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## Construction Sector Employment in Low-Income Countries: Nature of Employment

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This summary note explores the nature of employment in the construction sector in low-income countries. It is based on a [report](#), commissioned through ICED, that seeks to explore opportunities for, and barriers to, the construction industry as a source of productive and decent job creation in LICs.

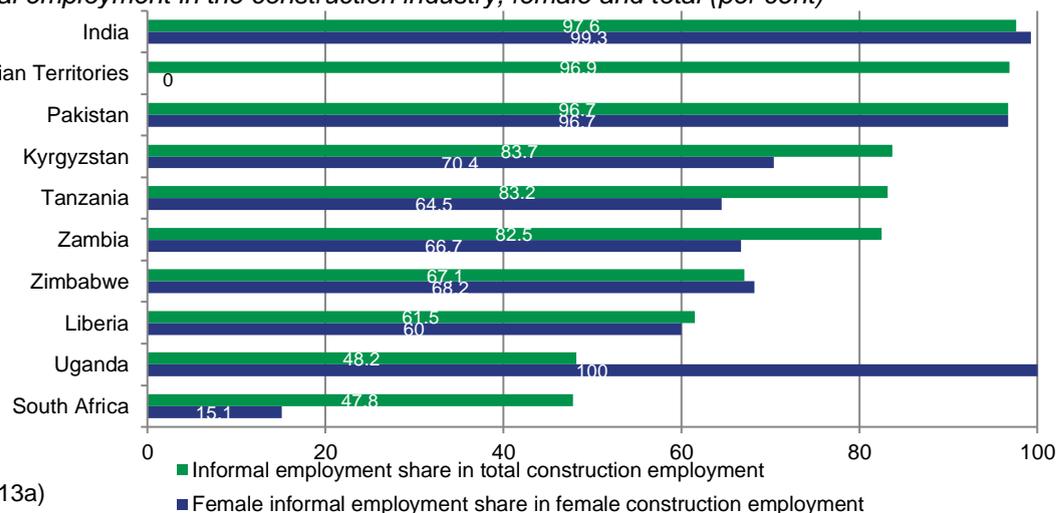
### 1. Informality and non-standard forms of employment

The construction sector has witnessed the proliferation of non-standard forms of employment, including part-time, casual and temporary contracts in many DFID countries of focus.<sup>1</sup> While these employment arrangements may assist with the industry's flexibility and growth, they sometimes provide either inadequate or no social protection for workers. Key issues include who actually employs workers within the construction sector (the use of intermediaries and gangmasters), and to what extent workers can rely on both regular access to work and being paid for work when undertaken as a result.

The lack of social protection benefits such as pension schemes, maternity leave, and unemployment benefits are often correlated with poverty and vulnerability.<sup>2</sup> Wages are low (often due to the oversupply of informal labour). Hours may be long, with workers paid at piecemeal rates. Health and safety conditions are poor. There is widespread discrimination in pay for women and other vulnerable groups. A lack of social protection may also result in additional costs for employers, including out of pocket compensation for disabilities or serious illness incurred by workers, hiring of temporary employees to replace ill workers and loss of skilled employees and penalties for noncompliance with labour standards.<sup>3</sup>

Informal employment can be divided into employment in the informal sector (mainly self-employment and informal micro-enterprises) and informal employment outside of the informal sector, i.e. enterprises formally registered that employ workers informally.<sup>4</sup> Self-employment and informal micro-enterprises are not a new phenomenon in the construction industry, but their prevalence has increased in recent years. Self-employment is partly explained by changing employment relations. Many workers work directly for clients through these direct arrangements, though self-employment is also associated with increased subcontracting done by enterprises. Figure 1 shows the incidence of informality in the construction sector for the ten DFID focus countries with available data.<sup>5</sup>

Figure 1: Informal employment in the construction industry, female and total (per cent)



Source: ILO (2013a)

There are large differences in informality rates among the countries listed, but informality is generally high. Countries with highest informality rates include India, Palestine and Pakistan. Countries such as South Africa,

<sup>1</sup> ILO (2015c)

<sup>2</sup> ILO(2015d)

<sup>3</sup> ILO Green Jobs Programme (2014)

<sup>4</sup> The informal economy refers to all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements

<sup>5</sup> ILO (2013a)

Uganda, Liberia and Zimbabwe have comparatively low levels of informality. This could be partly due to stronger enforcement by governments, i.e. higher union density and more economic development. There is a negative and moderate correlation between the level of informality and the level of economic output (measured as GDP per capita), meaning that the richer a country is (in output terms), the less likely employment will be informal. More GDP per capita means it is more affordable to absorb the additional costs of formalisation. There may also be greater risks to pursuing informal employment, if government agencies have more enforcement power.

