment is important to note here. As is demonstrated in the different sectors below, while infrastructure investments have the potential to have direct impacts on job creation in the formal sector, as well as improved productivity through new technologies and increased mobility through better transport options etc. they may also have indirect and induced impacts on employment prospects in both the informal and formal sectors (for example roadside vendors in the informal economy on new trade routes), access to resources or markets (through improved mobility and access to technology) and increased agency. They may also be able to reduce drudgery of domestic labour, lower risks to women's health and well-being, and enable women to have choices over how to balance unpaid care work, paid employment and leisure time. While induced impacts are harder to measure in terms of programme outcomes, they are also important to consider again in terms of both risks and opportunities in designing projects.

The entry points through which ICED and DFID can achieve impact at these different levels are also varied, ranging from interventions at the point of delivery, to interventions in the wider enabling environment. Entry points exist around:

⁶ In sectors that women are more likely to work in such as textiles, apparels

- Designing direct interventions that improve infrastructure delivery and that work for women
- Incentivizing the private sector to integrate gender outcomes in the design of projects
- Investing in training and capacity building of women in order to improve their employment and business prospects
- Supporting women-led organizations to demand services and infrastructure that meets their needs
- Advocating for policy change at the municipal and national levels

However, care must be taken to ensure that infrastructure projects minimize displacement of the urban and rural poor⁷, and are used to provide solutions that are affordable for marginalized communities.

By taking a holistic approach to this range of intervention points, and likewise accounting for not only direct, but indirect and induced impacts, **urban and infrastructure investments has the potential to facilitate women's economic empowerment at scale, and create livable and equitable communities and cities.**

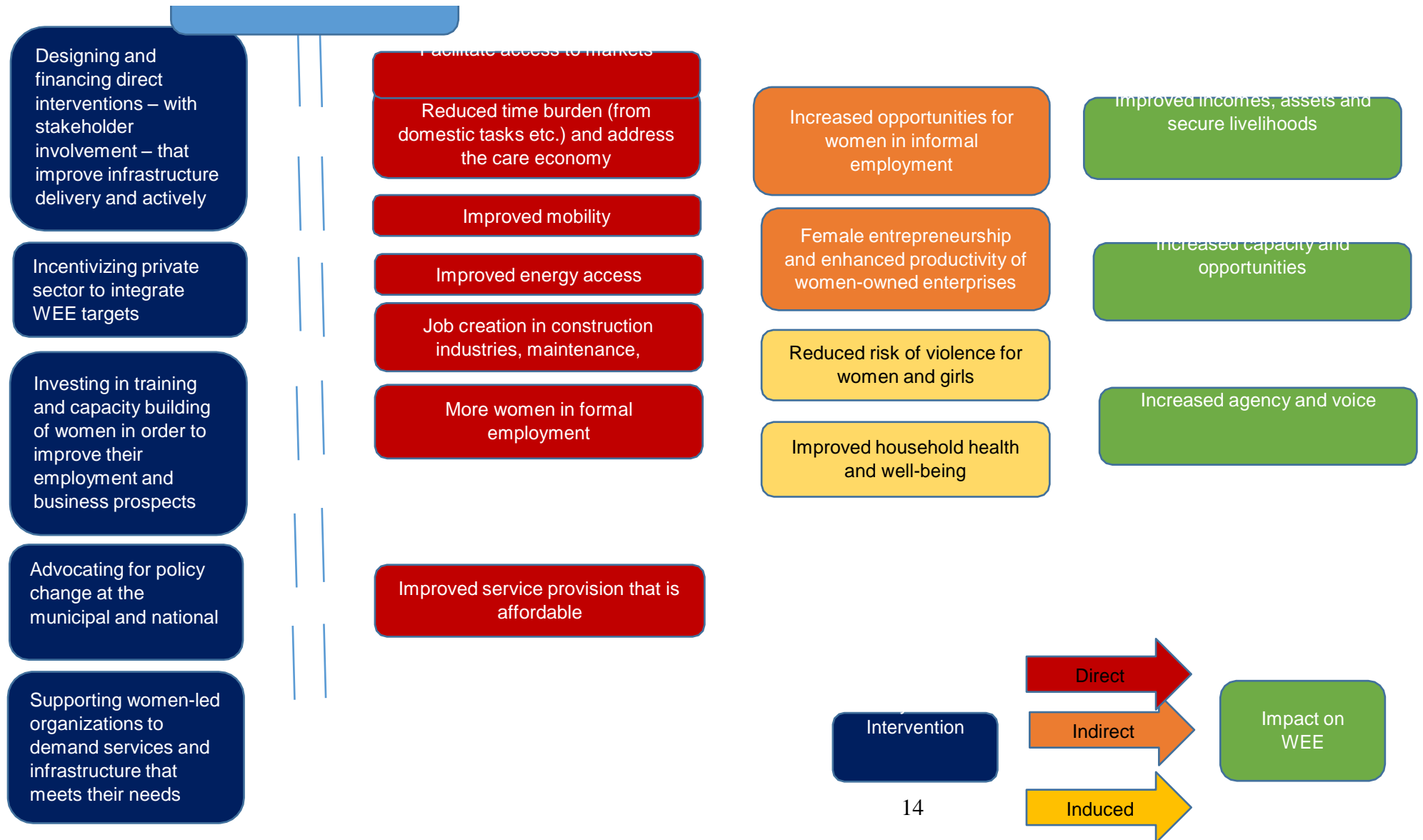
The diagram below outlines an *illustrative* theory of change to demonstrate the ways in which infrastructure and urban investments can have an impact on women's economic empowerment. It would be expected that during the design of programmes a programme-specific theory of change would be produced that demonstrates the intended impacts on women's economic empowerment. This would require also inputting key conditions and assumptions which are not included here due to the complexity and varied nature of these issues depending on sector and intervention type.

As such this diagram should be considered an example of some of the ways in which DFID could have an impact, if conditions for success are followed, and the range of entry points and outcomes that are possible. Further guidance and the development of a more in-depth theory of change and specific impact pathways are potential opportunities in Phase 2.

Specific opportunities and impacts that infrastructure investments can have in different sectors are outlined in section 4.

⁷To do so, DFID supported infrastructure projects can follow the UN's Basic Principles and Guidelines on Development-based Evictions and Displacement

Figure 1: Illustrative theory of change for potential entry points and outcomes on infrastructure and women’s economic empowerment



4. Conditions for Success

Infrastructure can serve as a critical enabler to women's economic empowerment - adequate, affordable and well-designed infrastructure can serve as the first step for poor women to access expanded opportunities. However the following conditions play a key role in ensuring that infrastructure can achieve its potential:

- **Women's active engagement** in the design, provision, and management of infrastructure investments as well as in planning and policy processes more broadly. Adequate inclusion of women's practical as well as strategic needs in surveys that feed into infrastructure design and planning is also critical.
- **Amplification of women's collective voice** to demand services and infrastructure. This can strengthen women's bargaining power and can serve to disrupt existing power structures.
- **Governance** and joined up planning between government agencies. Evidence suggests that unless there are coordinated, equitable and functioning democratic governance mechanisms, infrastructure projects cannot be assumed to deliver equitable benefits.
- **Transformation in social norms** that influence women's ability to access and use infrastructural resources at all levels (Kabeer, 2102). Infrastructure does not in itself modify the institutional rules, regulatory framework or social support services that can unlock strategic opportunities for women at scale. However Infrastructure development can have enabling effects on women's economic empowerment when investments are planned from the outset to help loosen restrictive gender relations and norms
- **Investments in social services and other measures** to allow women to reconcile paid and unpaid work obligations (Antonopoulos, 2009). Unpaid care work can be redistributed between women and their families, between families and employers (e.g. in terms of decent parental leave policies) and between families and the state (e.g. in terms of childcare services).
- **Strengthened asset security** for women through changes to land titling and tenure (Mitlin and Satterthwaite, 2014). This has the potential to reduce the risk of violence, increase control over resources and strengthen decision-making power.
- **Digital innovation**, which can facilitate the gathering and analysis of robust, real time data on women's infrastructure needs and current deficits, to feed into planning as well as enabling women's networking and access to information and opportunities.
- **Infrastructure design and delivery that acknowledge the differences between men and women** with respect to access to and use of infrastructure. These include:
 - Differences of needs for the type and location of physical infrastructure;
 - Differences in priorities for infrastructure services;
 - Unequal opportunities to participate in decision making on the choice of infrastructure services, both within the households and within the communities;

- Unequal opportunities to participate in the design and implementation of infrastructure programs and in the delivery of services; and
- Significant disparities in access to infrastructure services.

Further information on complimentary investments can be found in section 5.

Section B

5. ICED: Key Sectors to promote WEE

5.1 Transport

With increasing urbanization, cities in the Global South have witnessed rapid motorization, congestion, preference for road building over other forms of infrastructure, inadequate supply of public transport vehicles, overcrowded and unreliable public transport travel, and deterioration of infrastructure for Non-Motorized Transport (NMT).⁸ **The lack of investment in public transport and NMT infrastructure has impacted low-income groups disproportionately** as they rely on public transport significantly more than high-income groups in the same cities.⁹ **It has also impacted women disproportionately as women are likely to depend on walking and public transport infrastructure over other forms of transport.**¹⁰

Women are also worse off because their mobility is often restricted by social norms, and they are likely to suffer from harassment when accessing public spaces and transport. A FIA Foundation study (2016) shows women experience fear when ‘walking to transport stops, waiting at boarding points, and travelling on a mode of transport.’ This fear is heightened after dark, in isolated or poorly lit areas, and areas with few women. It is also particularly acute in overcrowded transport vehicles (Chant and McIlwaine, 2013; FIA, 2016) According to a recent study by the Asian Development Bank (2014), 85% of women in Karachi, Pakistan had felt harassed or uncomfortable when using public transport. In Mexico City – in 2011 alone – approximately a third (32%) of women over 15 reported that they experienced harassment in public spaces; 87% felt intimidated, 38% were sexually abused, and 9% physically abused in public spaces (USAID, 2016).

The threat of harassment has severely constrained women’s mobility in many cities, and has limited their access to schools, markets and jobs - constraining economic empowerment and their share in urban prosperity (UN Habitat, 2013). Inaccessible and unaffordable transport has prevented home-based workers in the informal sector from accessing markets (Chant and McIlwaine, 2013), and formal sector workers from accessing offices and jobs. This is also a direct result of ‘gender-blind’ or ‘male-biased’ transport policies that have exacerbated the challenges around women’s mobility and access to public space (Pozarny, 2016; UN Habitat, 2013).

⁸ Infrastructure for walking and biking

⁹ For more information, see Dimitriou (2011) and Vasconcellos (2001)

¹⁰ See Anand and Tiwari (2006), Salon and Gulyani (2010) in Levy (2016) for more details on women’s mode choice

Investment in safe transport can enable women to **access urban space, livelihoods and social opportunities** (Tacoli and Satterthwaite, 2013), and contribute to their safety and economic empowerment.

Given the need, DFID is in a unique position to influence interventions that can do so at scale.

Opportunities for DFID

- **Encourage Private Sector Investment in Public Transport**

As mentioned earlier, spending patterns in cities in developing countries reflect a preference for road building over public transport. This has indirectly limited women's mobility as women rely on walking and public transport for their commuting needs. It has also increased costs of travel as working women have had to use higher cost alternatives to commute (World Bank, 2011). In order to promote socially inclusive economic growth, it is essential to support investments in mass transit infrastructure as well as public buses with men and women's needs in mind. The availability of affordable, safe and integrated public transport can lower costs associate with congestion, and improve mobility as well as access to more remunerative or larger markets in both rural and urban locations. Investments in public transport can also be tied to increased recruitment of women in the transport sector (see Box below).

It should be noted that it is also critical to connect peri-urban populations within cities to public transport networks as men and women here frequently have to wait for hours to find transport, or walk long distances to access transport (World Bank 2010). For women, this severely limits their mobility and integration with the city's labour market.

EBRD investment in Public Transport, Kazakhstan – improvements to public buses and recruitment of women in transport

In Kazakhstan, EBRD provided \$160 million to one of its private sector clients – Almatyelectrotrans (AET) for improvements in public buses. Under the agreement AET was required to encourage women to join as bus drivers. The first bus driver was hired in 2015 and there have been plans to recruit additional female drivers. EBRD has also encouraged hiring of women in management roles. To date, the proportion of women in management has increased from 19% to 28%, and women have also been recruited to all-male teams.

(EBRD 2015)

- **Leverage Potential of Small and Medium Cities through Road Development and Public Transport Investments**

Investment in public transport is integral in large and mega-cities. However, it is also essential to leverage the potential of small and medium cities through investments in road development and public transport as these cities frequently suffer from poor connectivity and infrastructure. Here too, women's ability to access urban space,

educational opportunities, livelihoods and social opportunities is severely curtailed. DFID can support infrastructure need assessments in small and medium cities – with a strong gender lens – and foster greater connectivity within and across small and mega-cities.

- **Improve Secondary Roads in Rural Areas with Women’s Involvement**

Traditionally, improvements in rural transport have centered on primary roads that connect them to major cities. However, in most cases, women’s mobility in rural areas depends on the existence of secondary roads (often ‘simple tracks, trails, paths and footbridges’) as they make their trips primarily on foot (FAO, 2016; World Bank, 2010). ICED can support the improvement of secondary roads by involving women from local communities and understanding their transport needs. For instance, in Peru, a road improvement project that consulted with local women reported increased mobility on the part of women (77%), greater safety in travel (67%) and improvements in income (43%) (Caballero and Alcahuassi, 2007).

- **Encourage development of Non-Motorized Transport Infrastructure**

As a result of increasing motorization in cities across the Global South, there has been a rapid rise in road traffic-related deaths and injuries. Every year, over a million people succumb to fatal accidents in low and middle-income countries (NRC, 2006). Pedestrians and cyclists make up a significant proportion of deaths caused by road-related accidents; In Africa, they comprise 43% of total deaths (FIA Foundation). A study by the Nairobi City County Government identified that pedestrians made up 70% of 723 traffic fatalities in Nairobi in 2014 (FIA Foundation). Women’s safety, in particular, is at risk, as they tend to make more trips walking as a total proportion of their trips. Yet, infrastructure for pedestrians and bicyclists in most cities in the Global South is inadequate, deteriorating, and in some instances being demolished altogether.

There is an immense need to prioritize the development of NMT infrastructure including sidewalks, zebra crossings, pedestrian traffic signals, and bicycle lanes. Investing in such development will facilitate women’s ability to access public spaces and markets. In this regard, policy changes in cities such as Chennai and Mexico can provide guiding principles for other cities to follow (see examples below).

Transforming Transport, Mexico City – Prioritizing pedestrians over private car owners

In 2014, a new mobility law was introduced in Mexico City. The law views mobility as a fundamental right of the city’s residents, and has established a mobility hierarchy that prioritizes pedestrians followed by cyclists, public transport users, and private car owners. It has also created a Road Safety Integrated Plan to improve traffic safety in the city. While implementation of the law remains challenging, the new law has the potential to create a shift towards sustainable transport practices both within and outside Mexico City.

