

**Working Paper 521**

**Education and Nutrition among  
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Workers' Children – A Case  
Study of Bengaluru City**

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# **EDUCATION AND NUTRITION AMONG THE MIGRANT CONSTRUCTION WORKERS' CHILDREN – A CASE STUDY OF BENGALURU CITY**

**Channamma Kambara<sup>1</sup>, Malini L Tantri<sup>2</sup>, S Manasi<sup>3</sup> and N Latha<sup>4</sup>**

## **Background**

Urbanisation has emerged as one of the most prominent dimensions of economic development the world over. According to World Urbanisation Prospects, the 20th century has witnessed a rapid urbanisation with a dramatic increase in the proportion of global urban population from 13 per cent (220 million) in 1900 to 29 per cent (732 million) in 1950 to 39.4 per cent in 1980 to 41.2 per cent in 1990 to 49 per cent (3.2 billion) in 2005 to 52.8 per cent in 2010 and is projected to increase further up to 60 per cent (4.9 billion) by 2030 (World Urbanisation Prospects, 2005). India, in particular, has witnessed a trend of increase in its urban population. In the last fifty years, the population of India has grown two and a half times, whereas urban India has grown almost five times. It is estimated that by 2030, 590 million people will live in Indian cities. Further, the 2011 Census indicates an increase in urban population compared to the rural population, for the first time since Independence.

Economic progress, especially in the urban areas, has translated into a boom in sectors such as the construction industry in urban India. Similarly, urbanisation has resulted in increased labour migration in the construction industry across the world. According to NSSO, the casual labour in construction has expanded substantially during 1993-94 to 2014-15 while the share of other sectors either stagnated or declined. As per Economic Survey 2018, the construction sector is the second largest industry in India after agriculture, employing around 52 million people in 2018-19 across the country and is expected to add another 15 million jobs over the next five years to the real estate and construction sector (Kadidal, 2019). Hence, the construction industry has become an important indicator of development as it creates investment opportunities across various related sectors. It absorbs the largest proportion of rural workers who have migrated to urban centres due to a surplus in agriculture, chronic poverty, deficit rainfall, an inability to cultivate, loss of land and other factors. In the process of migration from rural to urban areas, the children are the most affected as many remain out of school, many are forced to drop out and some become vulnerable to work as child labour due to the seasonal mobility of their parents. Thus, mainstreaming these children in the development process is a big challenge in attaining the goal of universal primary education and inclusive growth. Adding to this, the temporary nature of work is featured by high labour turnover and the constantly changing work environment.

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## Construction industry in India and Karnataka

The construction industry is one of the backbones of the Indian economy as it plays an important role in the economy (Kaur and Mittar, 2015). It is one of the fastest growing sectors, with an annual growth of 10.3 per cent between 2000–01 and 2010–11 (Baruah, 2008), CIDC, Ahmedabad (2003) and NSSO 68th Round (2011-2012). In 2011-12, the construction industry contributed an estimated Rs. 6708 billion to the national GDP. And in 2015-16, it contributed 7.7 per cent to the country's GDP, with a total size of Rs 10,640.68 billion (RBI Database on Indian Economy, <https://dbie.rbi.org.in/DBIE/dbie.rbi?site=statistics>). According to the International Labour Organisation, 2016, the biggest increase in non-agricultural employment has been in the construction sector, where the share of employment in rural areas has increased from 14.4 per cent in 1999-2000 to 30.1 per cent in 2011-12 (India Labour Market Update, July 2016). In general, construction work is taken up as a means of immediate employment in urban areas as it guarantees day-to-day earnings.

Karnataka, with major infrastructure development projects, offers huge business opportunities for the construction industry. It is estimated that more than 15 lakh people from various states across the country migrate to Karnataka, especially to Bengaluru, every year in search of employment opportunities. For every person who migrated out of Bengaluru, 20 people came into the city, with fifty per cent of the incoming migration being involved in the construction sector, one-third of whom are women. The Gross State Domestic Product (GSDP) at factor cost from the Construction Industry in Karnataka from 2011-12 to 2016-17 at current prices based on 2011-12 series indicated a gradual increase between 2011-12 and 2016-17.