## **2. Foreign contractors and labour migrants in civil works**

**Medium to large multinational firms in the construction industry (those with approximately USD\$1 billion in annual turnover) are moving into new parts of the world.**<sup>6</sup> European and American contractor expansion models include high levels of technology and capital-intensive approaches, while Chinese and Indian contractors tend to rely more heavily on labour intensive methods.<sup>7</sup> The expansion of large construction players can generate positive technology and skills spillovers for small and medium local contracting companies and workers. The right policies and conditions are necessary for harnessing these benefits, including adequately trained workers and sufficient management capacity in national firms. In large-scale projects with technology-intensive contractors, national contractors need to reach a critical size and level of management standards to participate in such projects. However, labour-intensive projects allow for the participation of smaller contractors.

**Migrants – both temporary and long term – constitute an important component of the workforce in the construction industry.** Contrary to other sectors with high foreign participation such as health care, the construction sector relies on migrant labour often due to its seasonal and project-based nature, as well as its distinct spatial characteristics, i.e. construction cannot be moved elsewhere in the search for lower labour, input, or transport costs.<sup>8</sup> Foreign workers tend to participate in big civil engineering and industrial construction projects, rather than residential and commercial construction of buildings. This is because large-scale construction contractors ship in workers for big projects when large amounts of workforce power need to be deployed in short time.

**The emergence of regional and international construction labour markets<sup>9</sup> means that comparatively more advanced countries (with higher wages within the group of DFID countries, such as South Africa) absorb unskilled domestic and regional migrants, generating downward pressures on wages and harsh working conditions for both migrant and local workers.**<sup>10</sup> Yet large international contractors from countries with sizable construction sectors such as China have been said to rely on large amounts of technically qualified migrant workers (such as carpenters or electricians) to deliver their projects, limiting the employment and skills development of local workers.<sup>11</sup>

## **3. Occupational health and safety conditions**

**The fundamentally hazardous nature of the work, changing locations of construction sites and work environments, and high rates of staff turnover make construction one of the most dangerous sectors to work in.** Workers face a range of occupational safety and health (OSH) risks associated with biological, chemical, physical, ergonomic and psychosocial hazards. Safety and health data is scarce and comparability is difficult due to differences in collection and interpretation.

**Approximately 17% of fatal accidents reported globally take place in the construction sector, amounting to 60,000 fatal accidents per year,** according to a recent ILO report on the construction sector.<sup>12</sup> Fatality rates in the least developed countries may be more than double the rates in developed economies, although reliable evidence is difficult to obtain.<sup>13</sup> Fatality rates also vary significantly from year to year and it is difficult to detect causes of such changes. For instance, a decline in fatality rates may be due to improvements in OSH regulations and compliance; or a decline in business activity; or changes in the way that data is recorded. In many LICs fatalities are underreported due to weak institutional records, but also due to insurance consequences of reporting deaths at work.

**Fatal accident rates vary significantly by occupation.** Some occupations such as roofers, construction operatives, elementary construction workers, carpenters and joiners can be ten to a hundred times more dangerous than

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<sup>6</sup> KPMG, & Armstrong, G. (2015)

<sup>7</sup> 41% of Indian labour migrants across the world work in the construction sector, mostly in the Middle East but also in Asia and the Pacific. Source: Grant Thornton India (2016).

<sup>8</sup> ILO (2016).

Offsite construction is a phenomenon that can until a certain extent reduce the effects of the spatial characteristics of construction. In countries like UK, Japan and Australia. Source: Taylor (2009).

<sup>9</sup> The temporary and constantly changing number of construction projects means that large contractors need to constantly shift workers from one site (or country) to another Source: Wells (1996).

<sup>10</sup> ILO (2016)

<sup>11</sup> Dollar (2016)

<sup>12</sup> ILO (2015c)

<sup>13</sup> ILO (2015c) and Dong (2005)

others.<sup>14</sup> The bulk of fatalities in the sector in LICs are caused by falls from heights and being hit by moving objects such as vehicles and lifting equipment, and contacts with machinery or electricity. Non-fatal accidents are reported less often than fatal ones in the construction sector. Most non-fatal accidents are associated with tasks related to material handling and installation of drywalls, piping and ventilation-duct installation, or accidents occurring while moving around the construction site.<sup>15</sup> There is likely even greater underreporting of accidents in the informal sector.