(Paez & Mendez 2014)

Corporation of Chennai's Non-Motorized Transport Policy – leading the route to safer streets

In 2007, the Tamil Nadu government in India created a Road Safety policy to reduce the number of road accidents and injuries in the state. The policy was implemented in 2009 through the formation of road safety committees in each district. In Chennai, the committee worked with 15 government agencies and civil society organizations to improve road safety. In 2014 – with assistance from groups such as the Institute for Transportation and Development Policy and Transparent Chennai – the city government allocated 60% of its transport budget for developing and maintaining NMT infrastructure. The city aims to have continuous footpaths on 80% of its streets by 2018.

(ITDP 2014; Toshnival 2011, 2012)

Build Capacity and Support Policy Transformations

As noted, gender-blind transport policies that are not based on differences in men and women's travel patterns have directly limited women's mobility in public spaces. In order to mainstream gender in transport policies, DFID can develop capacity building programmes that enable public sector transport agencies to understand and address both men and women's needs in transport planning. It can engage staff in transport agencies in awareness raising exercises, finance time-use surveys to study the differences between men and women's travel patterns, and support with the development of gender-sensitive guidelines for transport planning. In Uganda, for instance, the Ministry of Transport developed a gender management plan that focused on capacity building, data collection, and monitoring to ensure that gender was being mainstreamed in transport policies (World Bank 2010).

Expand Transport Safety Initiatives to Small and Medium Cities & Share Learning Across Cities

A number of cities have introduced gender-sensitive transport interventions to address women's needs and vulnerabilities, through appropriate service routes and schedules, affordable fares, and appropriate/safe vehicle design (e.g. women-only carriages) (Outram and Korn, 2015). Cities including Mexico City, Cairo, Lahore, Jakarta, New Delhi and Rio de Janeiro, have introduced women-only bus or train carriages (UN Habitat, 2013). In Pakistan, initiatives are being undertaken to train women to ride motorbikes and drive rickshaws (Bjoerge 2016; Guardian, 2015). In India, programmes have been introduced to train women as commercial chauffeurs (Azad Foundation). In Indonesia and Liberia, motorbike taxis driven for and by women have been introduced to facilitate female commuters (Freischlad, 2015). In Cape Town and in Egypt, the city and national government have worked with UN Women Safe Cities Global Initiative to conduct safety audits to make the city safer for women (UN Women, 2014). Expanding initiatives to small and medium cities and sharing learning across cities can enhance women's safety in public spaces and potentially increase their mobility labour force participation.

- **Support Evaluations of Transport Initiatives Aiming to Improve Safety in Public Spaces**

Although a great number of initiatives have been undertaken in cities around the world to improve safety in public spaces, there have been limited evaluations of the impact of the initiatives. Such evaluations can provide support for evidence-based policy-making and avoid duplication of ideas that do not work. In Lahore, the Center for Economic Research in Pakistan (CERP) and Duke University are conducting a Randomized Controlled Trial that aims to test whether improved transport and women's-only transport can facilitate women's mobility and labour force participation. Similar evaluations in other cities can develop evidence on how transport infrastructure contributes to WEE.

- **Facilitate the Creation of Women's Safety Committees in Transport Agencies**

As noted, transport policies are frequently gender-blind and do not take into account differences in men and women's travel patterns. In addition, while laws exist to prevent harassment in public spaces, they are seldom implemented. This failure can partially be addressed by establishing Women's Safety Committees that are headed by representatives from transport agencies, and include members of NGOs, women's groups and the police. This has been initiated in Bangalore by the Bangalore Metropolitan Transport Company and has been critical in conjuring support for gender-sensitive programmes and policies (FIA 2016).

By working through these committees, transport staff can also be trained on gender sensitization and sexual harassment in public spaces as a means to improve women's safety on transport. In Delhi, for instance, the NGO Jagori conducted trainings for over 3,500 bus drivers and conductors on gender discrimination and sexual harassment and was able to address 'deep-rooted beliefs' that sanction violence against women, and in turn make public transport safer for women (Jagori, 2007). The committees can also initiate safety audits¹¹ in their respective cities to improve infrastructure such as street lighting and potentially lower the incidence of violence against women and girls in public spaces. Additionally, the committees can facilitate additional opportunities for women in the transport sector, and support media campaigns to address social norms constraining women's mobility.

In summary, ICED can contribute towards WEE in the transport sector by:

- Encouraging private sector investment in public transport
- Leveraging potential of small and medium cities through road development and public transport investments
- Improving secondary roads in rural areas with women's involvement
- Building capacity and supporting policy transformations
- Encouraging development of non-motorized transport Infrastructure
- Supporting evaluations of transport initiatives aiming to improve safety in public spaces
- Facilitating the creation of women's safety committees in transport agencies

¹¹ See Actionaid's Safety Audit Participatory Toolkit for designing safety audits

5.2 Energy

Access to energy is what O'Dell et al. (2014) call an 'under-explored lever' for women's economic empowerment.

Access to energy and affordable, efficient or clean energy technologies has the potential to **save time spent by women on unpaid care work, and improve health and safety**. An energy awareness programme in Arusha, Tanzania, where 70% of the population lives in informal settlements on the outskirts of the city, found that access to affordable clean energy technologies resulted in significant reductions in household expenditure and time spent cooking and collecting fuel (UN Habitat, nd). Research by O'Dell et al (2014) showed that access to efficient cookstoves can improve women's and their families' health due to a reduction in air pollution due to burning biomass for fuel.

Energy access can also improve women's productivity, and enable them to start and grow home-based enterprises and small businesses. A study in Nicaragua showed the propensity of women to work outside the home increased by approximately 23 percent due to more efficient, less time intensive home production work following to the provision of lighting and modern cooking appliances (Grogan et al, 2013). A study from South Africa (DFID, undated; Dinkelman, 2010) showed rural electrification increased female employment by 9%, largely in self-employment and microenterprises as 'electricity lowered the cost of new home-based products and services'; studies from Nicaragua (DFID, 2016, Grogan and Sadanand, 2013) and India income (DFID, 2016, Misra (2015) showed similar results. Research in Brazil showed that access to energy is correlated with higher income for women, and this correlation is especially strong for urban women, where self-employed urban women earn 148-322 per cent higher incomes than urban women without access to electricity.

There is also an issue around energy as an enabler for other complementary investments in women's economic participation. For example, certain factors, such as access to capital, reliable internet access, business associations or networks, training and education, and access to markets will increase the economic growth value of improved electricity access when incorporated into rural energy programs.

However, it is important to note that **access to energy is not enough**: UNIDO (2015) argue that in order for technologies in the energy sector to have a positive impact on WEE, one needs 'deliberate and consistent efforts to embed a gender transformative approach' in plans, e.g. ensuring energy infrastructure and technologies meet women's needs, are accompanied by business skills trainings or mentoring; and that there are complementary interventions at the household and community level to improve women's status (Danielson, 2012; UN HABITAT 2009b). Complementary interventions can include the provision of financial services (Chapple and Bozovic 2015), access to capital, reliable internet access, business associations or networks, training and education, and access to markets.

When engaging women as consumers, **it is also important to bear in mind other constraints that women may face in accessing energy through the state**. Evidence from several African countries shows, for example, that women-owned enterprises face greater discrimination than men-owned enterprises in accessing grid

electricity connections, facing delays and expectations they will pay bribes for these services (UNDP, 2012). This may pose a risk to women entrepreneurs' ability to grow businesses.

Opportunities for DFID

- **Ensure that energy products are appropriate and affordable during the design phase.** In Laos, for instance, the Laos Rural Electrification Programme found that the barrier to electricity connection for 20-40% of rural households (of which half were female-headed) was the up-front connection costs; so, the programme provided subsidies ('with gender-sensitive design/consultation and eligibility criteria), which increased the rate of connection for female-headed households from 67% to 95% (ESMAP, 2013).
- **Foster women's entrepreneurship in the energy sector.** The production and distribution of cleaner, small scale energy technologies is an emerging market, providing opportunities for women to engage as sales agents, employees and entrepreneurs within the value chain. In contexts with an absence of large-scale electrification, off-grid solutions can provide much needed services to marginalized populations (USAID, 2016). Here, women have proved invaluable in extending energy services and products to hard to reach customers, in establishing appropriate business models and increasing customer awareness of products (Dutta, 2011). The Solar Sister Initiative in Nigeria, Tanzania, and Uganda (see Box below and Annex C) has employed women as vendors to promote clean energy. Other similar initiatives in urban areas have provided employment opportunities for a number of previously unemployed women, for example in the production or marketing of solar cookers in Bamako, Mali (UN Habitat, nd). As household energy managers and through their networks, women can play a key role in increasing awareness and delivering new domestic energy products and services, particularly in hard to reach communities (Energia, 2015).

Investing in energy infrastructure that involves education and training for women to build businesses or be employed in the design production, marketing, sale and maintenance of new technologies and services (Dutta, 2011) can both around reduce energy poverty and building women's assets, opportunities and capabilities.

- **Incentivise interventions that reach the 'last mile' who are excluded from energy access.** This could include the provision of subsidies to enable connection to affordable electricity and to address issues of affordability.

Solar Sister, Uganda, Nigeria and Tanzania – women’s enterprise and capacity building through clean energy

Solar Sister is a network of women in Uganda, Nigeria and Tanzania reaching the most low-income and remote areas with affordable solar lamps, mobile phone chargers, and fuel-efficient stoves. Solar Sister’s business model deliberately creates women-centred direct sales networks. Management staff train and recruit Business Development Associates (BDAs), who are direct, locally hired Solar Sister field staff. In turn, each BDA recruits, trains, and supports a group of 1-25 self-employed Solar Sister Entrepreneurs (SSEs). In total, Solar Sister has recruited and trained 65 BDAs and over 2,000 SSEs, the majority of whom are women.

Women’s engagement with Solar Sister as entrepreneurs and employees provides them with their own source of income, creates new productive capital and income-generating opportunities, and increases financial stability and independence. Women customers who previously had no energy access also experienced improvements in their income-generating potential.

To date, the activity has created micro-businesses for 171 Solar Sister entrepreneurs in Uganda, Rwanda and South Sudan, bringing the benefits of solar power to more than 31,000 Africans. Solar Sister's goal is to make women an integral part of the clean energy value chain in Africa. Every dollar invested in a Solar Sister entrepreneur generates over USD 48 in economic benefits in the first year alone through earned income for the entrepreneur and the cash savings of her customers.

Soria, L. Farley, K. and Glinski, A. (2016); UNFCC (nd)

Utilize social norm change approaches to enable women to move into higher-tiered job opportunities – Interventions can include campaigns and the use of role models, training, sensitisation and implementation of gender-sensitive policies within workplaces (including e.g. the provision of safe transport, childcare, flexible working, and/or policies to prevent and respond to workplace sexual harassment); and mentoring and training schemes to support women to enter into better paid roles (DFID, 2016).

Stevens (2009) highlights the importance of the growing jobs in the sustainable energy sector to include women at all levels, including in the ‘secondary’ sectors of construction, manufacturing and energy production, and in the tertiary sector of engineering and financial and business services—where women are underrepresented, especially in better paid positions. Government and union action is required to raise the proportion of green jobs filled by women and to ensure the quality of those jobs. Steps should be taken to increase the number of women who are: employed, recruited, trained, paid equitably, and organised. Taking into account these benefits of involving women in both on-grid and off-grid value chains can therefore have significant knock-on effects for women’s employment opportunities and income generating options (O’Dell, 2014).

In summary, DFID can contribute towards WEE in the energy sector by:

- Facilitating greater access to affordable energy
- Supporting complimentary interventions such as provision of finance, training, access to markets for women running small businesses in both formal and informal sectors
- Fostering women's entrepreneurship and role in the production and distribution of clean, small-scale energy technologies
- Incentivising interventions that reach the 'last mile' who are excluded from energy access
- Utilizing social norm change approaches to enable women to move into higher-tiered job opportunities

5.3 Affordable housing and upgrading of informal settlements

Housing plays a vital role in the informal economy, particularly for homeworkers. **Many women working in the informal economy rely on their homes as a physical asset to do their work;** to earn income through the rental market¹²; and as collateral to access loans to grow their businesses. As such, the location, affordability and design of housing has direct impacts on women's income earning opportunities, as well as their access to decent working conditions.

Women are also more likely than men to have businesses in informal settlements. Many of these enterprises are held back due to the lack of access to basic services. Access to water and energy improves productivity; the provision of drainage and pathways improves demand and reduces the costs of inputs.

Rapid urbanization in the Global South has exponentially increased the gap between housing supply and housing demand. As a result of increasing housing shortages, 900 million urban residents live in informal settlements in low and middle-income countries (Tacoli 2012). With increasing urbanization and population growth – particularly in Africa and Asia – the demand for adequate, affordable housing will continue to accelerate (UNDESA 2010).

Residents in informal settlements frequently suffer from overcrowding and poor services, including water, sanitation, waste management. They also suffer from the threat of eviction and increased vulnerability from natural and human hazards (Tacoli 2012).

Due to the failure of the formal housing market to provide affordable housing solutions for the urban poor, **densification within existing inner-city settlements has substantially increased.** Simultaneously, **the poor have had to move to city peripheries in search of affordable land.** This has increased transportation costs, and particularly constrained women's ability to participate in the labour market. Children have also suffered as a result of poor educational facilities in peri-urban areas (Hasan, undated).

There is a significant gender gap in access to secure housing. A UN Habitat survey (2013) found that 64% of respondents across all cities studied except Kampala thought that 50% or more women in their city had no access to secure housing.¹³ And only 23% thought their city had policies to address the barriers facing women in securing land and property tenure (UN Habitat, 2013). These barriers include discriminatory inheritance laws, which often exclude women from ownership of these key physical assets. Gender-sensitive land titling programmes are not yet widespread.

Opportunities for DFID

¹² In urban contexts, access to secure housing can also provide an opportunity to earn income through engaging in the rental market—i.e. renting out rooms, particularly in sub-Saharan Africa (expert contribution from Caroline Moser).

¹³ Moreover, the policy focus has been on women's access to tenure/ownership, gender discrimination in access to the rental sector is also an important and neglected issue (UN Habitat, 2013).

- **Promote Investment in Appropriate, Adequate, Affordable Housing**

There is an urgent need to promote investment in appropriate, adequate and affordable housing solutions. DFID can play a leading role in:

- Encouraging private sector firms to provide affordable housing solutions that target the populations most in need of housing and engage communities beyond construction of physical infrastructure;
- Collaborating with planning experts to revise building, land-use regulations to promote the development of affordable housing
- Engaging local and central governments to identify land parcels to increase land supply and provide appropriate housing solutions to the poorest communities that cannot be served by the private sector¹⁴
- Garnering international support for the construction of affordable housing;¹⁵

To avoid past failures and actively promote women's economic empowerment, it must ensure that women's needs are incorporated in the development of new housing settlements. For instance, in the Mumbai Slum Rehabilitation Scheme, new apartment blocks offered slum residents improved WASH services, but the more limited living space meant that disadvantaged women with childcare responsibilities were no longer able to easily work from home (Tacoli and Satterthwaite, 2013).