NSSO data (Table 1) indicates a gradual increase in the number of construction workers for every 10,000 persons in Karnataka between 2004-05, 2009-10 and 2011-15. The average number of construction workers in urban Karnataka for every 10,000 persons was 97 in 2004-05, 128 in 2009-10 and 965 in 2011-12 showing an increasing trend. Male participation in construction activities was more compared to women i.e. 92 per 10,000 persons in 2004-05, 144 in 2009-10 and 1232 in 2011-12.

**Table 1: Number of construction workers per 10,000 persons in Karnataka**

Year	Male	Female	Total
2004-05	92	38	97
2009-10	144	67	128
2011-12	1153	264	965

Source: NSSO Report: Employment and Unemployment in India, 2011-12, 2009-10 and 2004-05.

Despite the large number of workers involved in construction works in major cities of India, there is limited information available or research carried out on the impact of such migration on the nutrition and educational status of the migrant workers' children. Among the existing studies (Premchander *et al* 2014, Jacob 2011, Kumar 2013), most are focused on the access and availability of basic services (like drinking water, sanitation and housing etc), health aspects and occupational hazards faced by the construction workers. There is a lack of evidence on the education and malnutrition among the children both at the macro and micro levels. In this context, taking the case of Bengaluru city, the

present study has examined the status of education and nutrition of construction workers' children and emerging challenges.

The study is based on both primary and secondary data. Stratified purposive sampling method was followed in the survey and information was collected through a structured questionnaire. The migrant construction workers were interviewed at their dwelling place. In the first stage, construction work sites and dwelling places<sup>5</sup> of migrant construction workers were identified. In the second stage, migrant construction workers were recognised in these sites. Further among the migrant workers, (a) construction workers working for developers (b) workers not confined to any developer and (c) individual construction workers, working at independent house construction locations. Both unskilled workers and skilled workers were identified and interviewed to make it representative. In total, 300 households were interviewed. A total of 560 children between the age group of less than one year to 18 years were considered in the study. Children within the age of 5 years were considered for nutrition analyses as per standard practice, whereas children from 3 years up to 18 years of age were considered for education. Among the children surveyed, 56 per cent were boys and 44 per cent were girls.

The paper is organised as follows: The section following this provides an overview of the construction industry and construction workers in India in general and Karnataka in particular. Besides, it outlines the status of available schemes and programmes with regard to construction workers. Section three presents the demographic and socio-economic backgrounds of migrant construction workers, and also the status of education, health and nutrition of construction worker's children. The last section summarises the paper and offers a few policy suggestions.

## **Policies, Acts and Welfare Schemes Supporting Construction Workers – An Overview**

The government has taken many initiatives in the form of labour laws, policies and programmes to protect the interests of construction workers and of their dependents, including children<sup>6</sup>. These legislations are divided into various categories - legislations on social security, legislations on industrial relations, legislations on wages, legislations on labour welfare, legislation on employment and training. Though there are various provisions made in the labour laws, a major challenge remains with respect to the enforcement and applicability of certain labour laws for the unorganised sector, especially in the context of migrant construction workers. There are no separate policies for the children of construction workers. However, their concerns are either directly met through some provisions in the initiatives or indirectly addressed in them.

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<sup>5</sup> Those places are Veeranna Gudda, Carmelaram, Chinnappa Layout, J P Park Jopdi, Nagavara Palya, Gulburga Colony, Hosakerehalli, Peenya, Kasturi Badawane, Sumanahalli bridge, JMC Labour Shed, Kothanur Dinne, Rachenahalli and Amrutahalli.

<sup>6</sup> Some of them are meant to protect the interests of construction workers in employment (regulating and improving working conditions to protect and promote their health, safety and welfare), wages (fixing of pay, periodic revisions and timely payment), employment security (freedom for workers to form or join trade unions and promote their welfare through collective bargaining, to provide for the prevention and settlement of industrial disputes) and ensure social security and benefits to workers (such as sickness, maternity, disablement and death), welfare facilities.

