ICED Evidence Library

Construction Sector Employment in Low-Income Countries: Size of the Sector

Tags: construction, economic development, jobs

Volume: ECDEV001

This summary note provides data to understand what proportion of the national workforce is employed in the construction industry in DFID focus 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.

Drivers of growth in the construction sector

The construction sector plays an important role in the economic development of countries. It currently represents about 13% of global GDP and this is expected to increase to 14.7% by 2030.[1] *Global Construction 2025* forecasts that global construction demand will increase to 2025, especially in countries such as China and India – which will represent 63% of global construction profits by 2025.[2]

Three of the principal driving forces of growth in construction markets are:

1. **Government infrastructure spending plans**: Around 80% of global infrastructure spending is publicly funded or funded through Public-Private Partnerships.[3] In terms of value, power and electricity projects dominate (US$5.4 trillion), railways is the second-largest sector (US$5.2 trillion), followed by roads projects (US$1.9 trillion), airports and ports projects (US$1.2 trillion), and water and sewerage (US$421.5 billion).
2. **General economic growth:** The size of the construction sector is moderately positively correlated to economic growth, suggesting that the sector employs more workers when the economy is growing.[4]
3. **Urbanisation:** 1.5 million people are added to the global urban population every week. A staggering 90% of this growth will take place in African and Asian countries with rapid urbanisation placing huge demands on infrastructure, services, job creation, climate and environment.[5]

The construction sector can be divided into three broad sub-sectors: civil construction (e.g. roads and highways, bridges), industrial construction (e.g. oil and gas platforms, mining infrastructure) and residential and commercial construction (e.g. single-family dwellings and office buildings). Main areas of construction growth in DFID focus countries are infrastructure building in transport, energy and social infrastructure (e.g. schools, hospitals, water).[6] Residential and industrial construction is predicted to grow more moderately.

Employment trends

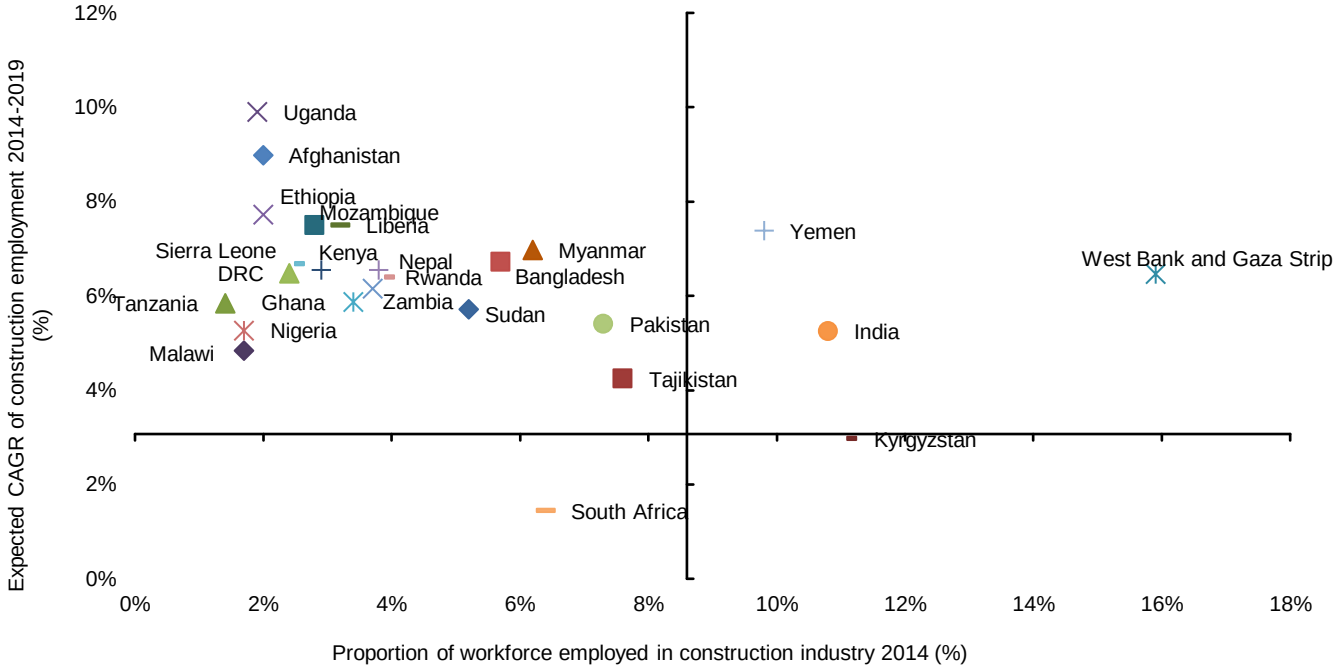
The construction sector is a major source of employment; not only in on-site construction but also in construction-related professional services, and the supply of materials and components such as bricks and wood. The construction sector is important in stimulating local economic activity, particularly if linked to an improvement in conditions in low income settlements,[7] and in improving access to trade and essential services such as water and electricity.