**Common health problems in construction work include deafness, musculoskeletal disorders, and exposure to hazardous substances such as asbestos.** These problems are particularly present in low income countries, where fewer regulations, poor training, and lower compliance to safety standards contribute to greater exposure to hazards. The difference in health and safety outcomes derives from differences in compliance and training.

#### **4. Working conditions for women and other marginalised groups**

**Participation of women in construction sector employment is lower than in many other sectors across DFID's focus countries.** In 2014, women made up 9.5% of the world's 273 million construction workers. Sierra Leone, Ethiopia, Liberia, and India have a higher proportion of women working in construction than this.

**In some DFID countries (e.g. India and Bangladesh), women and other marginalised groups perform the most strenuous, dirtiest and physically demanding of tasks, in an already harsh work environment.**<sup>16</sup> These range from cleaning building sites, brick making and brick carrying, to shovelling gravel or digging drains for sewage systems.<sup>17</sup> A study of informal construction workers in Dar es Salaam, Tanzania also revealed that women's main tasks include stone crushing, selling food to workers on construction sites, and working in offices as storekeepers and cleaners.<sup>18</sup> Very few women work in technical occupations, such as masonry, carpentry or electricity.

**Women generally are less recognised than male workers: they get lower pay, the rate of accidents for women is higher, and they are commonly sexually harassed.** A survey of 2,600 construction workers in five cities of India found open inequality in pay with women earning 10-20% less than men for similar work.<sup>19</sup> The physical hardships and their consequent effects upon women's health – especially to pregnant women and lactating mothers – are important issues. Carrying heavy loads up ladders and over uneven surfaces can cause spontaneous miscarriages as there is no provision of maternity benefits for women construction workers, or crèche facilities.

**The risk of sexual harassment and abuse is higher for women contracted in infrastructure projects.**<sup>20</sup> A report from Human Rights Watch found that female construction workers in Sylhet city Bangladesh described being economically exploited, verbally abused, and sexually harassed, mostly by co-workers or construction supervisors.<sup>21</sup> Women and girls living in communities receiving large influxes of male workers (contracted on large construction projects), also face increased risks of sexual exploitation and violence.<sup>22</sup>

**Women in most LICs are often unaware of their rights, or are scared to complain for fear of losing their jobs.**<sup>23</sup> Women working and living in or around working sites away from their homes are potentially more vulnerable because of the lack of supporting networks.<sup>24</sup> Their living conditions are many times worse than non-migrant women in the sector, often with no water supplies or toilets, nor places to leave the children when they work. Bringing their children to worksites increases risks to safety as well as prevalence of child labour.

#### **5. Child labour in construction supply chains**

**Worldwide, some 215 million children are in work, with more than 100 million children trapped in hazardous occupations.**<sup>25</sup> Nearly half of all the working children are in the construction industry or sectors in its value chain, such as brick kiln, stone quarrying, wood, and forestry. Children are often forced to work for little or no wages, many times in life threatening conditions.<sup>26</sup> Most working children live in poverty and are forced into the workforce due to economic compulsions in order to help support their families or support themselves. In many cases children are forced into work by their parents or by employers or middlemen.

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<sup>14</sup> Weeks (2011)

<sup>15</sup> Weeks (2011)

<sup>16</sup> On the other hand, only about 1.4% of women in India's construction sector work in technical positions such as engineers or architects. Source: Patel and Pitroda (2016).

<sup>17</sup> Kalpana and Kiran (2013)

<sup>18</sup> Jason (2005)

<sup>19</sup> Vaid, K.N. (1999)

<sup>20</sup> Fraser, Viswanath and Maclean (2017)

<sup>21</sup> Human Rights Watch (2014).

<sup>22</sup> World Bank Group President Jim Yong Kim (October 2016) in speech launching GGBV Task Force.

<sup>23</sup> ILO (2016)

<sup>24</sup> Fraser, Viswanath and Maclean (2017)

<sup>25</sup> ILO(2011a)

<sup>26</sup> BWI (n.d)

**South Asia has the highest concentration of working children labourers in the world, with more than one quarter concentrated in India where the brick kiln industry is one of the most important building material sectors.** A health study on child labour estimated that brick kilns engage about 1.7 million children in India, at least 500,000 in Pakistan, and 110,000 in Bangladesh.<sup>27</sup> Another study from the ILO reported that 56% of brick makers in Afghan kilns of two districts are children, with the majority being 14 years of age or under.<sup>28</sup> Interventions to reduce child labour in the construction supply chains could therefore concentrate in Afghanistan, Bangladesh, Burma, India and Pakistan, and to a lesser extent in Nigeria, Sierra Leone, Uganda, and Zambia.