## Labour laws applicable to building and construction sector

The major labour laws applicable to regularising the wages, working conditions, safety and health, welfare measures, of the building and construction sector are: (1) Equal Remuneration Act, 1976, (2) The Minimum Wages Act, 1948 and (3) The Inter-State Migrant Workers Act 1979. Besides, these, other Acts formulated specifically to support the building and construction workers are (1) The Buildings and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996, and (2) The Building and Other Construction Workers Welfare Cess Act, 1996.

However, a majority of the construction workers are not aware of the provisions of the laws relevant to them. Non-registration of construction workers under the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and Welfare Cess Act, 1996 denies them access to welfare benefits as per the provisions of the Act. In some of the states, these Acts have not come into force as the Rules are yet to be framed to establish the Construction Workers' Welfare Boards at the state level. In many states, where the Welfare Boards have been established, the funds collected remain to be fully utilised. Implementation needs to be geared up. Most of the construction workers are not registered with the KOCW Board, and therefore they are denied the benefits under these laws. This was very much the case in Bengaluru city as well. A whopping 98% were not enrolled in the BOCW, thus denying them access to the varied benefits that the schemes offer. Even the registered were not aware of the benefits that could accrue to them. It was observed that the ones who registered were informed by the contractor indicating that health costs would be covered in case of accidents during work. However, they were not aware of any other benefits.

**The Building and Other Construction Workers Welfare Boards** As per Section 18 of the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996, every state government is required to constitute a State Building & Other Construction Workers Welfare Board. Some the schemes that directly and indirectly benefit children are discussed in Table 2.

**Table 2: Welfare Schemes under Karnataka Building and Other Construction Workers Welfare Board (KBOCWWB)**

No	Welfare Scheme	Criteria/Objective	Assistance
1	Assistance for Maternity	<ul style="list-style-type: none"> <li>Registered woman construction worker who should have registered one year back from the childbirth</li> <li>For the first two deliveries</li> </ul>	Sanction of Rs.30000/- for a female child and Rs 20000/- for a male child
2	Hospitalisation Assistance	<ul style="list-style-type: none"> <li>Registered construction worker</li> <li>If the construction worker is hospitalised for a minimum 48 hours continuously</li> </ul>	Rs 300/- per day of the hospitalisation to the maximum of Rs 10,000/-
3	Education Assistance	<ul style="list-style-type: none"> <li>Son or daughter of a registered construction worker who registered one year before</li> <li>For the first two children</li> </ul>	Financial assistance for construction workers' children <ol style="list-style-type: none"> <li>From 1<sup>st</sup> to 3<sup>rd</sup> standard students: Rs.2000 after completion</li> <li>From 4<sup>th</sup> to 6<sup>th</sup> standard students: Rs.3000 after completion</li> <li>From 4<sup>th</sup> to 6<sup>th</sup> standard students: Rs.3000 after completion</li> <li>From 7<sup>th</sup> and 8<sup>th</sup> standard students: Rs.3000 after completion</li> </ol>