The construction, renovation, maintenance and demolition of buildings and civil engineering projects together accounted for more than 273 million (part-time and full time) jobs worldwide in 2014, constituting an estimated 8.6% of the total global employment.[8] Around 70 million people work in construction in DFID countries of focus, corresponding to an average of 7.6% of the total workforce in these countries. Female employment constitutes a small but growing share of employment in these countries: 11.2% on average in 2014, above the world average of 9.5%.[9] Figure 1 shows the share of the workforce employed in the construction industry in DFID focus countries, current and expected in 2019; most have smaller than global average construction sector employment, but are growing at a faster than average rate.

---

[1] Schilling (2015)
[2] Global Construction Perspectives and Oxford Economics (2013)
[3] Infrastructure IC (2017)
[4] The correlation coefficient is 0.19. It is obtained with the employment share of the construction sector for the year 2014 (ILOSTAT) and development is defined as GDP per capita, PPP (current international $) 2014.
[5] PwC analysis of United Nations, Department of Economic and Social Affairs, Population Division (2014).
[6] Global Construction Perspectives and Oxford Economics (2013)
[7] ILO (2012)
[8] Authors calculations based on ILO (2015a).
[9] ibid.

Figure 1: Proportion of the workforce employed in the construction industry (2014) and expected change 2014-2019



Source: ILO (2015a). Note: Origin is set at 8.6%, 3.1%, the world average construction employment in 2014 and expected compound annual growth rate (CAGR) of construction employment between 2014 and 2019. CAGR is calculated with the following formula CAGR= ((Emp_n-Emp_0)/Emp_0)/n, where Emp_n is the forecasted employment and Emp_0 is the employment at the reference year.

Table 1: Foreign presence in DFID countries of focus

	Number of migrants ('000s)		Migrants as % of total population		Female share of migrants (%)	
Country	**2000**	**2015**	**2000**	**2015**	**2010**	**2015**
Afghanistan	75.9	382.4	0	1	44	49
Bangladesh	987.9	1422.8	1	1	14	13
Democratic Republic of the Congo	744.4	545.7	2	1	51	52
Ethiopia	611.4	1072.9	1	1	47	49
Ghana	191.6	399.5	1	1	49	46
India	6411.3	5241	1	0	48	49
Kenya	699.1	1084.4	2	2	50	50
Kyrgyzstan	389.6	204.4	8	3	58	60
Liberia	151.9	113.8	5	3	46	43
Malawi	232.6	215.2	2	1	52	52
Mozambique	195.7	222.9	1	1	47	52
Burma	98	73.3	0	0	47	45
Nepal	717.9	518.3	3	2	66	69
Nigeria	487.9	1199.1	0	1	45	45
Pakistan	4181.9	3629	3	2	46	49
Rwanda	347.1	441.5	4	4	49	50
Sierra Leone	98.2	91.2	2	1	44	45
Somalia	20.1	25.3	0	0	47	46
South Africa	1001.8	3142.5	2	6	40	40
South Sudan	..	824.1	..	7	..	49
West Bank and Gaza Strip	275.2	255.5	9	5	55	56
Uganda	634.7	749.5	3	2	50	50
Yemen	143.5	344.1	1	1	44	48
Zambia	321.2	127.9	3	1	49	50
Zimbabwe	410	398.9	3	3	43	43

Source: United Nations (2015)

Foreign participation

Migrants have long been a structural component of the construction workforce in many countries. Table 1, on the previous page, shows that migrants as a percentage of the total population in DFID focus countries ranged from 0 to 7% in 2015. The International Migration Report (2015) compiles estimates of migrants living for one year or longer in a country other than the one in which he or she was born.[10,11] Data includes both labour migrants as well as accompanying family and students. Information should therefore be understood as a proxy of labour migration.

