



# GENDER AND INCLUSIVE URBANISATION

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# FOREWORD

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*Traditional urban planning practices for urban development in the developing world often fail to take into account the specific ways in which decisions on a policy level, as well as in implementation, can disadvantage women and girls in urban areas. The dimensions of gender in urban planning are an area that has been under-represented in the literature on urban planning practices, although in the last decade some attention has been given on how to tailor urban planning practices to be more inclusive across genders.*

*Women can be adversely affected by urban planning in a number of ways, both physical and socio-political. Transport access, access to sanitation and water, and access to clean energy are all areas where traditional methods of urban planning for development leave women and girls at a disadvantage.*

*Xavier Lemaire & Daniel Kerr, UCL September 2017*

*Images front page: Global lights adapted by SEA / Market porters in Accra, Ghana (Image: Jonathan Torgovnik/Getty Images Reportage) / Informal settlement in Nairobi, Kenya (Image: AP/Ben Curtis). Images on this page: Globe adapted by SEA / Street in Kampala, Uganda (Image: weesam2010 / Flickr) / Children overlooking Kabira slum, Nairobi, Kenya (Image: Gates Foundation)*

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SAMSET website: <http://samsetproject.net/>

# GENDER AND INCLUSIVE URBANISATION PRACTICES

## ACCESS TO ENERGY

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Accessing energy in urban areas, can be more challenging for women than for men, especially for single-occupancy households headed by women, because of a lack of household income, a lack of time to acquire alternative energy sources due to other time commitments such as informal care (for example for children), and a lack of capacity and knowledge about alternative, sustainable energy sources (an issue which is cross-cutting between women, but is more applicable to women in a developing country) .

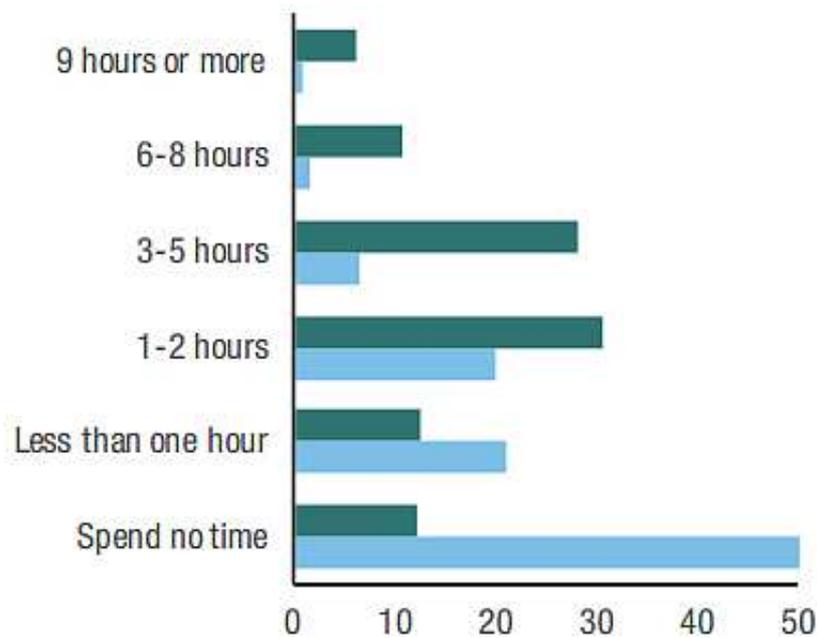
Women in urban areas of developing countries often have a different energy use pattern to men, for a variety of reasons, including ease of access to energy resources (e.g. having greater or easier access to traditional biomass fuels) and different energy usage patterns in day-to-day tasks, (e.g. in household or informal care tasks contra formal employment). Women in developing countries are responsible for the majority of the household work; renewable electricity and clean cooking can alleviate some of the challenges they face. [12]

Women and men can have varying perceptions of energy access due to how they interact differently with energy resources and the use of energy. This is often borne out in energy planning, particularly in planning interventions to improve energy access in urban poor communities. In the clean cookstoves sector for instance, programme design and product design are both vital components in designing a successful intervention. A number of clean cookstoves programmes in the past have failed to achieve their goals because of a lack of understanding of the use of energy in households. Understanding how women currently use energy in the household sector, their modes of energy use and modes of energy carrier acquisition, can help to design more appropriate interventions. [8]



Woman using a charcoal-fired clean cookstove in India. Image: <http://indiaopendata.com/863-2/>