- **Support Women-led In-Situ Upgrading of Informal Settlements**

Bottom up, women-led, community driven approaches led by networks of the urban poor (the majority of whom are poor women) such as Shack/Slum Dwellers International¹⁶ or Mahila Housing SEWA Trust¹⁷ have been very successful in negotiating collectively with Municipal Authorities for improved infrastructure, globally (see Box below). They have also transformed women's engagement in municipal governance processes. Such collective action by women is a key contextual strategy and a pre-condition for ensuring that infrastructure investments lead to gender sensitive infrastructure provision with potentially transformative impacts. Through their engagement in these grassroots movements, women have become more visible as public leaders, providing other women and girls with role models. The process of claiming improvements in infrastructure and/or housing by low-income women, especially in urban areas, has in itself frequently proven to be empowering.

DFID can support networks of community-based organizations to collect and map data about their settlements to influence local governments. It can also work with them to develop small-scale infrastructure programmes that provide basic services such as water, sanitation and pathways in informal settlements.

For this it can design programmes to provide:

- Resources to facilitate community organization, horizontal exchanges and information sharing; and

¹⁴ In doing so, it should also consult with lower-level staff in government departments who often have most the most knowledge of local conditions

¹⁵ For this, DFID can collaborate with the World Bank which is increasingly focusing on affordable housing development, particularly in South Asia

¹⁶ <http://sdinet.org/about-us/what-we-do/>

¹⁷ <http://mahilahousingtrust.org/#home>

- Seed money (in the form of patient equity) for innovative, precedent setting projects

Infrastructure gains through women's collective action

Shack / Slum Dwellers International (SDI) is a network of community-based organizations of the urban poor in over 600 cities located in 33 countries (and growing) in Africa, Asia and Latin America. One of its key objectives is to negotiate with local authorities for in-situ upgrading of informal settlements where upgrading is any intervention that improves the physical conditions of a settlement (including but not limited to water, sanitation, drainage, solid waste removal, electricity connections, street lighting and street paving) which in turn enhances the lives of its inhabitants.

For SDI, the central participation of women is a critical component of a gender-sensitive mobilization strategy, which sees men and women re-negotiating their relationships within families, communities, and their own slum dweller "federations". By prioritizing the leadership potential of women, federations alter traditional male domination in communities, in ways that actually strengthen grassroots leadership. SDI uses the savings and credit methodology to develop their leadership capacity, financial management skills, and confidence.

SDI has been successfully using community-based informal settlement enumeration methods to collect, map and analyse data about their settlements to influence local government resource flows and development priorities, to mitigate against disaster and conflict and to make poor communities vocal and visible. Information about the informal settlements in terms of their locality, size, tenure status, basic amenities, educational, health and social facilities as well as transport and other public services is collected by the community, usually women. The data is utilised as a resource and advocacy tool to support poor, homeless communities in their quest to secure tenure and address the inequitable distribution of resources and services in cities. Data has been collected in over 600 cities so far.

<http://sdinet.org/>

- **Lead Initiatives that Strengthen Women's Land and Property Rights**

Strengthening women's land and property rights also has important wider benefits, as it can release time from protecting their homes from eviction, increase access to loans and facilitate business start-up and expansion, and increase women's safety and security. This has been demonstrated in a number of initiatives (see Box below), from the Global Land Tools Network, and donor-led programmes such as the World Bank land-titling programme in Vietnam, and the Habitat for Humanity 'Women Build'

programme in Zambia, to changes in national legislation to ensure joint certification for husband and wives (Chant, 2011).

Strengthening Women's Land Rights & Successful Forms of Incremental In-situ Upgradation – Pune, India

In 2009, the Maharashtra Social Housing and Action League (MASHAL), an NGO based in Pune, and the Pune Municipal Corporation (PMC) collaborated to upgrade seven informal settlements in Pune.

The project was jointly funded by the national, state and local government, and included a 10-12% contribution from residents of the informal settlements. It involved residents from the outset and sought their input for the design of their homes. The project also gave local contractors preference external contractors.

The team prioritized the development of homes for widows, senior citizens and single women as part of the first phase. In total 2,010 homes were constructed and completion certificates were provided in the name of the female head of the family.

The project was able to successfully improve conditions for residents of the seven informal settlements by supporting existing livelihoods, enhancing personal security, reducing environmental risks, and empowering the community to participate in its self-development.

(Rawoot 2015)

In summary, DFID can contribute towards WEE in the housing sector by:

- Promoting investment in appropriate, adequate, affordable housing solutions with a particular focus on women's needs
- Supporting women-led in-situ upgrading of informal settlements
- Leading initiatives that strengthen women's land and property rights

5.4 Water and Sanitation

Despite improvements in Water, Sanitation and Hygiene (WASH) facilities, **there remain significant challenges in achieving access to water, sanitation and hygiene for all**¹⁸.

In urban areas, **residents of informal settlements, and households living close to city peripheries suffer from poor water and sanitation facilities in particular**. Here, **women and girls are especially disadvantaged** due to an increase in time they have to spend making alternative arrangements, and due to a compromise to their dignity and self-respect. This severely constrains their ability to improve their living conditions or engage in productive, remunerative activity that can contribute to economic growth (UN Habitat 2013). Inadequate sanitation in India, for instance, is said to cost the economy \$213 million due to loss of time at school and work, while in Viet Nam, timesaving alone from improved sanitation could save \$41.6 million per year (Asian Development Bank, 2015). Likewise inadequate access to water in rural areas also adds significantly to women's time burden in terms of domestic responsibilities.

The lack of adequate water and sanitation facilities in public spaces has a significant impact on the health of informal sector female workers. Women street vendors in India, for instance, have suffered from kidney problems, due to a severe lack of women's public toilets (UN Women, 2015). It also has a significant impact on the profitability of, and growth prospects for, enterprises. In a survey of 8 urban areas, restricted access to toilets and running water, and deficits in power supply and waste removal were shown to undermine productivity (Roever, 2014).

It is essential therefore that any infrastructure initiative that aims to contribute to poverty reduction and women's economic empowerment, invest in improvements to water and sanitation facilities.

Opportunities for DFID

- **Develop and support programmes to improve water and sanitation facilities in informal settlements, particularly in peri-urban areas**

Programmes that provide accessible and affordable water and sanitation facilities in informal settlements can reduce women's time burden, improve household health, and save household income for other expenditures. In particular, improvements in water provision can significantly reduce women's time-use on domestic tasks, such as water collection. They can also enable women to choose between care work (paid or unpaid) and employment – inside or outside the household (Fontana and Natali 2008). However, it is critical to involve women and local communities in each stage of planning and implementation to ensure that the programmes remain affordable and

¹⁸ As per SDG 6

address key concerns faced by communities (Mitlin and Walnycki, UN).¹⁹ In Brazil for example, residents are managing and financing condominal sewerage –low cost waterborne systems – that have avoided high upfront costs and have proved to be affordable (World Bank 1995). Similar initiatives can be supported in other cities.

- **Involve women in the design and maintenance of water and sanitation improvement projects**

The Built Environment Improvement Programme in Thatta Pakistan involved women in the planning and implementation phases and aimed at improving women's livelihoods and share knowledge on domestic hygiene, primary health care and environmental sustainability in an area where 97% of the population did not have access to potable water. By involving women in the planning and implementation phases, it was able to have a positive impact on women's livelihoods, skill building, political involvement, and managerial responsibility

- **Support development of sanitation facilities in markets and public spaces**

The provision of suitable sanitation, drainage, water and waste disposal in markets and public spaces has been successfully demanded in some cases by women workers in the informal economy. SEWA's successful advocacy and activism led to the 2014 Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, which mandates the engagement of street vendors in local and municipal planning in India, to ensure their needs are considered (UN Women, 2015). Support to these groups is therefore key.

Informal workers in local and municipal planning

Women make up a high percentage of India's 10 million urban street vendors. In March 2014, the Indian parliament passed the Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act. The Act was the direct result of advocacy efforts by the Self-Employed Women's Association (SEWA) and the National Association of Street Vendors of India (NASVI) who fought for the legislation for decades and also participated in a four-day hunger strike. The Act recognizes street vendors, sees them as positive agents in the economy, and includes dispute resolution mechanisms to address their day-to-day problems.

The law requires that street vendors influence local government planning processes by participating in Town Vending Committees alongside local government representatives, non-governmental organizations and community organizations. By giving them a voice, it encourages inclusive planning at the local level.

UN Women 2015; Inclusive Cities blog

¹⁹ Here a framework that focuses on accessibility, adequacy, affordability and awareness can be useful in designing appropriate solutions and targeting areas most in need of service provision (see Carolini 2011 for more details)

- **Work with local authorities to ensure informal workers can access safe work environments, whether at home, in markets or elsewhere**

UN Women (2015) calls for action to ensure that informal workers can access safe work environments, whether at home, in markets or elsewhere. In Papua New Guinea (PNG), UN Women, UN Habitat, local authorities, women's organisation's and vendors worked together under the Port Moresby Safe City Free from Violence against Women and Girls Programme to make markets safer for women informal traders. The program focused on improved WASH infrastructure, a public awareness campaign on sexual harassment, and private sector partnership with mobile company to enable the collection of market fees via mobiles, limiting women's exposure to extortion (p. 94). Similar initiatives in partnership with local authorities – particularly in markets, commercial and industrial zones – can potentially improve women's ability to access safe work and also enhance labour supply.²⁰

In summary, DFID can contribute towards WEE in water and sanitation by:

- Developing programmes to improve water and sanitation facilities in informal settlements, particularly in peri-urban areas
- Involving women in the design and maintenance of water and sanitation improvement projects
- Supporting development of sanitation facilities in markets and public spaces
- Working with local authorities to ensure informal workers can access safe work environments, whether at home, in markets or elsewhere

²⁰ See Taylor (2015) for interventions recommended by Actionaid that can be used to equip markets with adequate and appropriate infrastructure

5.5 ICTs

ICTs and digital innovation have significant potential to impact women's empowerment at scale, and play a key role in capturing data on the needs of women with regards to transport, energy, and wider infrastructure. This includes gathering real time data to inform settlement planning, mapping public space risks for women, and connecting women to finance and market opportunities.

Safetipin – Digital innovations to make communities and cities safer

SafetiPin is a mobile app that works to make communities and cities safer by collecting and disseminating safety-related information on a large scale through crowd sourcing and other methods. Launched in 2013 in India - the app has also been used in Jakarta, Nairobi, and Bogotá, among others. Safetipin data can be used to take important urban planning and monitoring decisions, including deployment of limited resources for lighting, security, CCTVs, public transport at night. Safetipin's partnership with Uber already means that it has significant potential to reach scale across a large number of cities.

ICT and particularly mobile telephony is increasingly enabling women vendors and micro-entrepreneurs to access information about markets, both in rural and urban areas, and to enable connections between these. Mobile communications provide timely market information to women producers, with the potential to increase their earnings by reducing transaction costs and price variability as well as enabling direct payments (through mobile money transfers) which can assist cash constraints. Mobile telephony can also assist previously isolated Home Based Workers in communicating with contractors and communicating with each other. To maximize this potential, gender differences in both access to and usage of mobile telephony and payments need to be better monitored and analysed and fed back into service provision and regulation.

Trade at Hand Programme, Liberia, Mali and Burkina Faso

Trade at Hand programme uses mobile phones to link literate and illiterate (the programme uses readily recognisable symbols for illiterate users) women traders in Monrovia with rural women farmers, providing information on products, prices, transport etc., and enabling exchange of offers and sales, via SMS. It has since been expanded to Senegal, Mali and Burkina Faso.

(UN Habitat, 2013)

ICTs, including mobile banking, have significant potential to enhance women's ability to grow their business. ICTs can be critical in facilitating access to finance (savings and credit), as well as information and new markets. When businesses integrate into global value chains, with enhanced demands on timing, product quality, etc. using new technologies and data becomes increasingly important (De Haan, 2016). Credit interventions that are linked to banking facilities have proven to generate the greatest gains for women beneficiaries (Smith, 2015). Also market information-based performance improvements may be greatest for women owned businesses because they overcome gender-based constraints to women's physical mobility and allow them to expand their customer base, enter into new sales and value chains facilitated by e-commerce and provide new internet based personal and business services

Similarly, **ICTs can enable women to access employment.** Klonner and Nolen (2008) note that rural labour markets in South Africa are, like elsewhere on the subcontinent, characterised by low wages and high rates of under- and unemployment and high job search costs. Controlling for the endogenous placement of mobile phone towers, they found that the introduction of mobile phone coverage in rural areas was associated with a 15% increase in employment, with most of the effect due to increased employment by women. They attributed it to reduced costs of job search. They also found a significant shift away from agriculture into self-employment and waged employment (Kabeer, 2012).

DFID can contribute towards the development of ICT and its use in innovating for empowerment by:

- Promoting women's access to and affordability of digital technologies
- Connecting up with the private sector to encourage a focus on reaching new users of technologies, in particular women
- Partnering with innovative technology developers, such as Safetipin and others, to support the further build and integrate the data and knowledge of the needs of women with regards to transport, energy, and wider infrastructure

6. Involvement of the private sector in promoting women's economic empowerment

An estimated 884 million people in developing countries are without safe water; 1.6 billion are without electricity; 2.5 billion have no sanitary facilities; and nearly 1 billion lack access to an all-weather road. Based on World Bank research, countries need to double their spending on infrastructure every year until 2020 to bridge the severe infrastructure spending deficit that exists in Sub-Saharan Africa as well as South Asia. It is estimated that public funding of infrastructure in developing countries accounts for between 70 and 80 percent of total infrastructure spending, with the balance coming from the private sector, often in the form of a Public-Private Partnership (PPP) contracts²¹.

The public sector therefore plays a critical role in infrastructure delivery, with private sector finance still lagging behind. However there is potential to influence the ways in which the private sector engages with infrastructure design and delivery and to encourage the integrate gender throughout infrastructure investments, particularly in terms of moving beyond mitigation to targeting women's economic empowerment directly. This could also involve embedding women's economic empowerment into contract clauses, performance standards or social safeguard mechanisms.

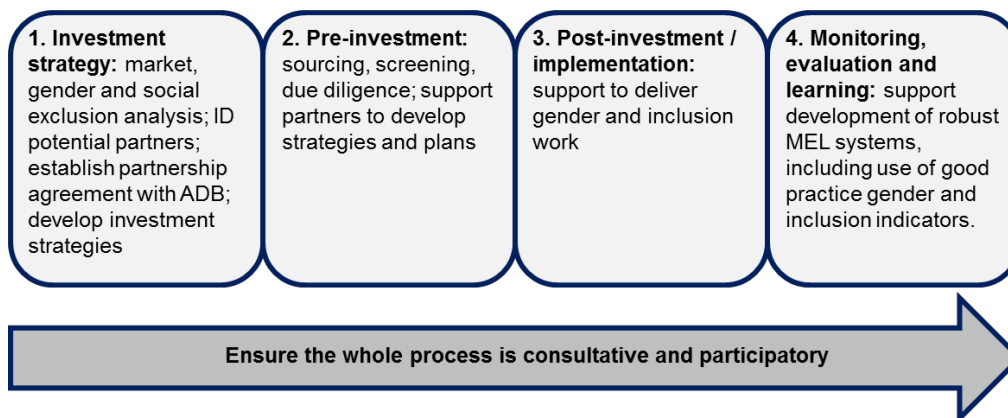
DFID can engage private sector involvement in WEE by:

- **Embedding Women's Economic Empowerment as a core component of its Development Capital (DevCap) commitments**

ICED is already engaging with the issue of how DFID can mobilize private finance in infrastructure investments through Development Capital (DevCap) and has done some work on integrating gender into the core of the DevCap lending process. The following schematic was developed as part of a review of how the Asia regional DevCap facility could better integrate gender into its programmes and is useful in thinking through the process that DFID should follow when engaging with private finance in this area²².