**Normally children are not directly employed by the brick kiln owners, but start helping their parents from as young as five years old.** Other common tasks performed by children include preparing the soil, turning over cooked bricks, and creating brick piles. Wages are paid based on the piece-rate system and hence children continue to work as part of family labour to be paid higher wages based on the quantity of bricks they produce.

## **6. Skills and education levels**

**Education and training are essential to meeting the skills gap<sup>29</sup> in the construction industry,<sup>30</sup>** providing workers with the knowledge necessary to carry out their work and increasing employability. Training is also an important factor behind OSH improvements and increased labour productivity that may in turn lead to higher wages.

**Employers in DFID countries of focus** (such as Zambia, Malawi, Tanzania, and Mozambique) **report difficulties in finding skilled workers.**<sup>31</sup> This is partly due to skills gaps and deficits, as training programmes are sometimes out of date and do not always meet the needs of the industry.<sup>32</sup> In most DFID countries of focus construction trades are taught in community and technical colleges, while construction-related curricula is less predominant in tertiary education. Challenges to the acquisition of skills include low levels of skills of trainers themselves, who in many cases do not have the adequate competencies to teach construction trades.

**Skills gaps in developing countries vary from country to country, due to different technological patterns and employment structures.**<sup>33</sup> The higher the technical requirements, the more important it is to have qualified workers. For instance, 83% of the construction workforce in India are unskilled workers. According to the National Skill Development Corporation, the main skills gaps in India at the management level are at the planning stage, including weak capacity to estimate project costs.<sup>34</sup> At the technical level there is inadequate knowledge of specific tasks, such as lining, levelling and finishing skills in carpentry, and lack of knowledge about machine operation. Unskilled workers generally lack safety orientation, general workplace skills and the ability to follow technical instructions. Often there is a skills mismatch between international, widely accepted qualification systems and national qualification systems.<sup>35</sup>

**Investment in skills may also be important to transitioning construction towards lower carbon and more sustainable industry practices to meet wider environmental and climate change goals.** The demand for new skills lies across a range of environmental issues related to construction activities, including: the reduced consumption of energy, materials, and water; development of building scale energy systems; low carbon transport infrastructure; green housing development; waste minimisation; and pollution control.<sup>36</sup> Green jobs may also be of higher quality than those they displace. The UNFCCC and the ILO have argued that taking action to mitigate climate change creates high-quality employment in the long run.<sup>37</sup> There may also be social inclusion benefits as many green jobs are in the informal economy and / or accessible to lower tier workers.

**More efficient and cleaner construction approaches can support a shift from manual labour to pre-fabrication and on-site assembly,** which not only creates higher skilled employment opportunities in the supply chain, but also can improve quality control.<sup>38</sup> A key issue is the lack of availability of a higher skilled workforce that might underpin a shift towards a more efficient and safer construction sector, rather than continuing to rely on labour intensive and poor-quality methods. Green jobs can also be promoted through the supply chain, by supporting the use of locally sourced renewable materials, providing opportunities for both skilled and unskilled labour. A key issue has been lack of investment in research, codes, and standards that support local forms of construction.

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<sup>27</sup> FPRW-IPEC (2014)

<sup>28</sup> ILO (2011b)

<sup>29</sup> A skills gap is the qualitative mismatch between the supply or availability of human resources and the requirements of the labor market.

<sup>30</sup> ILO (2015c)

<sup>31</sup> See for example ILO (2017a)

<sup>32</sup> See for example STEP (2016)

<sup>33</sup> ILO (2015c)

<sup>34</sup> National Skill Development Corporation (2009)

<sup>35</sup> ILO (2015c)

<sup>36</sup> UNEP, 2008

<sup>37</sup> Figueres and Ryder, 2012; OECD 2011

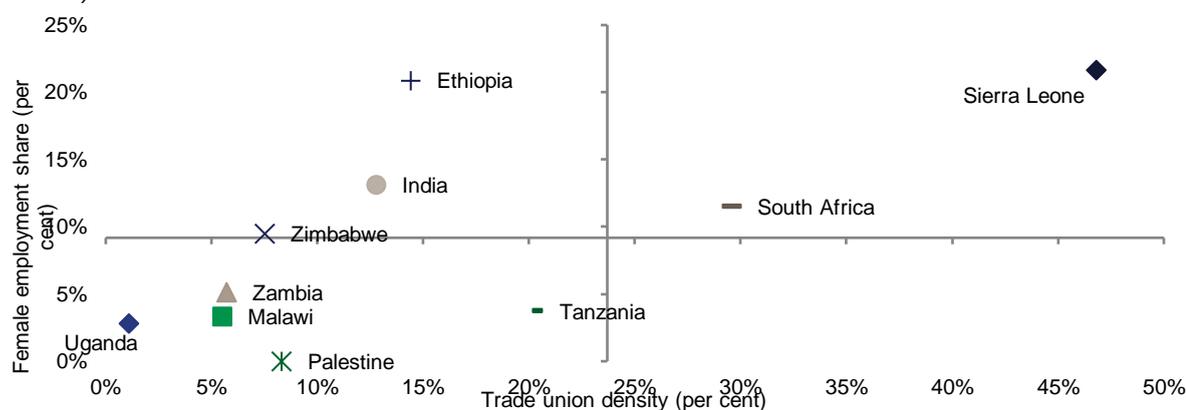
<sup>38</sup> See ARUPs support for Kindergartens in Ghana (Sabre Trust)