Improved biomass cookstoves programmes that have relied on disseminating a pre-selected product have failed to achieve the goals in terms of ongoing usage that have been desired, due to a lack of understanding of how household cooking is performed by women, and the subjective effects that different energy carriers impart to cooked food. Global Alliance for Clean Cookstoves (GACC) programmes in India, for example, have struggled when trying to implement stove-top cooking appliances, like induction hobs or improved LPG stoves, as traditional cooking methods are a communal, social affair with a floor-based biomass or charcoal stove, and the new modal needs for using new technologies such as LPG stoves are undesirable to consumers. [1]



Source: Gallup World Poll data. ■ Women ■ Men

Time spent on household work by respondents in 46 developing countries (2005-2016) [10]

Addressing the issue of access to energy for women and girls involves inclusive practices in energy access projects, as well as policies and regulations that promote access to energy on a market basis; with designing interventions to either specifically target women in energy access initiatives, or designing interventions to include all members of a community, for example through timings and locations of interventions, ensuring women can attend. This also implies targeting female community leaders for capacity-building and information-sharing activities, as well as traditionally-male community leaders. Appropriate technology options for projects are also important, as well as including women in the planning process, both on a policy/legislative and technology level. [10]

## ACCESS TO WATER AND SANITATION

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New housing projects often fail to develop adequate water and sanitation measures to provide women with security and a sufficient level of service when accessing municipal water services or sanitation services. This is particularly relevant for public service areas, such as markets and transportation systems. Sexual harassment and rape can be a serious issue in developing country contexts, and research has shown that segregated sanitation facilities (for example, separate men's and women's lavatories) significantly reduce the incidence of violent sexual crime. This also applies in residential areas: women without a lavatory or adequate sanitation facilities (for example, washing facilities) in their home are more likely to be assaulted. The development of adequate sanitation facilities, particularly in informal settlements and public spaces, is therefore not just a public health issue, but a public safety issue. [5]



Urban waterway in Dhaka, Bangladesh. Image: <https://undark.org/article/leather-tanning-bangladesh-india/>

## TRANSPORTATION AND ACCESS TO TRANSPORT

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Access to urban mobility is an area in which women are often disadvantaged compared to men because of high costs of private transport within cities without adequate public transport provision; frequency and accessibility, such as how frequently communities are serviced with public transport options and how accessible public transit service points are; and safety, as in how safe women feel when using public transport, and what measures are in place on public transport to give women and girls a safer environment. [3]

The mainstreaming of gender into transport planning process has the potential to significantly improve the social sustainability of mass transit projects. The cost dimension may be the most difficult to address without significant continued investment from public or non-governmental bodies. Women in developing urban areas typically have lower incomes than men, and are more likely than men to have no source of income on an individual level. Equitable access to mass transit greatly increases likelihoods of finding gainful employment for women (and men alike), through the greater area accessible with increased mobility. [4]



*Women and men using Dar es Salaam's new bus rapid transit system, the DART. Image: Simon Batchelor*

A case study for how mass transit development can be made more mindful of women's needs can be seen in Jakarta, Indonesia. Improvements to the Jakarta urban railway network began in the early 2000s, and in recent years user consultations on these improvements and further work have been conducted.

Initially, these user consultations did not take into account the voices and needs of women in the city. Specific efforts were made further on in the consultation process to bring women's voices into the debate, with some interesting results. These consultations highlighted some issues that had been missed in the earlier consultations, and also some women-specific issues that were highly necessary to address. These included concerns over the place of the informal economy at mass transit access points (for example station vendors), as well as the issue of sexual and physical harassment on public transport. To this end, planners in the city put into place new measures to ensure that the informal economy at stations (a social space where women are in the majority) were still able to operate, formalising rights to vendor space. In addition, some measures have been put forward to lessen the issue of sexual harassment with a view to eradicating it. These include women-only carriages on trains, as well as greater law enforcement presence on the mass transit network, and changes to carriage design to leave women less exposed (for example, adding waist-height handles, rather than solely above-head handles). [4]

## HOW CAN ENERGY TRANSITIONS BE ADAPTED TO BENEFIT WOMEN AND GIRLS EQUALLY?

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Residential energy provision is a clear route to improving qualities-of-life for women and girls in developing countries. The public health dimension of using inefficient energy sources such as wood, charcoal or kerosene for household energy uses such as heating and lighting is well documented, and supplanting these energy sources with sustainable or renewable sources would improve livelihoods in the residential sector in a way which benefits women significantly. Women are typically disproportionately affected by the use of inefficient household fuels in developing cities due to the majority of household work still performed by women in these contexts.