²¹ PPP projects can use mechanisms such as deductions and penalties if the private sector contractor fails to perform or meet targets, so the public sector retains a level of control. In particular, PPP contracts carry more immediate and clearly defined compliance criteria and penalties. Therefore, women's economic empowerment measures can be designed and implemented through PPP contracts in the form of innovative benefit-sharing clauses, quotas for skilled women workers etc.

²² Jacobson (2016) DFID Asia Regional DevCap Platform Work Package: Mainstreaming Gender and Inclusion. ICED (internal document produced for DFID)



- **Providing targeted support to governments to negotiate innovative PPP contracts that eliminate gender biases and promote WEE**

It can be challenging for large infrastructure projects to specifically target and measure impacts on women and girls, particularly within the context of Public Private Partnerships (PPPs), which are increasingly used to overcome government constraints such as lack of public funds, where the private sector may prioritise financial rather than social returns on the investment (Outram and Korn, 2015). Yet there is also a real opportunity to provide targeted support to governments so they negotiate innovative PPP contracts with the private sector, which can eliminate gender biases and promote WEE. Support can focus on eliminating any gender biases from legal frameworks governing PPPs, developing gender-specific affordability analysis, and setting out service quality standards to ensure that women needs are being met²³

- **Provide seed capital to demonstrate innovative infrastructure provision / upgrading, and to develop as women as contractors**

Providing initial capital for more delivery of more innovative infrastructure provision that has an emphasis on women’s economic empowerment, can help to demonstrate the value add of including women in infrastructure investments, with an incentive to them encourage further private sector investment. Facilitating women to train as skilled or semi-skilled construction workers can enable them to enter male-dominated sectors, benefit from economic activity, and earn higher wages.

- **Supporting Expansion of Manufacturing and Service Sector Activity**

An expansion of manufacturing and service sectors, particularly in the types of jobs that women are more likely to work in such as textiles, apparels and services has the potential to increase labour demand and productivity, and exert and upward pressure on wages and incentivize women to take up paid work (Field and Vyborny 2015). DFID country offices can work in conjunction with private sector development departments, women’s-rights groups, as well as city governments to support and expand industrial and service sector employment in regions and cities that most require it.

²³ Biswas (2016) Expert contribution

7. Beyond infrastructure: complimentary interventions to promote WEE

It is important to emphasise that hard infrastructure alone will not achieve women's economic empowerment at scale. As seen under conditions for success in section A, a number of other complimentary interventions are also critical to promoting women's economic empowerment and ensuring that positive outcomes are ensured. These investments relate to both increasing women's economic empowerment in both the informal and formal sectors, and include:

- **Child care** provision and the redistribution of unpaid care work between men and women
- Enforcement of **labour rights**, including equal pay for men and women and equality of opportunities for jobs
- Interventions that bring women into **public leadership roles, use the media to change social norms, focus on education and training for skill-building**, and support safe transport interventions (see section 4) have the potential to increase women's labour supply²⁴
- **Healthcare** provision that is affordable
- **Education** access that does not discriminate by gender
- Effective **governance** that is accountable to citizens and listens to the voices of marginalized groups, including women
- Supporting women's organisations and **collective voice**
- Security of **land tenure** for women
- Urban and infrastructure planning that **mitigates disaster risks**
- **Changes to urban planning and legal frameworks** that stigmatize informal work as unproductive (ESD, 2012)

Many of these involve working across departments within DFID to influence a range of stakeholders and partners. It requires a holistic view of how transformative change can happen on women's economic empowerment and an understanding that infrastructure is just one piece of the puzzle.

While ICED is unlikely to be able to have a direct impact in a many of these areas, it is important to be aware of additional complimentary investments and interventions that are likely to be needed and to encourage a more portfolio-based approach within DFID that can encourage a range of complimentary interventions.

²⁴ See Field and Vyborny 2015 for additional details

8. Involving different actors in promoting women’s economic empowerment through infrastructure

The following recommendations have been drawn from a roundtable which brought together ICED and DFID experts from gender, infrastructure, private sector development and women’s economic empowerment to share best practice across DFID and to consider selected practical actions which can be taken by different actors, drawing on the key findings of ICED’s submission to the high level panel (which drew on this report).

These may be useful in thinking through different actors that ICED or DFID may seek to engage with when designing infrastructure and urban programmes, and the kinds of commitments that would be required in order to promote women’s economic empowerment.

Actor	Selected Practical Actions
Donors	<ul style="list-style-type: none"> • Provide funding support to build and grow women’s own organisations to collectively bargain for improved infrastructure services • Design programmes which enable and encourage women to influence processes and use a collective voice • Influence other actors in the infrastructure sector, in addition to making their own commitments. • Shift the focus from implementing ‘safeguards’ that ‘do no harm’ to articulating more ambitious targets that promote positive outcomes for women and girls’ empowerment. • Promote capacity building and training for women, in order to move women from doing unskilled to semi-skilled and skilled work in infrastructure projects. • Provide seed capital to demonstrate innovative infrastructure provision/upgrading, and to develop as women as contractors.
Private Sector	<ul style="list-style-type: none"> • Integrate gender throughout infrastructure investments, particularly in terms of moving beyond mitigation to targeting women’s economic empowerment directly. • Embed women’s economic empowerment into contract clauses, performance standards or social safeguard mechanisms. • Demonstrate the value add of including women in infrastructure investments • Build the skills of women labourers to move from unskilled to semi and skilled work. For example employing female project supervisors and engineers • Partner with the NGOs /CSO to reach women • Lead the way in providing infrastructure by and for women - supporting innovative approaches to improving women’s mobility as well as employment and empowerment through

	initiatives such as female taxi driver services, motorbike taxi drivers etc.
National Government	<ul style="list-style-type: none"> • Ensure that policy and legislation recognises the diverse needs, constraints and opportunities of both women and men. • Hardwire gender into lead departments • Break down silos between different government departments and agencies involved in designing and implementing infrastructure. • Solicit technical support to negotiate better contracts with the private sector for infrastructure provision that benefits women and incentivises employment opportunities for women in the delivery and running of infrastructure services • Introduce clauses in PPP contracts around the need to design with women's groups and the importance of consultations, as well as incentivising employment opportunities for women in the delivery and running of infrastructure.
Municipal Government	<ul style="list-style-type: none"> • Have clear mechanisms to promote and include women's voices in planning processes. • Extend the use of infrastructure scorecards to improve the delivery of gender sensitive infrastructure services • Encourage women's engagement - specifically in transport planning and the provision of street lighting - in order to address violence against women and girls. • Employ women contractors for the provision of infrastructure especially communal infrastructure such as latrines.
NGOs and Civil Society	<ul style="list-style-type: none"> • Play a major role in promoting the voice of women's collectives to demand infrastructure that meets their needs and aspirations. • Partner with the private sector to build the capacity and capabilities of women in construction and other skilled jobs. • Media could also play a role in challenging attitudes and norms.

9. Conclusion

This scoping paper has highlighted that **opportunities exist for infrastructure to support women's economic empowerment across the sector.**

- Infrastructure can play a key role in **releasing more time for economic opportunity through time saving**. Access to energy, provision of affordable transport that is responsive to women's mobility patterns, and provision of social infrastructure for child and other care services have particularly been highlighted.
- **Opportunities for women in the informal sector** can be significantly expanded through infrastructure by increasing accessibility to water, electricity, markets, safety and security and by increasing market competitiveness.
- Infrastructure can also help the scale up of women owned businesses through **increasing productivity and opening up access to higher growth sectors**. Access to reliable energy is a precondition to upgrading of production technologies; ICT infrastructure can provide access to finance, information and new markets, overcoming mobility problems; access to affordable transport enables access to wider markets. Infrastructure has also provided innovative business opportunities for women, most notably energy entrepreneurship and as transport providers.

A **clear continuum** has emerged with regards to gender and the role of infrastructure in addressing constraints and opportunities that can lead to women's economic empowerment. These map closely onto the Gender and Inclusion framework developed by ICED and provide a useful way to think through approaches to impacting on women's economic empowerment through infrastructure investment.

1. There is a need to further **build and integrate the data and knowledge of the needs** of women with regards to transport, energy, and wider infrastructure in urban settlements, the informal sector work, and the care economy.
2. Given the large infrastructure deficit, and the severe impact this has on meeting women's basic needs, there is a requirement that infrastructure investments continue to focus on **prioritising the provision of adequate and affordable water, sanitation, energy access** etc. as a first step to enabling economic opportunities.
3. Beyond addressing these immediate needs, infrastructure can play a role in addressing constraints to **women's mobility, time and productivity**, which can enable them to take up new opportunities. This also provides potential to engage in decent and skilled employment and enterprise and access new markets,
4. Building on this, are **targeted opportunities to facilitate the growth of employment opportunities for women in the infrastructure sector** and women-owned enterprises, by building skills, enhancing access to information, finance and technology. This might be through digital innovation, market linkages through improved transport, or scaling up energy access to

unlock opportunities for business growth. As part of this there may be scope for facilitating women's own investments in localised shared infrastructure improvements.

5. Finally, **integrated policy and planning that prioritises women and women's voices, and hardwires gender into every stage of infrastructure development** can enable women to demand change and reach their potential. As such the process by which decisions are made on infrastructure investments is also critical.

Some of the most promising opportunities for impacting on women's economic empowerment at scale, are provided by **new technology**. The paper has identified a number of examples of the use of digital technology: in gathering real time data to inform settlement planning, in mapping public space risks for women, in connecting women to finance and market opportunities. Clean energy technology has also been at the heart of innovative women's enterprise models.

Another area of potential is **Public Private Partnerships (PPPs)** in infrastructure investments. If designed well, PPPs can target wider benefits to women. Measures can be designed and implemented through PPP contracts in the form of innovative benefit-sharing clauses, quotas for skilled women workers, supervisors etc. and penalties for non-compliance. To get the private sector to engage in the WEE agenda in an authentic, sustainable and scalable way will require **building a case for and demonstrating women's comparative advantage** as entrepreneurs, managers, designers and builders of infrastructure.

Finally, unlocking the transformative potential of infrastructure requires that investments and provision **systematically consider the needs of the vast majority of women who spend the majority of their time working in the care and informal economies**. There is a need for ICED to further define how investments that focus on inclusive economic growth takes into account work outside of the formal economy.

10. Recommendations on Next Steps for ICED

This scoping report has involved a number of conversations internally within ICED to identify further opportunities to take these issues forward. The full detail of these can be found in Annex B, however a summary of key recommendations emerging per output is included here.

10.1 Output A (support to DFID country offices)

There is clear appetite and within the Output A team to engage with GESI issues, including WEE. The team can see opportunities within DFID country office pipelines (see Annex B), but needs support from GESI mentors to understand how to address WEE in practical ways. The following recommendations propose practical ways to support Regional Relationship Managers (RRMs) to engage with WEE in their work going forward:

- **GESI Mentors:** there is already agreement to establish GESI mentors to support the Output A work, and for these mentors (or their selected alternates) to join all pre-scoping missions. It is recommended that these GESI mentors are able to advise on WEE, and that there are additional WEE-specific mentors who can be on hand to support across the different regions on a needed basis. The scoping report can be used to identify key opportunities in particular sectors that could potentially be explored further as part of the design process.
- **Develop practical tools to use internally in ICED:** the team would benefit from clear tools, such as a Theory of Change that clearly shows the relationship between WEE, the priority sectors for the ICED Facility, and the Facility's end goal: inclusive economic development and poverty reduction. This will enable RRM's to clearly conceptualise these relationships and visually show this to DFID staff in country.
- Work with the **ICED M&E Advisors** to ensure that the team can build up a resource of 'best practice' WEE indicators, to have on hand for scoping missions, to advise DFID M&E staff.
- **Develop practical tools to use during country missions:** the GESI mentors and the wider SDDirect team should in Phase 2 of the ICED WEE work package, develop practical tools for RRM's to use on their country missions. From initial conversations with RRM's, it is recommended that these include the ToC mentioned above; a set of questions to ask different advisors at different stages of scoping; a set of advisors to meet (e.g. to always meet the Social Development Advisor as well as Private Sector and Infrastructure Advisors).

10.2 Output B (knowledge and learning and action research)

Ensuring that the knowledge and learning generated by this work is captured and built upon will be critical. Recommendations for next steps under output B include:

- Develop a **succinct knowledge product** that synthesises key learning and recommendations from this paper, in particular for DFID advisors
- Share the scoping report widely among the ICED team and DFID infrastructure, private sector and social development advisors

- **Map similar infrastructure interventions being implemented by the World Bank, the ADB and USAID** to explore opportunities for future collaboration, and determine DFID's key value proposition in this space
- Continue to develop **concrete examples of what success looks like** across sectors in order to bring things to life for the advisors - backed up with evidence.
- **Capture and share existing examples** of best practice (including those in Annex C) within the ICED team and in DFID as necessary

There are a number of potential areas where ICED could conduct further research to **fill knowledge gaps**. These include:

- **Country-specific constraints to female labour force participation (FLFP).** An understanding of such constraints and social norms can be used to influence policy. It can also be used for the development of programmes that address those constraints.
- **The impact of safety initiatives on women's safety and mobility.** While a number of cities have adopted safety initiatives to facilitate women's mobility, there have been limited evaluations of the impact of such initiatives. Such evaluations can reduce duplication and provide evidence needed to implement them at scale.
- **The role of infrastructure in supporting the growth of women-owned businesses in the formal sector.** While there is increasing evidence on the role of improved infrastructure on women's entrepreneurship in the informal sector, there is a gap in the evidence base on how women-owned businesses can be established and expanded in the formal sector.
- **The mechanisms through which on-grid energy can impact women's economic empowerment most effectively.** At the moment, a significant amount of the literature is currently focused on small-scale off-grid energy solutions as a means to empowering women and fostering women-owned enterprise. However, there is limited evidence on the role of on-grid energy in influencing WEE
- **The impact of Public Private Partnerships on Women's Economic Empowerment.** This paper has suggested multiple mechanisms through which PPPs can be used to benefit women. However, there is a need to conduct political economy analyses to better understand constraints faced by the public sector in negotiating better agreements, and evaluate the impact of infrastructure PPPs on women's access to services
- **The constraints faced by donor agencies in mainstreaming gender within infrastructure investments.** Often governments do not have the capacity to implement programmes, and relevant stakeholders are not engaged. Lessons from previous interventions that have attempted to mainstream gender within infrastructure investments can ensure that ICED is able to learn from past failures.

10.3 Output C (policy influencing)

Output C is a small but strategic element of ICED, which supports DFID to have a voice on cities and infrastructure and to be able to influence international fora. This year provides several opportunities to influence policy around women's economic empowerment and urban/infrastructure development.