			<ul style="list-style-type: none"> <li>v. From 7<sup>th</sup> and 8<sup>th</sup> standard students: Rs.4000 after completion</li> <li>vi. From 9<sup>th</sup> to 1<sup>st</sup> PUC students: Rs.6000 after completion</li> <li>vii. For second year PUC students: Rs. 8,000 after completion</li> <li>viii. For I.T.I/Professional Diploma courses of not &lt; 2 years duration: Rs. 7,000 after completion</li> <li>ix. Passing each year in any degree course: Rs. 10,000/ per year</li> <li>x. B.E or MBBS students: Rs. 25000 for B.E and Rs. 30000 for MBBS</li> <li>xi. Post Graduation: Rs. 20000 every year for two years</li> <li>xii. Doctoral research: Rs. 20000 every year</li> </ul>
4	House Assistance (Karmika Gruha Bhagya)	<ul style="list-style-type: none"> <li>• Registered period &gt; 5 years</li> <li>• Should have 15 years of experience</li> <li>• Should have own site of his/her spouse</li> </ul>	<ul style="list-style-type: none"> <li>• up to Rs.200,000 in instalments for the Government Housing Scheme to the government Agency concerned directly</li> <li>• Loan of Rs. 1.5 lakh if rate of interest if &gt;5%</li> </ul>
5	Assistance of LPG connection	Should be a registered construction worker	The assistance of LPG connection including two burner stove & refill every 3 months for his or her family
6	Marriage Assistance	Should be registered one year early as he/she is a construction worker	<ul style="list-style-type: none"> <li>• Rs.50, 000 to meet the marriage expenses also to the worker's two dependent children.</li> <li>• For each family there can be two claims for marriage assistance</li> </ul>
7	Assistance for pre-school Education & Nutritional support of the child (Thayi Magu Sahaya Hastha)	For registered women construction worker a period of 3 years from the date of delivery	<ul style="list-style-type: none"> <li>• Pre-school education &amp; Nutritional Support of the Child</li> <li>• Rs. 6000/- (at the rate of Rs 500 per month to the registered women</li> <li>• Only for the birth of first two children</li> </ul>
8	Disability Pension	<ul style="list-style-type: none"> <li>• The person who is disabled due to any disease or accident at worksite</li> <li>• Upto 60 years of age</li> </ul>	<ul style="list-style-type: none"> <li>• Ex-gratia payment of Rs.20000</li> <li>• Rs. 1000 per month as disability pension</li> </ul>
9	Accident Benefits	Should be a registered Construction worker	<ul style="list-style-type: none"> <li>• Rs.500000 for the deceased beneficiary/first living nominee in case of death</li> <li>• Rs.200000 for permanent total disablement</li> <li>• Rs.100000 in case of permanent partial disablement in proportion</li> </ul>
10	Assistance for Major Ailments (Karmika Chikitsa Bhagya)	Should be a registered construction worker	<ul style="list-style-type: none"> <li>• Grant an amount up to Rs. 2,00,000/- the rates prescribed under the Central Government Health Service (C.G.H.S)</li> </ul>
11	Assistance For BMTC Bus Pass	Registered and should be under BBMP limits	<ul style="list-style-type: none"> <li>• BMTC bus pass for travelling around the city</li> </ul>
12	Pension Schemes	<ul style="list-style-type: none"> <li>• Completed 60 years</li> <li>• paid subscription fee for a continuous period of not less than three years and remain as such construction worker until he attains the age of 60 years</li> </ul>	<ul style="list-style-type: none"> <li>• Rs. 1000 per month to the beneficiary</li> </ul>
13	Assistance to meet Funeral Expenses	<ul style="list-style-type: none"> <li>• Registered or immediately registered worker</li> </ul>	<ul style="list-style-type: none"> <li>• Rs. 4,000 for the funeral expenses</li> <li>• Ex gratia amount of Rs. 50,000 shall be paid to the nominee of the deceased registered construction worker</li> </ul>
14	Assistance for KSRTC bus pass	<ul style="list-style-type: none"> <li>• Should be children of registered construction workers</li> <li>• Permanent resident of a place in the state</li> </ul>	KSRTC student bus pass to the children of construction workers

**Table 3: Awareness of Government Welfare Schemes**

<b>Awareness of Government Welfare Schemes</b>	<b>Yes</b>	<b>No</b>
Awareness of Government Welfare Schemes	97	3
BPL Scheme	97	3
Anthyodaya Scheme	93.3	3.7
Scholarship for Class 1 to 5 at the rate of Rs. 1800 p.a	80.3	16.7
Scholarship for Class 6 to 10 at the rate of Rs 2400 p.a	60	37
Scholarship for Class 11 to 12 at the rate of Rs 3,000 p.a	48.7	48.3
Scholarship for graduation courses at the rate of Rs 10,000 p.a	46.7	50.3
ITI/vocational course/professional course at the rate equivalent to annual fee of govt institutes/colleges	46.3	50.7
Are you aware of Sarva Shikshana Abhiyana?	2.3	97.7
Do you know about free Student Bus Pass assistance for travelling KSRTC buses to and from the place of residence?	74.3	25.7
If there is a family member above 65 years of age, do you get 10 kgs of rice for free every month under Annapurna Yojane?	0.3	99.7