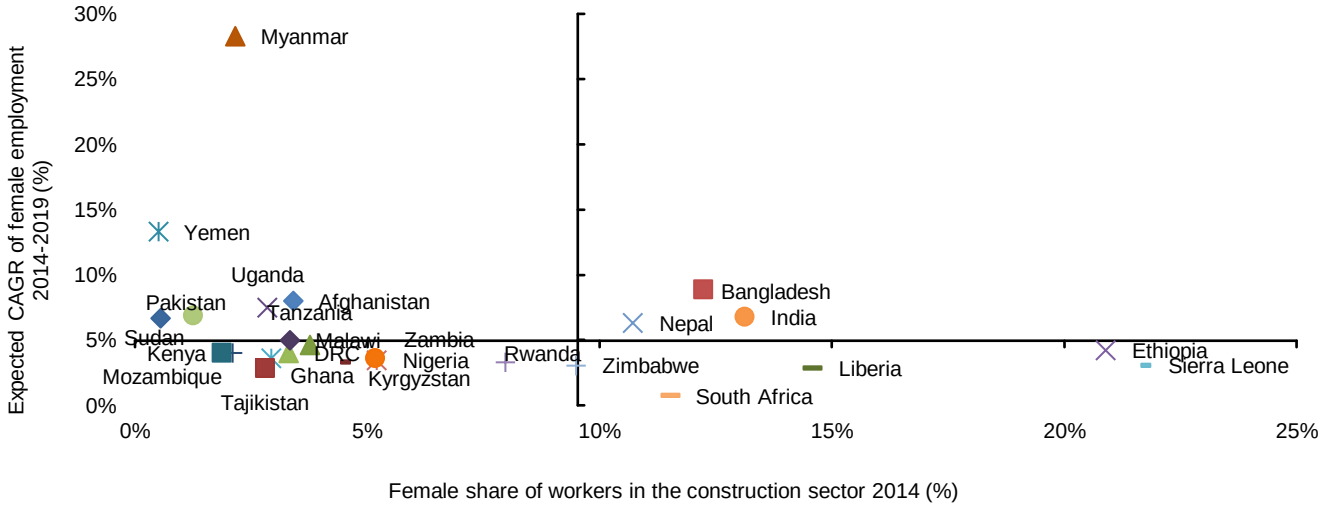
The incidence of migrant workers in the construction sector is generally higher than in other sectors due to the seasonal and project-based nature of employment. Construction is often considered an 'easy entry' sector because it needs a considerable amount of non-skilled and semi-skilled workers. This, together with the fact that the sector is often not heavily regulated in DFID focus countries makes it an easier sector to enter for non-regulated migrants. In some cases, this leads to the participation of large amounts of foreign labour,[12] e.g. in Kyrgyzstan, a 2015 household income/expenditure survey showed migrants constitute around 29% of total workers in the sector.

The presence of Chinese contractors together with large numbers of migrant workers in the construction sector across Africa is being increasingly scrutinised. It has been argued that such foreign contractors do not employ the local workforce on their projects. Recent data however reveals that up to 85% of employees of Chinese contractors in Africa are locals.

Female participation

Participation of women in employment in the construction sector remains lower than in most other sectors despite increases in recent years. Equal access to employment is far from being achieved.[13] Empirical observation of ILO construction employment data shows that in most countries changes in the labour market are more pronounced for women than for men. [14] When there is high demand for labour in the sector, female employment rates increase proportionately more than male rates. When there is a reduction in the construction workforce, female employment decreases faster than male employment. According to ILO data (2015a), women constitute 9.5% of the total construction work force. [15] The rate of women's participation in the construction sector in Asia is generally higher than in Africa. Figure 2 shows the share of women workers out of all workers in the construction industry in DFID focus countries in 2014, and the expected change between 2014 and 2019.[16] Average annual employment growth for women is 5.0%, which is higher than overall average employment growth of 3.1%.