The scoping report has highlighted the importance of influencing other actors in the infrastructure and urban space in order to impact on women's economic empowerment. ICED and DFID's engagement in the policy space could therefore include:

- Engaging with national and municipal governments to embed targets around women's empowerment in infrastructure programmes
- Advocating for public and private infrastructure initiatives to take into account differences in men and women's needs (e.g., transport policies are frequently gender-blind and do not account for differences in men and women's travel patterns)
- Influencing other actors to invest in the complimentary interventions that are needed alongside infrastructure investments to ensure that DFID maximizes the potential of investments in infrastructure to impact WEE
- Emphasizing the importance of the informal and care economies when measuring impacts of programmes designed to impact on economic growth
- Advocating for changes to urban planning and legal frameworks that stigmatize informal work as unproductive e.g. Street Vendors Act India
- Supporting collective action that advocates for policy /legal change e.g. SEWA, NAVSI
- Facilitating further linkages across DFID departments to break down silos between social development advisors, gender experts infrastructure advisors and private sector (through convening dialogues and roundtables on the issues of WEE and infrastructure)

Given that this is the first year of programme implementation, ICED is most well positioned to facilitate dialogue: learn from others, ask question and develop partnerships. As ICED builds up its own findings and evidence of best practice, it can begin to engage in these events in a more influencing role. For further information and specific ideas for platforms to influence at, see Annex A.

- There are a number of events that ICED could target in order to further its work on this agenda, including the World Economic Forum, G20 W20 on women's empowerment, and UN Habitat III.
- There will also be opportunities to further influence the High Level Panel, around working with DFID to translate the HLP recommendations into practical programming actions, in their cities and infrastructure programmes. ICED could set up a workshop with DFID around the launch of this report, to work though how to apply its recommendations in these different sectors. One opportunity to do this may be around the October 2016 SDA Conference.
- The DFID roundtable on the ICED HLP submission served as a useful starting point for linking up DFID advisors working on gender and those working on

infrastructure. These connections should be maintained and further networks built across the cadres to influence DFID advisors engagement with these issues and to build capacity.

- There are 20 members and 18 deputy members of the HLP on WEE, coming from a range of backgrounds, sectors and countries. There is potential to engage them in Output A work, as champions and partners (see Annex A for specific suggestions).

Bibliography

ActionAid (2016) *Fearless: Women's rights organisations key to ending violence against women and girls in our rapidly urbanising world.*

https://www.actionaid.org.uk/sites/default/files/publications/safe_cities_for_women_may_2016.pdf

ActionAid (2015) *Women and the City III: A SUMMARY OF BASELINE DATA ON WOMEN'S EXPERIENCE OF VIOLENCE IN SEVEN COUNTRIES.*

http://www.actionaid.org/sites/files/actionaid/women_and_the_city_iii.pdf

ActionAid (2013) *Women and The City II: Combating violence against women and girls in urban public spaces – the role of public services.* ActionAid International.

http://www.actionaid.org/sites/files/actionaid/women_and_the_city_ii_1.pdf

ActionAid (2013) *Making Cities and Urban Spaces Safe for Women and Girls – Safety Audit Participatory Toolkit.* Developed by Social Development Diresct (SDD) on behalf of ActionAid International.

http://www.actionaidusa.org/sites/files/actionaid/actionaid_safety_audit_participatory_toolkit.pdf

ADB (2014). *Rapid Assessment of Sexual Harassment in Public Transport and Connected Spaces in Karachi.*

Anand, A. and Tiwari, G. (2006) *A Gendered Perspective of the Shelter-transport-Livelihood link: The Case of Poor Women in Delhi*, *Transport Reviews* Vol 26, No 1, pages 63-80.

Better Work, IFC and ILO (undated) *Research Brief: Garment Factory Characteristics and Workplace Sexual Harassment.* Better Work, IFC and ILO.

Better Work, IFC and ILO (undated b) *Case Study: Addressing Sexual Harassment in Jordan's Garment Industry.* Better Work, IFC and ILO.

Bjoerge, H. (2016) *WoW! Women on Wheels Reclaim The Roads for Gender Equality*, UN Women

<http://asiapacific.unwomen.org/en/news-and-events/stories/2016/01/wow-women-on-wheels-reclaim-the-roads> [Accessed 30 June 2016]

Capos and Gassier (nd) *White Paper - Gender and Entrepreneurship in Sub-Saharan Africa: What are the constraints to women-owned firms, what works, what doesn't, and what we don't know.*

Carolini, G. (2011) *Framing Water, Sanitation and Hygiene Needs Among Female-Headed Households in Periurban Maputo, Mozambique*, *American Journal of Public Health, Research and Practice.*

Chhabra, E. (2015) 'Meet the Pink Panthers: Liberia's first female fleet of motorcycle taxi drivers' Available online at: <https://www.one.org/international/blog/meet-the-pink-panthers-liberias-first-female-fleet-of-motorcycle-taxi-drivers/>

Chant, S. (2014) 'Exploring the "feminisation of poverty" in relation to women's work and home-based enterprise in slums of the Global South', *International Journal of Gender and Entrepreneurship*, 6(3): 296-316.

Chant, S. (2013) 'Cities through a "gender lens": a golden "urban age" for women in the global South?', *Environment & Urbanization* 1 Vol 25(1): 1–21.
<http://eau.sagepub.com/content/early/2013/03/08/0956247813477809.full.pdf+html>

Chant, S. and McIlwaine, C. (2016) *Cities, Slums and Gender in the Global South: towards a feminised urban future*. Oxford: Routledge.

Chant, S. and McIlwaine, C. (2013) *Gender, Urban Development and the Politics of Space*. E-International Relations. <http://www.e-ir.info/2013/06/04/gender-urban-development-and-the-politics-of-space/>

Chen, M. A. (2001) *Women in the Informal Sector: a global picture, the global movement*. WIEGO. <http://www.cpahq.org/cpahq/cpadocs/module6mc.pdf>

Chopra, D. et al. (2015) *Women's Economic Empowerment and Care: an evaluation of the consideration of care in conceptualizations of women's economic empowerment*. IDS

Chopra, D. (2015) *Balancing Paid Work and Unpaid Care Work to Achieve Women's Economic Empowerment* (IDS Policy Briefing Issue 83). IDS.
http://opendocs.ids.ac.uk/opendocs/bitstream/handle/123456789/5623/PB83_AGID316_Balancing_Online.pdf;jsessionid=AA6E09A302622623054B93891D32AC4D?sequence=1

Clark, S. and Muthuri, S. (2016) *Creating Better Economic Opportunities for Women in Nairobi Slums Through Improved Child Care Options*. IDRC Meeting Childcare and Women's Economic Empowerment, March 8th, 2016.
https://www.idrc.ca/sites/default/files/sp/Documents%20EN/idrc-women-empowerment-evidence-from-india-kenya-and-canada_1.pdf

Danielson, K. (2012) *Gender equality, women's rights and access to energy services: An inspiration paper in the run-up to Rio+20*. https://empower-women.azureedge.net/~/_media/files/un-women/knowledge-gateway/resourcefiles/2013/08/08/20/45/iucn_genderequalitywomenrightsaccessenergy-services.pdf?v=1&d=20130925T201126

De Haan, A. (2016) *Enhancing the Productivity of Women-owned Enterprises: a background paper for the UN High Level Panel on Women's Economic Empowerment*. Ottawa: IDRC.

DFID (2016) *Sustainable energy and gender: working paper*. London: DFID. 9/2/16.

DFID (2014) *Economic development for shared prosperity and poverty reduction: a strategic framework*. London: DFID.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/276859/Econ-development-strategic-framework_.pdf

DFID (2013) *Stepping-up a gear for Girls and Women: Updates to DFID's Strategic Vision for Girls and Women, to 2020 and beyond*. London: DFID.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/298253/Strategic_Vision_for_Girls_and_Women_Narrative_-_November_2013-4.pdf

DFID (2010) *Cities: The New Frontier*. London: DFID.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/67689/cities-new-frontier.pdf

Dimitrio, H.T. (2011). Transport and City Development: Understanding the Fundamentals. In Dimitriou, H.T. & Gakenheimer, R. (Eds), *Urban Transport in the Developing World: A Handbook of Policy and Practice* (8-39). Northampton, MA: Edward Elgar Publishing Limited

Duflo, E. (2012) 'Women Empowerment and Economic Development', in *Journal of Economic Literature*, 50(4), 1051–1079. <http://economics.mit.edu/files/7417>

Dutta, S. (2011) 'Unlocking women's potential towards universal energy access', in *Boiling Point*, Issue 66. <http://www.energia.org/cms/wp-content/uploads/2016/02/DFID-Energia-Ashden-Report-Public-Summary-Feb-2015-1.pdf>

EBRD (2015) *Supporting Women's Employment in the Passenger Transport Sector in Kazakhstan: Lessons on Equal Opportunity from Almatyelectrotans*.

Evans, A. (2015) *Why is support for gender equality mainly growing in urban areas?* From Poverty to Power Blog. <https://oxfamblogs.org/fp2p/support-for-gender-equality-is-growing-but-why-is-this-mostly-in-urban-areas/> [accessed 9 June 2016]

Evans, A. (2014) 'Women Can Do What Men Can Do': the Causes and Consequences of Growing Flexibility in Gender Divisions of Labour in Kitwe, Zambia. *Journal of Southern African Studies*. 40:5, 981-998. http://eprints.lse.ac.uk/59192/1/Evans_Women%20can%20do%20what%20men%20can%20do.pdf

Fia Foundation (2016) *Safe And Sound International Research On Women's Personal Safety On Public Transport*. Research Series, Paper 6

Field, E. and Vyborny, K. (2016) *Female Labor Force Participation: Pakistan Country Study for the Asian Development Bank*. ADB.

Fraser, E. and Mohun, R. (2016) *VAWG Helpdesk Research Report: GBV in the workplace*. London: DFID VAWG Helpdesk.

Freischlad, N. (2015) *This 22-year-old is Building a Go-Jek Competitor Exclusively for Women*. <https://www.techinasia.com/22yearold-building-gojek-competitor-exclusively-women> (Accessed 1 July, 2016)

Goldman Sachs (2014) *Giving credit where it is due: How closing the credit gap for women-owned SMEs can drive global growth*.

Grieco, M. (2013) *Transport, the poor, and moving towards low-carbon societies*. FAL Bulletin, Issue No. 318(2).

http://repositorio.cepal.org/bitstream/handle/11362/36368/FAL-318-WEB-ENG_en.pdf?sequence=1

Grieco, M. (2008) *Living infrastructure: Replacing children's labour as a source of sanitation services in Ghana*. Presented at the Water and Sanitation in International Development and

Guardian (2015) *Women-only 'Pink Rickshaw' Hits the Road in Lahore*. Reuters in Lahore.

<https://www.theguardian.com/world/2015/apr/10/women-only-rickshaw-hits-the-road-in-lahore> [Accessed 7 July 2016]

Disaster Relief (WSIDDR) International Workshop Edinburgh, Scotland, UK, 28–30 May 2008.

GSD (2012) *GSD Hosts United Nations Expert Meeting on Gender and Urbanization*. Cambridge, MA: GSD, Harvard University. <http://www.gsd.harvard.edu/#/news/gsd-hosts-united-nations-expert-meeting-on-gender-and.html>

Hasan, A. (undated) *How Can This be Changed?* IIED. Available at: <http://arifhasan.org/articles/how-this-can-be-changed>

Herrera, J. et al. (2012) *Informal Sector and Informal Employment: Overview of Data for 11 Cities in 10 Developing Countries*. WIEGO Working Paper.

http://wiego.org/sites/wiego.org/files/publications/files/Herrera_WIEGO_WP9.pdf

Hlanze, D. (2012) *DFID on the economic empowerment of women and girls: a policy response*. London: DFID.

ICED (2016) *ICED Inception Report Executive Summary Report*. London: Infrastructure and Cities for Economic Development (ICED).

ICRW (2011). *Understanding and Measuring Women's Economic Empowerment - Definition, Framework and Indicators*. Washington: ICRW.

<http://www.icrw.org/files/publications/Understanding-measuring-womens-economic-empowerment.pdf>

IDRC et al. (2013) *Growth and Economic Opportunities for Women: Literature Review to Inform the DFID-IDRC-Hewlett Foundation Research Program on Women's Economic Empowerment, Gender Equality and Growth in Low-Income Countries*. IDRC, DFID and the Hewlett Foundation.

ILO (2015) *Engaging men in Women's Economic Empowerment and Entrepreneurship Development Interventions: an ILO-WED Issue Brief*. Geneva: ILO.

http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---ifp_seed/documents/briefingnote/wcms_430936.pdf

ILO (2013) *Women and Men in the Informal Economy: A Statistical Picture, Second Edition*. Geneva: ILO and WIEGO. http://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/publication/wcms_234413.pdf

ITDP (2014) *Chennai Adopts NMT Policy: A Quantum Leap Towards Safer Streets* <https://www.itdp.org/chennai-adopts-nmt-policy-quantum-leap-towards-safer-streets/> [Accessed 30 June 2016]

ITUC (2016) *Investing in the care economy: a gender analysis of employment stimulus in seven OECD countries*. Brussels: ITUC. Available at: http://www.ituc-csi.org/IMG/pdf/care_economy_en.pdf

Jagori (2007). *DTC Gender Trainings: Our Experiences*. Safe Delhi Campaign. <http://safedelhi.jagori.org/news/gender-trainings-with-dtc-our-experiences/> [Accessed July 1, 2016]

Kantor, P. (2005). *Determinants of women's microenterprise success in Ahmedabad, India: Empowerment and economics*.

Kabeer, N. (2012) *Women's economic empowerment and inclusive growth: labour markets and enterprise development*. IDRC and DFID SIG Working Paper.

Kevane, M. and Wydick, B. (2001), 'Social Norms and the Time Allocation of Women's Labor in Burkina Faso', *Review of Development Economics*, 5: 119–129

Khosla, P. (2012) *Young women: life choices and livelihoods in poor urban areas*. ActionAid. http://www.actionaid.org/sites/files/actionaid/young_women_-_urban.pdf

Klugman, J. (2016) Gender Inequality and Development: gender-based violence. Kohlin, G. et al. (2011) *Energy, Gender and Development: What are the Linkages? Where is the Evidence?* World Bank Working Paper. <http://siteresources.worldbank.org/EXTSOCIALDEVELOPMENT/Resources/244362-1164107274725/3182370-1164201144397/3187094-1173195121091/Energy-Gender-Development-SD125.pdf>

Levy, C. (2016) Routes to the just city: Towards gender equality in transport planning. In: Caroline O.N. Moser, ed. *Gender, Asset Accumulation and Just Cities: Pathways to Transformation*. Oxford: Routledge.

Maestre, M. (2016) *Women's economic empowerment – where is unpaid care work?* BEAM Exchange. <https://beamexchange.org/community/blogs/2016/3/9/unpaid-care-work/>

Mariotti, C. and Khan, A. (2016) *The economic empowerment of women and their life in the city*. Internal DFID brief, produced by ODI.

McAslan Fraser, E. (2012) *Helpdesk Research Report: Economic Empowerment and Violence against Women and Girls (VAWG)*. Birmingham, UK: GSDRC.
<http://www.gsdrc.org/docs/open/hdq790.pdf>

McIlwaine, C. (2016) Gender-based violence and assets in just cities: triggers and transformation. In: Caroline O.N. Moser, ed. *Gender, Asset Accumulation and Just Cities: Pathways to Transformation*. Oxford: Routledge.