With respect to other welfare schemes, comparatively, they were aware and have availed certain benefits, particularly scholarships and bus pass to travel. A majority of the construction workers (98%) were not aware of the existence of the Building and Other of Construction Workers (BOCW) Welfare Board. Hence, they were not members. This highlights the gravity of the situation and the implications on their families and children. Those who were among the two per cent workers, registered from Karnataka state, also faced issues. Several of them were informed by the NGOs who helped them to join the board. One of the respondents reported that the procedure for joining the board was cumbersome. A few construction workers had identity cards issued by the board. They did not get messages and advertisements creating awareness about BOCW on phone and also had not seen any advertisement about BOCW nor did they come across any awareness programmes like camps, and other mediums to spread awareness about BOCW and employers had not mentioned about BOCW. Due to the lack of information about the existence of BOCW and due to lack of membership of the board, many of them were not receiving any benefits from the board. Only one of the respondents mentioned about the health-related schemes that he received under BOCW i.e. paid maternity leave to registered construction workers ranging from 90 days to 26 weeks for up to 2 deliveries. Lack of awareness about the board and its various benefits that workers are entitled to get is a serious issue that needs to be addressed immediately in order to improve the working and living conditions of the construction workers.

## **The State of Education and Nutrition of Construction Workers’ Children in the Study Area**

### **Background Characteristics of Migrant Construction Workers**

The socio-economic conditions of the construction workers spread across Bengaluru are characterised mainly by their low income, low educational levels and poor physical/environmental conditions. In our study region, a majority of the construction workers belonged to Hindu religion (73.7%) followed by Muslim religion (12 %). Only one per cent of them followed Christianity. With respect to caste, a

majority (45%) belonged to Other Backward Classes (OBCs), 35 per cent belonged to Scheduled Castes, followed by Scheduled Tribes (7%). Only a small percentage of respondents (1.3%) were of general category. Among the respondents surveyed, 62 per cent were male and 39 per cent female. With respect to marital status, a majority of them were married (93.3 per cent), whereas a small portion (4.3 per cent) of the respondents were either widows, widowers or separated. With respect to education levels of the respondents, a majority were illiterate (50 per cent), followed by education till middle school (VI - VII) (24 per cent) and high school (13 per cent) indicating the low education profile of the construction workers. Only 9 per cent had primary schooling till the 5<sup>th</sup>. Most of the construction workers in our survey were unskilled working as labourers and helpers etc. The skilled workers constituted around 17 per cent working as masons, carpenters, plumbers, painters and electricians etc. The others were mainly women working as domestic help and as homemakers.

**Table 4: Education and Occupational Type - Distribution of Migrant Construction Workers**

<b>Education</b>	<b>Percentage of respondents</b>
No Schooling	50.3
Primary (I-V)	9.0
Middle (VI - VII)	23.7
High School (VIII - X)	13.0
Pre-University (11th/12th Standard)	2.7
Graduation	1.3
<b>Total</b>	<b>100</b>
<b>Occupational Type</b>	
Unskilled (Labourer, Helper)	51.0
Skilled (Mason, Carpenter, Plumber, Painter, Tile Laying, Electrician)	16.9
Others	32.1
<b>Total</b>	<b>100</b>

*Source:* Based on Primary Survey

## **Migration**

According to the latest NSSO estimates, the construction sector is at the forefront of sectors employing labour migrants and is also a sector which has seen a rapid increase in employment in recent years. The highest percentage of short duration migrants work in construction sector (36.2%), followed by agriculture-related sector (20.4%), and manufacturing (15.9%) (Srivastava, 2011). The migration profile of construction workers in the survey reveals the evidence of seasonal/circular migration as an important subsistence strategy undertaken by the construction workers and thereby supports the NSSO estimates. Among the workers, the number of workers who migrated to Bengaluru has increased after the year 2000. The results found that around 50 per cent of the workers have migrated after 2010 and between 2001 and 2010 it was 33 per cent. This is in line with the increased growth of software companies in the Silicon Valley of India and also the booming construction industry.