This produces burdens for women in developing cities that men are not subject to, both the time invested in household tasks, and the public health hazard of using polluting fuels for cooking, heating and lighting. Improving access to cleaner fuels, e.g. renewable electricity, LPG or sustainable biomass/biogas, as well as improving access to cleaner cooking technologies, e.g. improved charcoal or biomass stoves, or electric stoves, can significantly impact qualities-of-life for women in developing cities. [7]

<b>Gender Equality Outcome:</b> Urban infrastructure and services are responsive to women's needs and priorities, and accessible, affordable, and safe	
<b>Gender Equality Dimension</b>	<b>Sample Gender Equality Indicators</b>
Human capital	<ul style="list-style-type: none"> <li>• Number of facilities designed to ensure safe and convenient access by women and girls (public lighting, footpaths, public water supply and sanitation, markets, municipal buildings, bus and train terminals)</li> <li>• Number and percentage of people who benefit from improved urban infrastructure and services resulting in better living environment</li> <li>• Time saved in travel to work, health services, educational institutions, and community facilities for women and men</li> </ul>
Economic empowerment	<ul style="list-style-type: none"> <li>• Number and percentage of women and men who access employment or increase their incomes due to improved infrastructure and services</li> </ul>
Voice and rights	<ul style="list-style-type: none"> <li>• Percentage change in women's representation in local governance structures and decision-making bodies</li> <li>• Evidence that urban development policies, strategies, and plans adopt participatory approaches and require the equal participation of women</li> <li>• Evidence that laws and regulations relating to land and housing titles are nondiscriminatory and compliant with the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)</li> </ul>
Gender capacity building	<ul style="list-style-type: none"> <li>• Evidence that urban development policies and strategies are based on gender analysis and include gender equality objectives</li> </ul>

*Urban gender equality indicators. [11]*

In terms of the sanitation question and energy transitions, residential sanitation provision can be combined with energy transition activities, for example utilising human waste products for biogas generation or fertiliser production for urban farming.



Providing safe places for women to engage in sanitation practices also has the potential to improve qualities-of-life dramatically, and public safety for women is an important issue when considering new sanitation projects.

Sustainable transport provision, like mass transit systems, have the potential to reduce city energy consumption, but also the potential to allow women and girls much greater access to the services of the city, if persistent public safety issues are addressed when designing such systems. This includes opportunities in both the formal and informal economies, with greater access to places of work in both sectors provided by rapid transit, as well as opportunities in the social and political spheres, allowing women the ability to engage with the formal city in ways that previously were unavailable to them. [11] [6] [9]

However, there are some barriers to consider in developing a sustainable energy transition regime that benefits women and girls equally to men. One of the most highlighted barriers in the literature around the issue is the lack of access to finance, a cross-cutting issue among development groups, but one that is particularly relevant to organisations that work in women-led development and gender equality issues in developing countries. Development agencies therefore should pay specific attention to the availability of finance for groups working with gender equality and women's empowerment in developing countries.

Another critical factor in women's empowerment is women's leadership. Leadership positions in governments and the private sector in developing countries is traditionally low, and the positions that do exist are often paid less and have less influence than equivalent positions staffed by men. Redressing this balance is a critical issue: encouraging women to assume leadership roles and providing opportunities for advancement within organisations for women will help to provide a more even gender balance at the top level of decision-making in both the public and private sectors. This involves instituting equal hiring practices, as well as ensuring roles staffed by women are not compromised in their decision-making power and agency compared to similar roles. [2]

# CASE STUDIES: INCLUSIVE URBAN DEVELOPMENT PROGRAMMES FOCUSING ON WOMEN

## SEWA SAVERA PROGRAMME, BIHAR, INDIA

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Bihar state is one of the poorest in India: according to the Human Development Index, Bihar ranks 21<sup>st</sup> out of 23 states in terms of education, healthcare and economic indicators. Many residents in the state, particularly in urban areas, are heavily dependent on the informal economy for livelihoods, a sector of the economy which is dominated by women (over 95% of women in the state as of 2012 were employed in the informal sector). This work includes labouring and shop work, but is predominantly made up of home-based labour such as crafting or cooking. This type of home-based work is heavily affected by energy use in the home, and surveys by the Self-Employed Women's Association (SEWA) in India found that the majority of women in the state were using inefficient lighting and other fuels in their work, which affected productivity greatly.