McIlwaine, C. (2013) 'Urbanization and gender-based violence: exploring the paradoxes in the global South', in *Environment and Urbanisation*, 25(1): 65-79.
<http://eau.sagepub.com/content/25/1/65.full.pdf+html>

MGI (2016) *Working Draft: UN HLP Draft background research on unpaid care work*. McKinsey Global Institute.

Moser, C. (2016) *Gender Catalyst Paper*. Internal paper for ICED.

Moser, C. (2016) *Gender, Asset Accumulation and Just Cities: Pathways to Transformation*. London: Routledge.

Natarajan, M. et al. (2015) 'Situational prevention and public transport crime in El Salvador', *Crime Science*, 4:29.

O'Dell, K. et al. (2014) *Women, energy, and economic empowerment: Applying a gender lens to amplify the impact of energy access*. Deloitte University Press.
http://d27n205l7rookf.cloudfront.net/wp-content/uploads/2014/09/DUP_950-Women-Energy-and-Economic-Empowerment_MASTER1.pdf

OECD (2006) *Promoting Pro-Poor Growth: Infrastructure*. Paris: OECD Publishing.

OECD (2007) 'Increasing Productivity and Improving Market Access, in *Promoting Pro-Poor Growth: Policy Guidance for Donors*. Paris: OECD Publishing.

OECD (2012) *Poverty Reduction and Pro-Poor Growth: The Role of Empowerment*. Paris: OECD Publishing.

Outram, P. and Korn, M. (2015) *Guidance Note: Mainstreaming Gender in DFID's Infrastructure Programmes*. Birmingham: GSDRC.

Paez, F. & Mendez, G. (2014) *Mexico City's New Mobility Law Shifts Focus Towards People, Not Cars*.
<http://thecityfix.com/blog/mexico-city-mobility-law-shifts-focus-people-cars-sprawl-traffic-safety-fernando-paez-gisela-mendez/> [Accessed 30 June 2016]

Peters, D. (2011) *Gender and Sustainable Urban Mobility*. Thematic study prepared for Global Report on Human Settlements 2013. <http://unhabitat.org/wp-content/uploads/2013/06/GRHS.2013.Thematic.Gender.pdf>

Pozarny, P.F. (2016) *Gender roles and opportunities for women in urban environments*. Birmingham, UK: GSDRC.

<http://r4d.dfid.gov.uk/pdf/outputs/GovPEAKS/HDQ1337.pdf>

Rakodi, C. (2016) Addressing gendered inequalities in access to land and housing. In: Moser, C.O.N. *Gender, Asset Accumulation and Just Cities*. New York: Routledge, Chapter 5: 81-99.

Rawoot, S. (2015) *Successful Forms of Incremental In-Situ Upgradation*. Invisible Cities Blog.

<http://www.tangeed.org/2015/12/successful-forms-of-incremental-in-situ-upgradation-a-case-study-in-affordable-housing-invisible-cities/>

Reichlin L. & Shaw E. (2015) *Gender, Urbanisation and Democratic Governance*. White Paper written for the Institute for Women's Policy Research commissioned by the National Democratic Institute.

<https://www.ndi.org/files/Gender%20Urbanization%20and%20Local%20Governance%20White%20Paper.pdf>

Salon, D. and Gulyani, S. (2010) *Mobility, poverty and gender: 'Travel Choices' of Slum Residents in Nairobi, Kenya*, Transport Reviews Vol. 30, No 5, September, 641-657

Sankrit, R.. (2011) 'Impact of energy access on livelihoods of women home-based workers: SEWA Bharat's intervention in Bihar, India', in *Boiling Point*, Issue 66.

<http://www.energia.org/cms/wp-content/uploads/2016/02/DFID-Energia-Ashden-Report-Public-Summary-Feb-2015-1.pdf>

Shack/Slum Dwellers (2015) *SDI's Practices For Change*, Available at:

<http://sdinet.org/about-us/sdis-practices-for-change/>

Shack/Slum Dwellers (2015) *Shack/Slum Dwellers International's Global Platform on City Level Informal Settlement Data*, Available at:

<http://knowyourcity.info/map.php#/app/ui/about3>

Stevens, C. (2009) *Green Jobs and Women Workers: Employment, Equity, Equality*. International Labour Foundation for Sustainable Development. <https://empower-women.azureedge.net/~media/files/un-women/knowledge-gateway/resourcefiles/2013/08/14/22/53/womenen.pdf?v=1&d=20130925T195932>

Soria, L. Farley, K. and Glinski, A. (2016) *With Solar Sister, Forward We Go": A Qualitative Assessment Exploring How Solar Sister Brings Light, Hope, and Opportunity to Women in Africa*. Washington DC: ICRW

Tacoli, C. (2012) *Urbanization, gender and urban poverty: paid work and unpaid carework in the city*. IIED and UNFPA. <http://pubs.iied.org/10614IIED.html>

Tacoli C. & Satterthwaite D. (2013) Editorial: Gender and Urban Change. *Environment and Urbanisation*, Vol. 25: 3-8.

<http://eau.sagepub.com/content/25/1/3.full.pdf+html>

Toshniwal, R. (2011) *Road Safety in Chennai: A Concern for the Vulnerable Road Users*. Safety Conference 2011 on Safety in Industries.

Toshniwal, R. (2012) *For a Safe and Sustainable Chennai Pedestrian Safety is the Key*. TrafficInfraTech.

Taylor, A. (2011) *Women and the City: Examining the Gender Impact of Violence and Urbanisation*. Action Aid. <http://www.actionaid.org/publications/women-and-city-examining-gender-impact-violence-and-urbanisation>

Taylor, G. et al. (2015) *DFID Guidance Note Part A: Addressing Violence Against Women and Girls Through DFID's Economic Development and Women's Economic Empowerment Programmes*. London: DFID. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/444143/Economic-Development-Part-A_2_.pdf

Taylor, G. et al. (2014) *Review of evaluation approaches and methods used by interventions on women and girls' economic empowerment*. London: ODI and SDDirect. <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8843.pdf>

Taylor, G. et al. (2014b) *Economic Opportunities and Obstacles for Women and Girls in Northern Nigeria*. London: SDDirect. <http://www.gwin.org.ng/gwin/images/ReportDocuments/Economic%20Opportunities%20and%20Obstacles%20for%20Women%20and%20Girls%20in%20Northern%20Nigeria.pdf>

Tornqvist, A. and Schmitz, C. (2009) *Women's Economic Empowerment: Scope for Sida's Engagement*. Sida. http://www.enterprise-development.org/wp-content/uploads/SidaEngagement_WomensEconomicEmpowerment.pdf

Turner, J. (2011) *Urban mass transit and social sustainability in Jakarta, Indonesia*. Case study prepared for the Global Report on Human Settlements, 2013. http://unhabitat.org/wp-content/uploads/2013/06/GRHS.2013.Case_Study_Jakarta.Indonesia.pdf

Turok, I (2013) *Urbanization and economic growth: the arguments and evidence for Africa and Asia*. Environment and Urbanisation. London: IIED.

UN Habitat (2013) *State of Women in Cities 2012-2013: Gender and the Prosperity of Cities*. Nairobi: UN Habitat.

UNIDO et al. (2015) *WEBINAR: RE-Thinking the Role of Energy Technology for Women's Empowerment: lessons from UN Women's Support to the Implementation of Mozambique's Strategy and Action Plan on Gender, Environment and Climate Change Strategy from 2011 to 2013*. Vienna: UNIDO. https://empower-women.azureedge.net/~media/files/un-women/knowledge-gateway/resourcefiles/2015/05/06/22/57/05_ondina_vieira.pdf?v=1&d=20150506T225746

UN Women (2015) *Progress of the World's Women 2015-2016: Transforming Economies, Realizing Rights*. New York: UN Women.

http://progress.unwomen.org/en/2015/pdf/UNW_progressreport.pdf

UN Women (2014) *Partnership with the City of Cape Town to Improve Safety for Women and Girls in Public places*.

<http://www.unwomen.org/en/news/stories/2014/9/cape-town-safe-cities-partnership-launched> [Accessed 1 July 2016]

USAID (2016) *Assessment of Linkages Between Public Insecurity and Gender-Based Violence in Mexico*. C230 Consultores for USAID.

Vasconcellos, E.A. (2001). *Urban Transport, Environment and Equity*. London: UK: Earthscan Publications Ltd.

Vyas, S. and Watts, C., (2009) 'How does economic empowerment affect women's risk of intimate partner violence in low and middle income countries? A systematic review of published evidence', *Journal of International Development*, Vol. 21, Issue 5, pp. 577-602.

Willness, C, Steel, P and Lee, K (2007) 'A meta-analysis of the antecedents and consequences of workplace sexual harassment', *Personnel Psychology* 60 (1), 127–62.

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.472.6532&rep=rep1&type=pdf>

Winters, P. et al. (2008) *Rural wage employment in developing countries*. Rome: FAO

World Bank (1995) *Good Sewers Cheap? Agency-Customer Interactions in Low-Cost Urban Sanitation in Brazil*, Current series. Washington, D.C.: World Bank Group

World Bank (2007) *Implementation, Completion and Results Report for the Second Peru Rural Roads Project*, Washington DC: World Bank

World Bank (2010) *Mainstreaming Gender in Road Transport: Operational Guidance for World Bank Staff*. Transport Papers 28, Washington D.C.: World Bank.

World Bank (2011) *Making Transport Work for Women and Men: Challenges and Opportunities In the Middle East and North Africa: Lessons from Case Studies*. Middle East and North Africa Region, Transport and Energy Unit

World Bank (2014) *Gender at Work: A Companion to the World Development Report on Jobs*

Woetzel, J. et al. (2015) *The Power of Parity: how advancing women's equality can add \$12 Trillion to Global Growth*. The McKinsey Global Institute.

Annex A: Specific opportunities for ICED

Influencing DFID country offices through ICED Output A

ICED is in a position, through its Output A TA to DFID country and regional offices, to influence programme design and to work with DFID to integrate women's economic empowerment into infrastructure and urban development programming. This presents a massive opportunity for DFID to bring thinking on transformational women's economic empowerment to bear on investment decisions.

Initial scoping by ICED found DFID's cities and infrastructure programmes have limited engagement with women's economic empowerment. But, there is interest and will within DFID to learn how to do this, and these questions/linkages are on the radar of the DFID Growth Research Team, which has commissioned several recent studies in this area.²⁵ Moreover, from ICED's initial country office (CO) engagement and DFID wider consultations, there are clear opportunities to bring WEE expertise in the design of economic empowerment programmes, urban economic development, and energy and transport infrastructure.

ICED Output A: early findings on Women's Economic Empowerment

This scoping report included consultation with the ICED Output A lead, and regional relationship managers, to identify any early findings on WEE, emerging from their pre-scoping and scoping country missions. **Overall, there have been few WEE findings to date.** That said, there is clear appetite within the ICED team to understand WEE issues and to ensure they know how to support DFID country offices in this area.

FCAS/ MENA

ICED has a key role to play in facilitating new and improved infrastructure and urban programming in FCAS environments, in order to deliver DFID's commitment to spending 50% of its budget in fragile and conflict-affected states. ICED is developing a FCAS Strategy, and is already engaging in a range of FCAS and MENA country offices. There is a need to ensure that the FCAS and GeSI strategies are integrated and speak to one another, and this is currently underway.

²⁵ DFID commissioned two guidance notes for country offices, one on gender and infrastructure (Outram and Korn, 2015), and one on gender roles and opportunities for women in urban environments, through the GSDRC (Pozarny, 2016). DFID has also commissioned a short, internal briefing document on women's economic empowerment and 'life in the city' (Mariotti and Khan, 2016).

In country engagement to date, WEE has not been raised as a key issue, though there are clear opportunities to bring this in in forthcoming engagement, e.g. around SEZs in Jordan.

Across the FCAS countries, there is also opportunity to consider the linkages between WEE and peacebuilding. Whilst this has not been considered in this Scoping Report, there is a literature on the role women’s economic participation can play in post-conflict reconstruction and peacebuilding²⁶, and the linkages between violence and WEE discussed in this report.

Country	Key WEE findings and opportunities
Jordan	ICED is planning a study with a GESI specialist on SEZs and job creation in Jordan, with a focus on economic empowerment for women and refugees.
Palestine	ICED has developed a TOR to review DFID’s infrastructure policies, approach and programmes to date and what has worked. The TORs have build in time for a GESI specialist, but the role needs a tighter focus, which could be around the role of infrastructure in WEE.
Somalia	ICED has developed a pre-scoping TOR; during the pre-scoping, the RRM can ask questions around WEE. ICED is developing a Value for Money (VFM) ToR, and want to expand its focus on GESI/WEE, which was missing from DFID’s own request. ICED can consider the value of WEE in VFM analysis. ICED thinks this work could be used as a case study/tool that could be ‘sold’ to other COs.

Asia

The Asia hub has already completed one work package for the DFID Asia Regional Team, to support the development of a Business Case for a new Asian Development Capital (DevCap) facility. The work package included a paper on mainstreaming gender and inclusion in the facility, **considering partly how investments in agribusiness, clean energy and inclusive finance can economically empower women.**

²⁶ See e.g. this recent report from Georgetown Institute for Women, Peace and Security:

https://giwps.georgetown.edu/sites/giwps/files/occasional_paper_series_volume_i_-_womens_economic_participation.pdf

Additionally, the Asia hub has engaged with Pakistan and Nepal in country, Bangladesh remotely, and is planning engagement with Myanmar. Whilst these initial engagements have yielded few concrete findings on WEE, they have highlighted opportunities to bring WEE into discussions in next phases of country engagement.

Country	Key findings and opportunities to highlight
Asia Regional	<p>The DevCap work package GESI paper highlighted opportunities to mainstream GESI into DevCap investments in agribusiness, clean energy and inclusive finance, as well as an approach for the facility to mainstream throughout the investment cycle.</p> <p>There may be scope for follow up work. Greg Briffa will be managing the TA component of this DevCap facility. There may be scope for further thinking on how to mainstream GESI across DFID DevCap investments, including inputting to the DevCap strategy.</p>
Pakistan	<p>ICED completed a scoping mission on urban productivity, and have submitted the findings. In the scoping mission report, the Desk Review highlighted the high rates of discrimination and violence against women including in the workplace and in public spaces and transport particularly marginalised women such as the poor and bonded labourers.</p> <p>This work is shaping up to focus on urban power or major mass transit infrastructure. In the next phase, ICED will want to work closely with GESI mentor to think through how to consider GESI and WEE issues in these sectors. One key issue will be around women’s mobility: the DFID Pakistan SDA raised ideas around women’s mobility in cities, where most women only travel by foot, in sprawling cities, thus limiting their access to economic and other opportunities. There is opportunity to consider how infrastructure can support women’s mobility in urban Pakistan, a context with strong social norms around women’s mobility. In this regards, discussions with the International Growth Center (DFID funded) team will be particularly useful as it is currently working on both cities and women’s mobility.</p> <p>Should the focus be on energy, there is an opportunity to engage with Fiza Farhan, a member of the HLP on WEE, and a voice for clean energy, social enterprise and WEE in Pakistan.</p>
Bangladesh	<p>There is will in the DFID office to move from mainly community-based and off-grid energy interventions to on-grid energy interventions and city programming for economic growth.</p> <p>Currently planning to support the CO design their rural off-grid power solutions programme; there is scope to build in a strong WEE component from the beginning, drawing on the DevCap GESI paper and on GESI thematic mentors.</p>

	The team is also about to issue the TOR to do a rural small-scale power programme. In the pre-scoping for this, the team can consider WEE, particularly in terms of opportunities for promoting enterprise.
Nepal	In CO engagement to date, WEE has not come up as a priority for the CO, but there is an opportunity to bring it into GESI conversations in Phase 2 this summer. The Nepal scoping work included a Desk Review which highlighted the economic disadvantages facing women in Nepal, including skills, literacy and pay gaps, and the double discrimination faced by marginalized women (e.g. lower caste). There are already plans to bring a strong GESI expert into next phase of scoping (July/August). The team would appreciate some up-front discussion around how to develop conversations around WEE, to influence 2-3 TORs in Nepal at the same time, in a harmonised way (urban and climate focus).
Myanmar	Limited engagement so far, as there has been no infrastructure advisor. However, given recent increase in donor investment, there may be scope for building WEE into new investments. Mark Harvey is planning to visit in August, and ICED is considering joining him.