**Table 5: Year of Migration of the Construction Workers**

Year of migration	Percentage of workers
More than 40 years	0.7
In last 40 years	1.3
In last 30 years	14.7
In last 20 years	33.0
In last decade	50.3
<b>Total</b>	<b>100</b>

*Source:* Based on Primary Survey

Influx of construction workers to Bengaluru have been both from inter-state and intra-state. However, migration is mainly from within Karnataka (61%). A majority of the workers have migrated from the northern part of Karnataka, especially from Hyderabad-Karnataka region. Migration from Raichur (24%) and Yadgir (22%) tops the list followed by Bellary, Koppal and Gulburga. These are places that are mainly drought prone and less developed than the other districts. Other places from Karnataka include Ramnagara, Bijapur, Bagalkote, Mandya, Uttara Kannada and Mysore. The other 40 per cent of them have migrated from other states of India among which West Bengal (10%), Bihar (8%) and Andhra Pradesh (3%) top the list. The other states from where the construction workers have migrated to Bengaluru are Assam, Telangana, Haryana, Uttar Pradesh, Himachal Pradesh, Tamil Nadu, Jammu and Kashmir, Uttarakhand, Rajasthan, Madhya Pradesh and Jharkhand. Low wages (58%) and lack of employment (31%) at the native places are the main reasons for migration of construction workers. The other reason for their migration is to attain better economic status (3%). In addition, low education level is one of the main reasons for people to migrate to other places as they do not get any employment at the given level of education.

Having come from different places, a majority of them retain strong connections with the native place which they visit at the end of the working season or holidays or on festival days or harvesting seasons or when there is not enough work at the destination, confirming their status as circulatory migrants. A majority of them visit home once in six months (75%), once in a year (15%) and a few of them once in three months (10%). Some workers are recruited for a specific duration or seasonally and go back to their places of origin at the end of this period, others stay on, rotating between one site and another, and return occasionally to their places of origin. The details of the period of migration show that these construction workers are here in Bengaluru since more than 40 years. However, among the construction workers we surveyed, a majority had an experience of 5 years (51%) and around 30 per cent had an experience of 6 to 10 years, indicating most of them had come into the construction sector from the past 5 to 10 years.

**Table 6: Years of experience in construction industry**

<b>Years of experience in construction industry</b>	<b>Percentage</b>
5 years	51
6 to 10 yrs	30
10-15 yrs	11
16-20 yrs	7
more than 20 yrs	0.33
<b>Total</b>	<b>100</b>

*Source:* Based on Primary Survey

The friends and relatives are the main sources who convey the information about employment opportunity in urban areas among all kind of workers i.e. skilled, unskilled etc. Accordingly, our survey shows that 99 per cent of the workers have been helped by their friends (71%) and relatives (28%).

### **Housing and Housing Amenities**

The workers stay in small sheds, either on the construction site/basement or on neighbouring vacant sites or on the roadside. These tents/sheds are made with plastic sheets and do not have any ventilation. Sometimes asbestos sheets are also used to build such transitory shelters. About 5-6 members live in these types of sheds. Those who work for construction companies and stay on sites do not pay for these sheds but the workers who work for small contractors and stay on the neighbour's vacant sites have to pay Rs. 250-300 per month for the tent.