**Opportunities also exist to support safer and more resilient building construction and retrofit**, with investment needed to build the capacity of local SME contractors to undertake such work and generate local employment. The World Bank's Global Programme for Safe Schools has highlighted the need for comprehensive national repair and retro-fitting programmes, and shortfalls in institutional capacity required to ensure even relatively simple structures are built safely, operated, and maintained. Employment opportunities also exist around the development of greater monitoring and compliance activities (e.g. Environmental and Social Impact Assessments), which in many DFID countries either do not currently exist or are not adhered to, but which form a significant area of employment in more developed economies. There will also be an increased demand for environmental engineers and technicians.

## 7. Collective bargaining and union density

**The right of workers to bargain freely with employers is important, so that workers can negotiate decent salaries and working conditions.** Collective bargaining is a voluntary process through which employers and workers discuss and negotiate their relations, in particular terms and conditions of work. It can involve employers directly, or as represented through their organisations; and trade unions or, in their absence, representatives freely designated by the workers. Figure 2 shows economy-wide union density in different DFID countries of focus.

Figure 2: Trade union density (x-axis) versus female employment share (y-axis) for DFID focus countries (latest year available)



Source: ILOSTAT. Note: The vertical axis is set at 24%, the world average trade union density. The horizontal axis is set at 9%, the average female employment share for the sample available.

**Union density differs widely from country to country.**<sup>39</sup> Sierra Leone and South Africa are the DFID countries of focus with the highest union densities recorded: 46.8% and 29.6% respectively. The other seven countries for which union density figures are available have lower union density than the world average, 23.7%.<sup>40</sup> Union density is particularly low in Uganda (1.1%), Malawi (5.5%) and Zambia (5.7%). Union density is positively correlated with the level of economic output (GDP per capita) (0.30), i.e. that the richer a country is (in output terms), the higher union density it will likely have. Union density is also positively correlated with female participation in the sector (0.66). High levels of informal and casual worker and micro-enterprises are associated with lower levels of union density, however.

**Economy-wide collective bargaining coverage**<sup>41</sup> also differs widely among DFID countries of focus. The collective bargaining coverage rate conveys the number of employees whose pay and / or conditions of employment are determined by one or more collective agreement(s) as a percentage of the total number of employees. Data is only available for five of DFIDs countries of focus. In Sierra Leone and South Africa, 46.8% and 32.6% of workers are covered by at least one collective agreement, compared with only 0.8% and 5% of workers in Ethiopia and Bangladesh. In Malawi, the collective bargaining coverage rate is 18.1%. Wider collective bargaining coverage is associated generally with economic development, urbanisation, higher union density, and higher government intervention. The structure of the industry in many DFID countries - a majority of informal and casual workers and micro-enterprises – is not conducive to collective bargaining and union density. Interventions here could more usefully promote social dialogue, associations of informal workers, and / or linkages between formal-informal workers.

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<sup>39</sup> Trade union density rate conveys the number of employees who are union members as a percentage of the total number of employees. For the purpose of this indicator in particular, trade union membership excludes union members who are not in paid employment (self-employed, unemployed, retired, etc.). Source: ILOSTAT.

<sup>40</sup> Union density was available for only nine DFID countries, including Ethiopia, Malawi, Occupied Palestinian Territory, Sierra Leone, South Africa, Tanzania, Uganda, Zambia and Zimbabwe. Source: ILOSTAT.

<sup>41</sup> Collective bargaining coverage includes, to the extent possible, workers covered by collective agreements in virtue of their extension. Collective bargaining coverage rates are adjusted for the possibility that some workers do not have the right to bargain collectively over wages (e.g. workers in the public services who have their wages determined by state regulation or other methods involving consultation), unless otherwise stated in the notes.