The intervention by the SEWA Bharat programme sought to provide efficient lighting systems and small solar home systems to provide light and electricity to households. This was financed on a deferred credit model, with SEWA Bharat as the implementing agency. Affordability was the biggest challenge to dissemination and growth of the programme, with many potential users not being able to afford systems outright, hence the institution of the financing model by the organisation. Under this model, SEWA Bharat acts as a facilitator, encouraging banks to lend to low-income households, as well as encouraging linkages with government programmes such as the Jawaharlal Nehru National Solar Mission. Monthly tracking of loan repayments is done by SEWA under its Sathis (trusted community representatives) sub-mission, reducing the risk of default.

Women have been directly involved at all stages of the project, from the initial group of entrepreneurs to the present day as community representatives and local facilitators. This includes women-headed self-help groups in a number of the programme's partner villages. After-sales and servicing is another important component of this programme, ensuring the longevity of systems by

improving awareness and knowledge in end-users, as well as offering servicing to users with malfunctioning systems, creating employment, but also trust in these small solar systems in the community. Women are at the forefront of the project, engaging with the community in advocacy for energy product purchases, as well as consumers directly. Enabling women consumers to own energy products directly increases the effectiveness of upkeep and maintenance procedures and improves accountability in terms of maintenance and payments. [14]

## PROJECT ON PROMOTION OF KABUL METROPOLITAN AREA DEVELOPMENT PLAN (TECHNICAL COOPERATION)

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Implemented by the Japan International Cooperation Agency (JICA), this project sought to promote women's empowerment in the urban development space at all levels. JICA assisted in formulating the "Kabul Metropolitan Area Urban Development Master Plan" in 2008-09, focusing on the municipality of Kabul as well as the "New City" district of Dehsabz, which was created to alleviate overcrowding problems in Kabul municipality due to extreme population growth in the past twenty years. The project sought to promote gender-responsive urban development in the city, with a goal of creating a city liveable for all, where women were not excluded from development because of cultural norms or differentiated access to the basic services of the city.

Part of the project to promote gender inclusivity in urban development in the city was encouraging liaison with local village leaders in territories bordering the Dehsabz New City area, promoting the work that was done in Kabul Metropolitan district in including women specifically in urban development. This included economic development through providing opportunities for employment, such as small-scale poultry farming and tailoring services, as well as encouraging basic literacy training for women in the New City, in an effort to develop capacity and promote economic empowerment.

Finally, as part of the overall project, in conjunction with UN-HABITAT JICA implemented the "Kabul Solidarity Programme", which sought to develop neighbourhood development councils, led by local people, to better understand the needs of local people in the development space. Care was taken to promote women-led neighbourhood development councils to establish women as part of the community decision-making process, a space where they have been traditionally excluded due to

strict cultural norms. It is hoped that through this process, women will continue to have a greater voice in neighbourhood and metropolitan planning activities. [13]

## SOLAR SISTER – WOMEN-LED ENERGY ENTREPRENEURSHIP

Solar Sister are an energy entrepreneurship-promoting organisation based in Sub-Saharan Africa, with operations in Uganda, Tanzania and Nigeria. Since their founding in 2010, the organisation has trained over 2,000 female energy entrepreneurs to sell and distribute solar home systems and solar lanterns, as well as clean cooking solutions, to rural and peri-urban households. Over 370,000 people had been reached as of 2015 with interventions from Solar Sister entrepreneurs. The organisation offers a number of benefits to women who choose to become entrepreneurs and sales representatives of the organisation.

An International Council for Research on Women (ICRW) report from 2016 on the organisation notes that incomes for women with energy access in rural communities are more than double that of women without access to energy, with comparable levels of self-employment, and the Solar Sister model is directly improving women's livelihoods, through the combined efforts of improving energy access for rural women, thus improving their livelihoods, as well as empowering women directly as entrepreneurs. For the entrepreneurs themselves, livelihoods have been shown to improve dramatically when becoming involved with the organisation, with entrepreneurs more likely to spend money on schooling for children, as well as being more likely to save money than non-entrepreneurs in the same settlements.

Organisations such as Solar Sister are also important in terms of networking for women in developing countries. These organisations give women independence and self-sufficiency, as well as building networks of women entrepreneurs and consumers that can have far greater reach than traditional dissemination methods. Women, particularly in the rural areas where Solar Sister are most active, often do not have the means or ability to network outside of the home or village effectively. Solar Sister enables these women to participate in wider support networks, enabling access to social and economic benefits that would have previously been out of reach.



*Solar Sister entrepreneurs. Image: Solar Sister, <https://www.solarsister.org/>*

Community-level impacts have also been highlighted as a successful factor in the Solar Sister model. Women-to-women contact in terms of the sales of energy equipment and services has been attributed to the successful scaling of the model, providing a reputation for the knowledge of entrepreneurs among beneficiaries, and helping to grow business. The social mobility of entrepreneurs has been shown to grow whilst taking part in the programme, as well as their position in communities in terms of status. Finally, safety for women in communities has been shown to improve when residents are participating as Solar Sister entrepreneurs, due to the greater diffusion of products that assist with night-time safety, such as solar lanterns for households and solar lighting for businesses and public areas.