Many of the respondents (49%) live in the rented houses, while 36 per cent lives in the make-shift dwelling located near construction sites and a negligible number of respondents that is, 2.7 per cent live in their own houses. With respect to type of houses, a majority live in kachcha houses (58.7%), followed by those in semi-kachcha (15%) and tiled (15%) houses. Some construction companies make provision for dwelling facilities to the labourers, while a majority of labourers have to build temporary huts/tents by themselves, near the site. In some cases, the construction company does not make provision for any electricity, sanitation facility, and water to the construction labourers. Except for the dwelling place provided by the builder/developer, the labourers have to pay rent for their sheltering places or houses. More than 40 per cent of the respondents pay rent below Rs.1000/month, 13 per cent of the respondents pay between Rs. 2000-3000 and only 5 per cent pay Rs. 5000 and above.

### **Education**

Education has always been a major part of social improvement as the shifting factor in a civilisation. Education empowers scientific advancement, economic development, enables people to provide for themselves and their families, allow for individual enrichment with personal growth. Hence education plays a vital role in the development of the economy and society. The importance of giving education to children is also well realised by the construction workers. The Sarva Shikshanaa Abhiyan and other awareness schemes of government along with the aspiration of the parents to see their children to

move out of poverty trap have encouraged education among the children of migrant construction workers. In this backdrop, the educational status of children was reviewed.

Table 7 further reveals that close to 39 per cent are going to ganawadi Anganawadi centres. Around 32 per cent are primary school going children followed by 8 per cent in middle school and around 11 per cent in high school. The college going children are less in number (5.3%). However, there are a few children who are not interested in studies and hence drop-outs. There are 5 per cent in this category who dropped out of college (16 children), high school (6 children) and middle school (one child).

**Table 7: Education Distribution of Children**

Education	Age pattern	Male (N=265)	Female (N=195)	Percentage (N=460)
Ganawadi Anganawadi centres	3 to 5 years	21.9	16.5	38.5
Primary School (I to V Std)	6 to 11 years	17.2	15	32.2
Middle School (VI to VII Std)	12 to 13 years	5.2	3	8.3
High School (VIII to X Std)	14 to 16 years	5.9	4.8	10.6
Pre-university College	17 years	3.7	1.5	5.2
Dropouts	13-17 years of age	3.7	1.5	5.2
<b>Total</b>		<b>57.6</b>	<b>42.3</b>	<b>100</b>

*Source:* Based on Primary Survey

*Note:* Figures in parenthesis indicate percentages

\*13-17 years of age

With respect to the distance between the education centre and their place of dwelling: for 93 per cent of anganawadi going children, anganawadi centre was accessible easily with the distance of less than 0.5 kms and was close to the construction and the dwelling sites. (38.5 per cent), while for 6 per cent of them it was accessible between 0.5 kms to 1 kms. The proximity of the anganawadi centres and their dwelling place was not more than 1 kilometre, giving the toddlers the advantage of distance. Further, 72 per cent of their schools and colleges were located within one kilometre, 16 per cent between one to two kilometres, around 2 per cent up to 4 kilometres and less than one per cent had to travel up to 5 kilometres for school/college. This shows that distance cannot be a discouraging factor for the children to stay away from school.

Though the education centres are close to their residences, the work places change frequently for the construction workers. They keep on moving from one project to another upon completing the construction. Hence they are worried about leaving their children back in their house unattended, when they go out for work. In the case of our sample, almost all of them (99 per cent) had this insecure feeling. It was observed during the survey that whole families of parents and sons and daughters and their respective families had migrated to Bengaluru and they were working in the construction sector. When one family was away on work, the other family members would assume the responsibility of taking care of the child – like sending the child to school and take care of them after they return from school in the evening till their parents return from work. It is also interesting to see that the elder sisters, 8 per cent of the children, also helped in taking care of the younger siblings in a few families.

There were also instances of parents carrying the toddlers to the construction site when there was no one to take care of them (6 per cent) at home. During focus group discussions, parents revealed that the timings of anganawadi was not conducive when both parents planned to work as the timings did not match with the time of work, and hence, a majority of the time, one of them had to remain at home. As many as 86 per cent of the respondents in our survey took care of their children or other family members when they went out for work. Taking children along with them made the children vulnerable to various diseases related to construction work, exposure to dust causing respiratory ailments, poor water quality and sanitation, causing like malaria, skin infections, etc.