Africa

There are a number of work packages under development in the Africa region, including a regional on-grid energy programme in southern Africa. The scoping review found a weaker evidence base around the links between on-grid energy and women's economic empowerment, although opportunities in the energy sector as a whole are high. Further scoping in this ToRs could help to further identify entry points for this programme and key conditions for ensuring on-grid energy impacts on women's economic empowerment.

Country	Key WEE findings and opportunities
Regional: eastern and southern Africa	ICED is supporting the development of Business case for Sustainable Power and Energy for Economic Development in Sub-Saharan Africa (SPEED), a 6-8 country regional on-grid energy programme in southern Africa. A GeSI analysis will be included in the business case for this programme, and the findings and opportunities outlined in the section on energy and women's economic empowerment should inform this.
Regional: southern Africa	ICED has submitted a TOR for a programme scoping work package, to support southern Africa (focus on Malawi, Mozambique and Zambia) to develop a new regional trade and integration programme. The TOR includes resources for a GESI advisor to QA the business case to ensure it is in line with the Gender Equality

	Act. It is recommended that this GESI Advisor also consider how to move beyond simple compliance, to consider opportunities for broader WEE impact.
Mozambique	<p>A scoping mission to Mozambique did not yield any findings on WEE. Further work in Mozambique should include discussion with their WEE programme Lugada, to consider potential linkages with that programme, particularly given its early findings on the importance of energy access to WEE in urban Mozambique.</p> <p>The Mozambique DESA infra advisor, Phil Outram, has been designing an off-grid energy programme for Mozambique and there are opportunities to further ensure that outcomes around WEE are incorporated in this.</p>
Tanzania	An ICED TOR to support DFID Tanzania develop a 'Water for Growth' Business Case has been approved. This TOR includes time for an inclusion advisor, but it will also be imperative to draw on gender and WEE expertise to ensure that these investments in water infrastructure will benefit and maximise economic opportunities for women.
Sierra Leone	An ICED TOR to support DFID Sierra Leone develop a business case for investments in energy and transport infrastructure. The TOR includes resources for a GESI advisor to do a GESI appraisal. This should consider how these investments in transport and energy access can benefit WEE.

Opportunities to influence WEE policy (Output C)

Output C is a small but strategic element of ICED, which supports DFID to have a voice on cities and infrastructure and to be able to influence international fora.

This year provides several opportunities to influence policy around women's economic empowerment and urban/infrastructure development. Since ICED is currently in its early stages, it should use this time to engage in 'listening mode', to facilitate dialogue; learn from others, ask question and develop partnerships. As ICED builds up its own findings, it can begin to engage in these events in a more influencing role.

The table below outlines some of the key opportunities to influence WEE policy. **Key events in the next seven months²⁷:**

Opportunity	When and where	Why
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²⁷ Mia Jeannot prepared a full list of lower priority events and events beyond January 2017, which should also be considered.

The High Level Panel on Women's Economic Empowerment	Launched in early 2016; currently finishing its consultation phase; first report to launch in September 2016	<ul style="list-style-type: none"> • The key global initiative driving WEE agenda this year • DFID SoS is a founding member • ICED has submitted a briefing note on the role of infrastructure as an enabler for WEE to the HLP report authors • ICED also held a DFID roundtable on the briefing note which has the potential to feed into wider work being done on the High Level Panel by DFID • Opportunities for further engagement around release of the first report , including a DFID hosted event timed to coincide & input into the annual cadre conferences (Oct)
G20 Leaders Summit	4-5 September (Hangzhou)	<ul style="list-style-type: none"> • G20 to be hosted by Germany from next year; as the host tends to set the agenda, ICED should investigate what will be the G20's priorities under Germany. Some initial analysis suggests issues of fair taxation, health and women's rights may be priorities.²⁸ • The G20's W20 focuses on women's empowerment.
World Trade Organisation (WTO) Public Forum	27-29 September (Geneva)	<ul style="list-style-type: none"> • Focus on international trade; the forum will discuss how women can participate more fully in international trade • Opportunities to engage in a panel working session or interactive workshop discussion.
UN Habitat III Conference on Housing & Sustainable Urban Development	17-20 October (Quito)	<ul style="list-style-type: none"> • Key event to discuss accessible urban markets and inclusive spatial development in cities • Already planning to attend; application for running a networking event is pending
Trust Women Conference	30 November – 1 December (London)	<ul style="list-style-type: none"> • Topic: Women Entrepreneurs: Drivers of Changes and Successful Patterns

²⁸ http://graduateinstitute.ch/fr/home/research/centresandprogrammes/globalhealth/news/past-news.html/_news/ghp/g7-to-g20--what-does-a-german-pr?v=1392752313000/_jcr:system/jcr:versionStorage/9a/11/f6/9a11f6fe-281a-45ce-ae04-28a2721e76ef/1.5/jcr:frozenNode ; <http://www.reuters.com/article/us-panama-tax-germany-idUSKCN0X91O1>

		<ul style="list-style-type: none"> • Accepting submissions of Speaker profile and evidence of past work/speaking engagements
World Economic Forum (WEF) Annual Meeting	17-20 January (Davos)	<ul style="list-style-type: none"> • The WEF agenda to be set in September, ahead of the February meeting • ICED is already supporting DFID on a side event with urban specialists. We can build in time for a GESI mentor to brief these people on clear linkages between urban and infrastructure and GESI/WEE. • An opportunity to showcase some work from Output A, of ICED's experience applying a GESI/WEE lens in its support to DFID COs. • Currently investigating who is DFID lead, to support them in preparing for any panels etc. • The WEF Head of Employment and Gender Initiatives, Saadia Zahidi, is a member of the HLP, so it may be possible to link our work on the HLP and engagement on the WEF. There is an opportunity to directly share the briefing note prepared for the High Level Panel and get further traction for the WEF.

Focus on The High Level Panel on Women's Economic Empowerment

Launched in January 2016, The High Level Panel (HLP) on Women's Economic Empowerment is the key global initiative driving the WEE agenda at the moment. The HLP aims to provide 'thought leadership' and mobilise 'concrete actions' to close economic gender gaps, and clear recommendations on how to implement the 2030 Agenda for Sustainable Development to improve economic outcomes for women, and promote women's leadership in driving an inclusive and sustainable economic growth (UN Women, 2016).

The HLP is composed of 20 members and 18 deputy members, from government, donors, civil society and the private sector (see Annex X for a full list of these members). **The Secretary of State for International Development, Justine Greening, is a founding member of the HLP**, and has been an advocate for the women's economic empowerment agenda within the British government.

The HLP has proposed four main objectives around women's economic empowerment; these are listed below and conceptualised in the HLP working conceptual framework for WEE, showing priority entry points, including both direct entry points and enabling factors.

- **Employment:** more jobs for women; reduced gap in the hourly pay of men and women; improved working conditions; more women in senior positions; less occupational and sectoral gender segregation
- **Enterprise:** women entrepreneurs have greater probability of growing and generating profits from their businesses
- **Assets:** women have increased ability to accumulate and control assets including land, financial products, appropriate technology and tools.
- **Power and agency:** women have greater power to make and implement economic decisions at the household, community and national levels

Whilst neither infrastructure nor cities are mentioned explicitly, these are cross-cutting issues, influencing women's employment, ability to start and grow enterprises, and access and control assets.

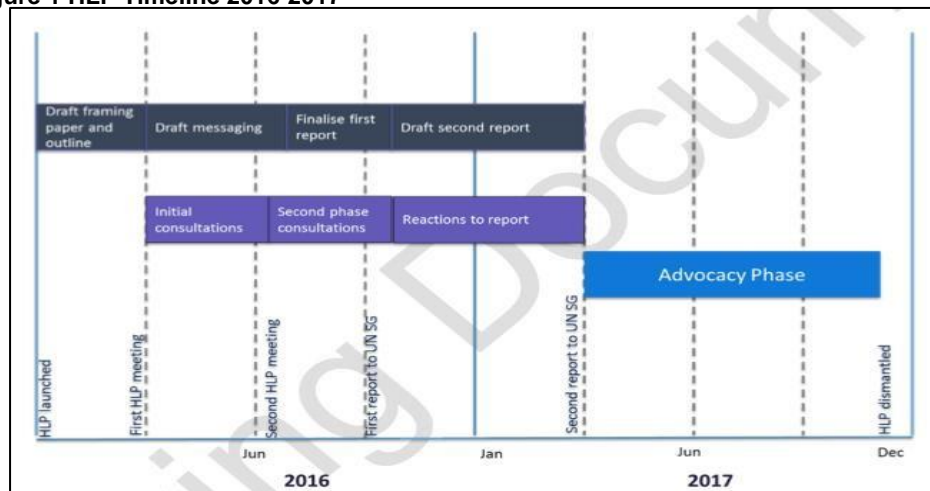
[How to influence this process?](#)

The HLP is currently engaged in a [global consultation process](#), meeting with key stakeholders from civil society and the private sector to generate ideas, evidence and examples of good practice. For example, at the May 2016 UK consultation event at the ODI, members of the HLP asked the audience: *what will it take to achieve WEE?*

Alongside these consultation events, the HLP has also commissioned a suite of background papers to support the drafting of its first report, to be authored by Laura Tyson and Jeni Klugman. The report will be launched in September 2016. ICED has submitted a Briefing note to the HLP authors on the role of infrastructure as an enabler for women's economic empowerment.

Figure 1 below outlines the timeframe for the HLP, with plans to draft the first report in Summer 2016, launch it in September, and begin to draft a second report alongside generating reactions to the first report. 2017 begins the HLP's 'advocacy phase', during which time it will use its recommendations to advocate for investments in WEE.

Figure 1 HLP Timeline 2016-2017



Because the HLP has been set up as a consultative process, there are windows to influence the HLP’s first report now, and there will be opportunities to influence DFID and other stakeholder in how to put into practice the first report’s recommendations in their programming and policy work.

As a first step, ICED and DFID identified the gap in the HLP’s priority areas: no mention of infrastructure of cities. Through discussion with the DFID team leading engagement with the HLP, and with one of the HLP report authors, ICED has identified a clear and immediate opportunity to influence the first report. ICED has submitted a short position paper to the HLP authors so this can support the report writing. The position paper has been drafted based on findings from this Scoping Report, and findings from an internal dialogue workshop between key DFID and ICED staff, drawing out best practice and recommendations about how to leverage infrastructure for WEE.

There will also be opportunities to influence at a later date, for example, around working with DFID to translate the HLP recommendations into practical programming actions, in their cities and infrastructure programmes. ICED could set up a workshop with DFID around the launch of this report, to work through how to apply its recommendations in these different sectors. One opportunity to do this may be around the October 2016 SDA Conference.

[How to use this process to influence DFID Country Offices](#)

There are 20 members and 18 deputy members of the HLP on WEE, coming from a range of backgrounds, sectors and countries. There is potential to engage them in Output A work, as champions and partners.

For example, one of the HLP members, Fiza Farhan, CEO of the Buksh Foundation and Director Buksh Energy Pvt. Ltd, runs an intervention called 'light a millions lives' that equips women 'light ladies' as entrepreneurs to bring solar energy products to their poor, rural communities in Pakistan. She has become a public figure in Pakistan advocating for the role social enterprise and clean energy can play in development and WEE outcomes, and could be an important partner and advocate in work in the clean energy sector in Pakistan.

The other example of a DFID priority country with which ICED has engaged, which is represented on the HLP, is Tanzania: H.E. Samia Suluhu Hassan, Vice-President, United Republic of Tanzania is a member. She has been an advocate for women's and youth economic empowerment in Tanzania, e.g. recently announcing plans to push for a 30% quota of all government procurement tenders to go to women and youth.

Annex B: Examples of Promising Approaches (Annex B of “Infrastructure: a Game-changer for Women’s Economic Empowerment”)

The following table presents a selection of examples of promising approaches²⁹ related to infrastructure and women’s empowerment. This table is not exhaustive and is included to give a sense of some of the approaches to transforming women’s empowerment through infrastructure. In terms of reaching scale or transformation, the authors have presented some key ideas on what is needed to scale-up interventions to reach more transformative potential.