Figure 2: Share of women workers out of all workers in the construction industry in 2014, and expected change by 2019



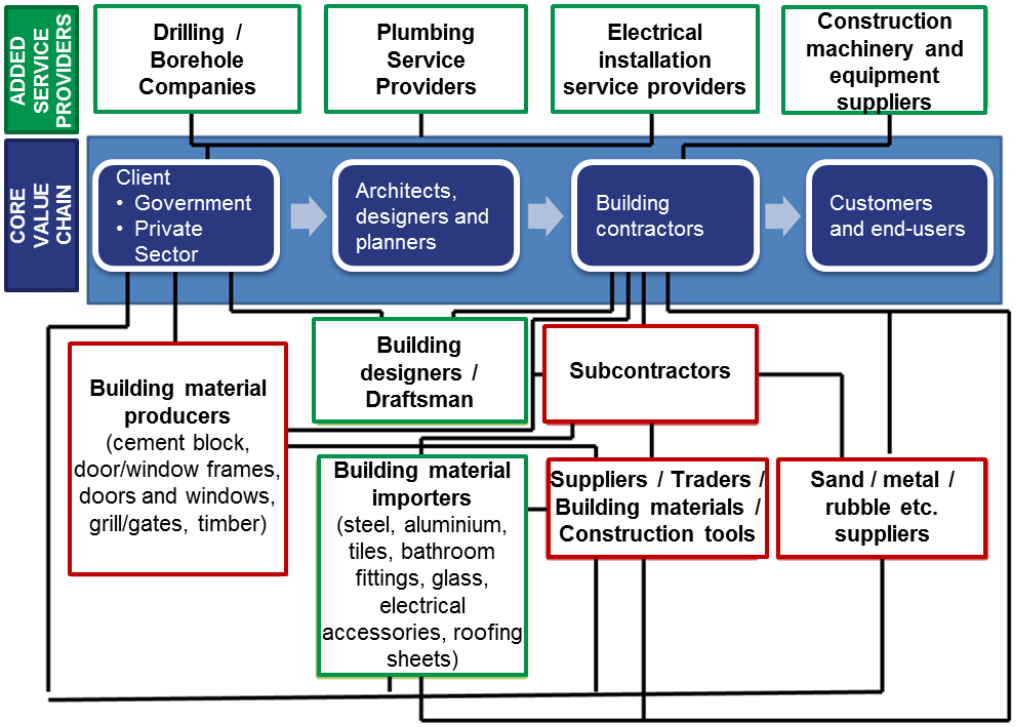
Source: ILO(2015a) Note: Origin is set at 9.53%, 4.95%, the world average female share of employment in the construction sector in 2014 and expected CAGR of female construction employment between 2014 and 2019. CAGR is calculated with the following formula CAGR= $((Emp_n-Emp_0)/Emp_0)/n$, where Emp_n is the forecasted female employment and Emp_0 is female employment at the reference year.

[10] Estimates of the number of migrants in the construction industry are only available for Kyrgyzstan and Yemen. Source: ILOSTAT.
[11] This means that many foreign workers and international students are counted as migrants. Additionally, the UN considers refugees and, in some cases, their descendants (such as Palestinians born in refugee camps outside of the Palestinian territories) to be international migrants. Estimates of the number of unauthorised immigrants are included in these reported figures. Tourists, foreign-aid workers, temporary workers employed abroad for less than a year, and overseas military personnel are not counted as migrants.
[12] ILO (2015b) and ILO (2016)
[13] Forbes Insights (2012)
[14] Author calculations based on the ILO(2015a)
[15] ILO (2015c)
[16] Figures collect informal employment in formalised enterprises but do not capture all the informal employment. ILO (2001) and Pais, J. (2002).

Jobs in construction supply chains

The construction sector is underpinned by an extensive supply chain, both in terms of service delivery and the underlying materials and inputs. This can include companies and workers engaged in upstream industries such as mining and forestry, as well as intermediaries (e.g. processing, manufacturing, transportation). There is also a large downstream industry related to real estate and commercial property management, and other infrastructure services. Figure 3 illustrates the different elements of the construction value chain, mapping the large number of potential stakeholders involved.

Figure 3: Simplified building construction sector value chain map



Source: ILO (2014). Red boxes indicate poor working conditions in value chain actors.

The size of the construction supply chain and related industries (both backward and forward) is important because it demonstrates the broad sectoral scope to improve employment practices and maximise economic growth opportunities. Most of the labour opportunities associated with construction are indirect and happen through the manufacture of goods or the supply of ancillary services. These sectors become even more important as construction methods shift towards pre-fabrication and supply chains become more integrated. Supply chain interventions are therefore likely to be more effective than direct construction interventions in improving the quantity and quality of employment in a sustainable manner.