This includes physical safety for women and children in the home, with clean cookstove products with lower risks of burns or cleaner, non-toxic fuels being available in previously un-serviced communities. [15]

## SEMARANG CITY, INDONESIA: GENDERED DIMENSIONS AND IMPLICATIONS OF TRANSPORT ENERGY USE

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A study in 2016 of Semarang City in Indonesia found significant differences in the way men and women access transportation in the city. Respondents to the survey conducted in Budiarti &

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Nuhardi (2017) identified a number of inequalities: women are more likely to use public transport than men, and public transport has suffered a lack of both growth (being outstripped by private transportation in road occupancy) as well as investment, leading to unreliable and limited services. Women are significantly less likely to own or use a private vehicle than men also. Travel modes depending on distance are also different between women and men, with women being more likely to walk short distances than men, who are more likely to use private transport (typically a motorcycle). The time of travel is another factor where differences exist; women are significantly less likely to travel at night compared to men, and more likely to be travelling in the morning.

In terms of analysing the reasons why these differences exist in the city, a number of factors inform these operational patterns. Women tend to have limited decision-making power or influence in terms of transport modal use, and as such are limited in the modes of transport they can utilise. In addition, cultural norms preclude women from using some modes of transport, most notably motorcycles, the use of which is often forbidden to women by parents or partners. Time of travel issues are commonly informed by safety for the women involved: many women interviewed in the study were apprehensive about travelling at night on public transport or by walking due to the potential for physical and sexual assault.

Recommendations have been drawn from these findings to analyse how transport provision in the city can be made to benefit women to a greater extent. Personal safety improvements are a key factor here, including the provision of public lighting and security patrols at bus stops, as well as lighting inside public transport vehicles. Secondly, consultation is an important factor, with women currently not involved to a large extent in public and city-scale transportation planning in the city. Improving the proportion of women involved in public transit planning will lead to a system which recognises the needs of female consumers to a greater extent.

Costs are another issue affecting women, and providing greater subsidy to public transport ticket prices would assist women, who are often on lower incomes than men in the city, in accessing transport in the city. [16]

# CONCLUSION

In summary, women currently are adversely affected in comparison to men by common urban development practices in developing countries. To resolve this issue, inclusive development strategies need to be adopted in the areas of urban residential and commercial planning as well as transport planning, and energy access and energy use. Taking into account the different modal patterns of behaviour of women compared to men; their needs, desires and daily routines, is crucial in designing programmes, policies and strategies that favour women equally to men in terms of development.

How can women and girls become more involved in the planning and development process in urban areas of developing countries? Firstly, it is necessary to understand the scale of the problem, either through direct consultation with women affected by unequal planning practices, or through research into the current state of planning and how women are affected by this. Key intervention areas can then be identified to address inequalities in urban planning which affect women in the particular urban space studied.

Ensuring women have equal access to the services of the city, both existing and planned, is important, as is ensuring that planned interventions are not affecting women unfavourably compared to men. Adding women's voices to the debate is particularly important in this regard, and companies such as Solar Sister, as well as organisations such as SEWA in India, are championing the voices of women in their respective fields, ensuring that their concerns and desires are heard. Therefore, promoting women's engagement in the planning process, either at a policy level or as individuals using the services of the city, is crucial in determining the needs of women in the urban space.

Finally, women in leadership roles in urban planning are currently severely lacking, either due to a lack of opportunity or a lack of skills training and education for female urban planners. Addressing the involvement of women in the planning process at the ground level can help address this current lack of participation in leadership roles.

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# SAMSET PROJECT INFO

## ABOUT US:

SAMSET is a 4-year project (2013-2017) supporting Sustainable Energy Transitions in six urban areas in three African countries – Ghana, Uganda and South Africa. A key objective is to improve 'knowledge transfer frameworks' so that research and capacity building efforts are more effective in supporting this challenging area.

## The Team

The project team includes a leading university in each of the three Africa countries – University of Ghana, Uganda Martyrs University and University of Cape Town - as well as an NGO in South Africa, Sustainable Energy Africa. In addition, the team includes two leading universities in the UK – Durham University and University College London, and a UK consultancy, Gamos.

## Project funders

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## SAMSET PARTNERS MUNICIPALITIES