Sector	Examples of Best Practice and Promising Approaches	Opportunities for Scaling up
Energy	<p>Expanding energy access through women’s economic empowerment, ENERGIA’s WE programme, Global</p> <p>The programme has worked with 2,697 women entrepreneurs in nine countries (as of 31 December 2015) to deliver energy products and services. It has been able to deliver <i>energy products and services</i> to 2,000,000 consumers in four years.</p> <p>Women entrepreneurs have been assisted to set concrete, time bound goals, and provided customized, one-to-one mentorship. As a result women play a central role in the supply chain, as trusted users and promoters of household and energy products.</p> <p>http://www.energia.org/what-we-do/womens-economic-empowerment/</p>	<ul style="list-style-type: none"> • Build capacities of local organisations to roll out WE programmes • Expand Women’s Access to Finance. • Develop enabling policies through national women’s machineries • Reform the business environment for women • Build the capacity of women’s associations and parliamentarians to contribute to advocacy for policy reforms • Engage with climate finance instruments for resource allocation.
Energy	<p>Barefoot College, Global (Asia, Africa, Latin America)</p> <p>Barefoot supports women to build skills and knowledge on energy solutions and water access, along with wider legal, financial, IT, health and microenterprise training. It trains women as solar engineers and there are now Barefoot trained solar engineers in 77 countries. It is grounded in the principles of collective decision making, decentralization and self-reliance.</p>	<ul style="list-style-type: none"> • Digitise: Technological tools are developed for specific use among semi-literate and illiterate learners from various regions of the country. • Transfer knowledge: Each woman trained becomes a trainer, actively

²⁹ There are somewhat limited evaluations of a number of these interventions, hence why they cannot be claimed to be proven

	http://www.barefootcollege.org/	<p>participating in the ongoing knowledge transfer to others.</p> <ul style="list-style-type: none"> • Co-Create: Enriche is developed and delivered in partnerships with local social enterprises and NGOs.
Energy	<p>Solar Sister, Uganda, Nigeria and Tanzania</p> <p>Solar Sister is a network of women in Uganda, Nigeria and Tanzania reaching the most low-income and remote areas with affordable solar lamps, mobile phone chargers, and fuel-efficient stoves. Solar Sister's business model deliberately creates women-centered direct sales networks through women's enterprise and capacity building through clean energy.</p> <p>https://www.solarsister.org/</p>	<ul style="list-style-type: none"> • Develop strong public-private linkages with technology, implementation and enterprise development partners. <p>(UNFCC)</p>
Energy	<p>Laos Rural Electrification Programme</p> <p>The programme found that the barrier to electricity connections for 20-40% of rural households (of which half were female-headed) was the up-front connection cost; so, the programme provided subsidies ('with gender-sensitive design/consultation and eligibility criteria), which increased the rate of connection for female headed households from 67% to 95%</p> <p>(Carlsson Rex et al, 2013).</p>	<ul style="list-style-type: none"> • Provide subsidies to enable 'the last mile' connection to electricity and to address issues of affordability.
Energy	<p>Global Alliance For Clean Cookstoves –</p> <p>GACC is a public-private partnership hosted by the UN Foundation to save lives, improve livelihoods, empower women, and protect the environment by creating a thriving global market for clean and efficient household cooking solutions. The Alliance's 100 by '20 goal calls for 100 million households to gain access to clean and efficient cookstoves and fuels by 2020'.</p>	<ul style="list-style-type: none"> • Provide finance to scale effective business models for empowerment through women's energy entrepreneurship. The WEF is a global fund for Alliance partners to increase the number of women earning income in the cooking value chain and to test

	http://cleancookstoves.org/	innovative approaches to scaling women's empowerment throughout the clean cooking sector.
Energy	<p>SEWA Savera Programme, India The programme has facilitated adoption of decentralised renewable energy systems among lower income households in rural and urban areas in two districts of Bihar, India, with a central focus on women workers.</p> <p>The intervention has offered new work opportunities and livelihood security to a number of women.</p> <p>(Sanskrit, 2011)</p>	<ul style="list-style-type: none"> • Establish and build community engagement and networks • Advocate for a favourable policy environment which allows women institutions (self-help groups, associations, cooperatives, banks and unions) to directly access government schemes and incentives
Transport	<p>CERP, Lahore, Pakistan CERP is implementing a Randomized Controlled Trial that tests whether women's only transport and transport vouchers to improve women's labour force participation and mobility.</p>	<ul style="list-style-type: none"> • Provide evidence on impacts on labour force participation and empowerment in order to expand to other areas
Transport	<p>Women on Wheels, India The programme trains poor women from surrounding slum regions to obtain their drivers license, and become certified commercial chauffeurs for other women or couples. Women are also trained in English, self-defense, CPR, women's rights, and communications.</p> <p>http://azadfoundation.com/women-on-wheels/</p> <p>There are also a number of smaller initiatives in African countries such as the Pink Panthers female motorbike taxis in Liberia.</p>	
Transport	<p>Strengthening National Rural Road Transport Program (SNRTP), Nepal A World Bank supported programme that provides support to districts to upgrade and maintain rural transport infrastructure by employing local citizens. The programme has employed over 1500 women from</p>	<ul style="list-style-type: none"> • Embed consultation processes and the participation of women in the design of rural roads (potentially through clauses in PPP contracts)

	<p>poor communities across Nepal as a priority, and has provided access to mobile banking services, accidental insurance, and free health checkups.</p> <p>(Ahmed 2016)</p>	
Transport	<p>Rural Roads, Peru A road improvement project that consulted with local women reported increased mobility on the part of women (77%), greater safety in travel (67%) and improvements in income (43%).</p>	
Transport	<p>EBRD Women Bus Drivers, Kazakhstan EBRD provided \$160 million to one of its clients in the city of Almaty to upgrade its public transport. The funding was given on the condition that the company encourage women to join as bus drivers. The first bus driver was hired in 2015 and there have been plans to recruit additional female drivers. Alongside, the proportion of women in management has increased from 19% to 28%, and women have also been recruited to all-male teams.</p> <p>(EBRD 2015)</p>	<ul style="list-style-type: none"> • Change perceptions around suitable professions for women • Remove legal barriers to women's employment in the Heavy Goods Vehicles (HGV) sector (e.g. Kazakh Law prohibits women from driving HGVs)
Transport	<p>New Mobility Law, Mexico City Mexico City introduced a new mobility law in 2014. The law views mobility as a fundamental right of the city's residents, and has established a mobility hierarchy that prioritizes pedestrians followed by cyclists, public transport users, and private car owners. Given women's reliance on walking and public transport, the law has the potential to create a shift towards equitable, sustainable transport practices both within and outside Mexico City</p>	<ul style="list-style-type: none"> • Assist National and Provincial government's in introducing similar laws across cities of the global south
Transport	<p>Investments in Non-Motorized Transport, Chennai In 2014, the city government in Chennai allocated 60% of its transport budget for developing and maintaining NMT infrastructure. The city aims to have continuous footpaths on 80% of its streets by 2018. It is likely</p>	

	that this policy change will make streets safer for women who depend on walking for their commuting needs	
Water and Sanitation	<p>Built Environment Improvement Programme, Thatta Pakistan</p> <p>The programme aimed at improving women’s livelihoods and share knowledge on domestic hygiene, primary health care and environmental sustainability in an area where 97% of the population did not have access to potable water. It involved women in the planning and implementation phases and was able to have a positive impact on women’s livelihoods, skill building, political involvement, and managerial responsibility</p>	
In-situ Upgrading	<p>Shack/Slum Dwellers International (SDI)</p> <p>For SDI, the central participation of women is a crucial component of a gender-sensitive mobilization strategy that sees men and women re-negotiating their relationships within families, communities, and their own slum dweller ‘federations’. SDI uses the savings and credit methodology to develop women’s leadership capacity, financial management, skills and confidence. It also trains communities – and particularly women – to collect information about informal settlements and use that data as an advocacy tool to acquire improved services</p> <p>www.sdinet.org</p>	<ul style="list-style-type: none"> • Include women in planning, implementing and maintaining infrastructure projects to widen the scale of impact
In-situ Upgrading	<p>Urban Partnerships for Poverty Reduction (UPPR) programme (2007-2015), Bangladesh</p> <p>More than 800,000 households have joined 2,500 community development committees, mostly led by women, to implement and maintain water and sanitation facilities. 166,000 households now have improved water sources and 143,000 household have new toilets.</p> <p>http://www.upprbd.org/</p>	

In-situ Upgrading	Urban Partnership for In-Situ Upgrading, Pune, India In 2009, the Maharashtra Social Housing and Action League (MASHAL), an NGO based in Pune, and the Pune Municipal Corporation (PMC) collaborated to upgrade seven informal settlements in Pune. As a result of the collaboration, 2,010 homes were upgraded, and female head of households were given title/completion certificates.	
ICT	Mobilink Project (GuarantCo), Pakistan – Mobilink is piloting a microfinance service to provide a range of mobile banking services to women who do not have access to the formal banking sector. It is implementing a ‘SMS Based Literacy’ programme to impart education to girls and women in rural Pakistan. To date, 6,000 illiterate women have benefitted from the programme. The programme is part of the Private Infrastructure Development Group. The project has successfully used ICT for women’s literacy and financial inclusion	<ul style="list-style-type: none"> • Deepen impact through SMS based financial literacy and other programmes. • Replicate through private sector telecoms actors in other countries.
ICT	Trade at Hand programme, Liberia, Senegal, Mali and Burkina Faso The programme uses mobile phones to link literate and illiterate women traders in Monrovia with rural women farmers, providing information on prices, transport etc. It has since been expanded to Senegal, Mali and Burkina Faso.	
ICT	M-Pesa, Kenya M-Pesa is widely regarded as a success story in mobile banking and increasing financial inclusions through ICTs. Results of the M-Pesa roll out on women’s economic empowerment have included new acquisition of skills, control of cash making a difference in their relations with the men, capacity of women to voice their specific needs, and new opportunities through improved market linkages and access to finance. Ndiaye, OK. (nd) ; Cobert, B. Helms, B. and Parker, D. (2012)	<ul style="list-style-type: none"> • Invest in the agent network, in education, and in communication to roll out at scale in other countries. <p>Already interventions around mobile banking that have followed M-Pesa’s lead include MTN Uganda, Vodacom Tanzania, FNB in South Africa, and GCASH and Smart Money in the Philippines.</p>

<p>ICT</p>	<p>SafetiPin initiative, Global SafetiPin is a mobile app that works to make communities and cities safer by collecting and disseminating safety-related information on a large scale through crowd sourcing and other methods. Launched in 2013 in India - the app has also been used in Jakarta, Nairobi, and Bogotá, among others. Safetipin data can be used to take important urban planning and monitoring decisions, including deployment of limited resources for lighting, security, CCTVs, public transport at night.</p> <p>Harrassmap is a website launched by volunteers in Egypt in 2010 that collects accounts of sexual harassment in public spaces and shares the data with city authorities to improve safety http://harassmap.org/en/</p>	<p>Safetipin’s partnership with Uber already means that it has significant potential to reach scale across a large number of cities.</p>
<p>Municipal Planning</p>	<p>Street Vendors Act, India Women make up a high percentage of India’s 10 million urban street vendors In 2014, the Indian parliament passed the Street Vendors Act. This Act requires that street vendors influence local government planning processes by participating in Town Vending Committees alongside government representatives, non-governmental organizations and community organizations. By giving them a voice, it encourages inclusive planning at the local level.</p>	<ul style="list-style-type: none"> • Strengthen women’s collectives and amplify voice allows for opportunities to demand similar planning in other cities or countries.
<p>Urban Planning</p>	<p>Gender Responsive Urban Planning, Naga City Council, Philippines Naga City Council has encouraged women’s participation in city planning through three key ordinances:</p> <ul style="list-style-type: none"> • The Women’s Development Code of Naga City 2003: The code sets out the commitment of the city council and women’s organizations to “vigorously pursue and implement gender-responsive development policies and programmes”. • The Naga City Women’s Council Ordinance: This Ordinance set up a Women’s Council to provide gendered feedback on planning policy formulation and implementation. 	<ul style="list-style-type: none"> • Commit additional resource from local and national government. • Fund women’s advocacy groups (UN-Habitat, 2008).

	<ul style="list-style-type: none"> • The Labour-Management Cooperation Ordinance: Under this Ordinance, one in three employer representatives must be woman and women's issues must regularly be on the agenda UN-Habitat (2012) 	
Urban Planning	<p>Safety Assessment Walk, Nairobi, Kenya – The Nairobi city council, along with UN-Habitat and the Intermediate Technology Development Group (ITDG) undertook the Nairobi Safety Assessment Walk in March 2002. It was aimed at kick-starting the development of a women's safety audit toolkit for citywide use (Kamau 2002). The findings related to four broad areas—lighting and visibility, physical design and maintenance, population concentration, and social and economic activities (Kamau 2002). Following the initial success of the project, the audits were implemented citywide.</p> <p>http://www.delog.org/cms/upload/pdf-gender/Gender_PlanningUrbanDevelopment.pdf</p>	<ul style="list-style-type: none"> • Promote women-led safety audits to address more immediate infrastructure deficits that affect women's ability to engage in economic activity due to fears of harassment or lack of safety.
Industry	<p>Mobile Crèches (MC) MC was established in 1969 to support migrant women who worked as labourers on urban construction sites in India, and could not avail any childcare facilities. To assist them, MC set up Crèches and daycare centres, By doing so it was able to support one million children over a 50-year period, and provide a model that could be used to provide Early Childhood Care while meeting the needs of working women globally. It was also able to advocate for the Building and Other Construction Workers Act 1996 that included provisions for crèches.</p> <p>http://www.mobilecreches.org/</p>	<ul style="list-style-type: none"> • Train workers to manage day-care centers; advocacy and organizing to implement laws, raise awareness in communities, and promote responsible business.
Industry	<p>SEWA's interventions in the bidi industry In India, the Self-Employed Women's Association (SEWA) organized bidi (tobacco product) workers (95% of which are women) and initiated conversations with both government and employers. Over 6 years it was able to increase wages for workers, facilitate access to welfare schemes,</p>	<ul style="list-style-type: none"> • Encourage and facilitate learning across cities and countries through knowledge exchange, and interaction between organized workers and unorganized workers

	<p>advocate for the development of worker's housing, and ensure that they were paid provident funds. SEWA also organized savings and credit programmes and health camps for workers.</p> <p>As a result of these successes, similar interventions were introduced in other cities and the central government set a minimum wage for all bidi workers and introduced welfare programmes for workers and their families.</p> <p>(WIEGO 2013)</p> <p>www.sewa.org</p>	
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Annex C: Experts Contacted

This scoping study relied on desk-based research and consultation with experts. The table below outlines who was contacted during the scoping study.

Name	Affiliation	Areas of expertise	Email
Sally Baden	SDDirect	Women's economic empowerment	Sally.baden@sddirect.org.uk
Sue Phillips	SDDirect	Urban development	sue@sddirect.org.uk
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Kalpana Viswanath	SafetiPin	Safe Cities	viswanath.kalpana@gmail.com
Caroline Moser	University of Manchester	Urban development, asset accumulation	
Deepta Chopra	IDS	Unpaid care work, social networks in slums	d.chopra@ids.ac.uk
Zahrah Nesbitt-Ahmed	IDS	Unpaid care work and GBV	z.nesbitt-ahmed@ids.ac.uk
Sylvia Chant	Professor of Development Geography, LSE	Urban poverty, employment, housing, care work	s.chant@lse.ac.uk
Cathy McIlwaine	Professor of Geography, Queen Mary University	Urban poverty, livelihoods, urban violence, migration	c.j.mcilwaine@qmul.ac.uk
Mar Maestre	BEAM Exchange / IDS	WEE, unpaid care work, PPP, social enterprise	mar.maestre@beamexchange.org
Cecilia Tacoli	IIED	Paid and unpaid work in the city	cecilia.tacoli@iied.org
Smita Biswas	Independent consultant	Infrastructure, informal economy	mita.biswas1@gmail.com
Renana Jhabvala	WIEGO/SEWA, member of the HLP	Informal economy	renanajhabvala@gmail.com
Marty Chen	WIEGO	Informal economy	
Sally Roever	Director, Urban Policies Programme, WIEGO	Informal economy	sally.roever@wiego.org
Caren Grown	World Bank Group Senior Director, Gender	WEE, feminist economics	cgrown@worldbankgroup.org

Caren Levy	Senior Lecturer, Development Planning Unit, UCL	Transport, housing, urban planning	c.levy@ucl.ac.uk
Henriette Kolb	Head – Gender Secretariat International Finance Corporation (World Bank Group)	Engaging private sector actors	hkolb@ifc.org
Arjan de Haan ³⁰	Program Leader, Inclusive Growth, IDRC	Jobs, entrepreneurship, inclusive growth	adehaan@idrc.ca
Diana Mitlin	IIED		
David Satterthwaite	IIED		
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Mark Harvey	DFID	Head of Infrastructure	

³⁰ And he drew in his colleagues Madiha Ahmed and Alejandra Vargas Garcia.



Infrastructure & Cities
for Economic Development

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