**Table 8: Who takes care of children if parents are out for work**

Children's responsibility taken by	Per cent
Spouse	85.7
Elder Daughter	7.7
Grandparents	0.6
No one, carrying to worksite	6.0
Total	100.0

*Source:* Based on Primary Survey

Most of the respondents preferred government schools (68%) and 10 per cent preferred private school for their children. However, rest of the respondents were reluctant to respond.

**Table 9: School details and regularity to school among the children**

Type of school	Male (N=265)	Female (N=195)	Percentage (N=460)
Government	86.7	86.2	86.5
Private	13.3	13.8	13.5
<b>Medium of instruction</b>			
Kannada	50.4	62.9	55.7
English	10	14.6	12
Others (Tamil, Urdu)	24.9	17.1	21.5
No response	14.7	5.4	10.8
<b>Regularity to school</b>			
Regular	95	95	95
Irregular to School	3	2	2.4
Drop Out	2	3	2.5
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

*Source:* Based on Primary Survey, 2019

When we reviewed the educational status of children in the households that were surveyed in this study, we found that all children, both boys and girls, were enrolled in schools. While a majority (56%) studied in Kannada medium schools, a smaller percentage of children (12%) studied in English medium schools, followed by much smaller percentage of children studying in Urdu and Tamil medium

schools, indicating a high preference for Kannada medium education. It is seen that a majority of the children, that is 95 per cent, are attending school on a regular basis. Around 3 per cent are dropouts who are mainly from college, high school and middle school. They are either working in construction sites or elsewhere and a few were not doing anything. "Not interested" is the oft-quoted reason for dropping out of school. Other reasons are frequent changing of locations, distance, financial constraints and difficulty to get admission.

Interestingly, none of the school going children were availing any benefit from the government towards education, which is largely due to information asymmetry and at the same time are not working after their school hours. Similarly, the schemes from BOCW also remain untapped by these workers as a majority of them do not have its membership.

### **Awareness of and Access to Education Schemes for Children**

Many schemes for education initiated by the government, particularly for the benefit of the construction workers' children, are unknown to these workers. Similarly, the schemes from BOCW also remain untapped by these workers as a majority of them do not have its membership. Children are getting food under the mid-day meal programme and at anganawadi and the mid-day meal in schools, which they enjoy. Those going to government schools did not have to pay the fees, whereas those in private schools did by default. They were asked if education schemes like Sarva Shikshana Abhiyan, Strengthening for Providing Quality Education in Madrassas (SPQEM), Rashtriya Madhyamik Shiksha Abhiyan (SSA) which help the poor students were availed. Also there was no assistance from any individuals, construction companies or CSR programmes that covered the education of these children.

Though the awareness levels about particular programmes were low, it was found that many of the children got uniforms and books from the school. There was some awareness about scholarship schemes prevalent for children from the economically backward background. Around 80 per cent knew about the scholarship for children in class 1 to 5; 60 per cent about scholarships from class 6 to 10; around 49 per cent knew about scholarships for children from class 11 to 12; Close to 75 per cent also knew about the student bus pass facility. This awareness was created by the teachers of the government schools where the children studied. It was reported that the school teachers would fill up the application forms for the schemes relevant to these children. Many of them have benefitted by these schemes. However, around 98 per cent of them did not know about the name Sarva Shikshana Abhiyana even though they are aware that every child of the age of six to fourteen years are eligible to free and compulsory education till the completion of elementary education and the children were given uniforms and books in school for free.

**Table 10: Awareness of Government Welfare Schemes among the Respondents (in percentage) (N=300)**

<b>Awareness of Government Welfare Schemes</b>	<b>Yes</b>	<b>No</b>
Scholarship for Class 1 to 5 at the rate of Rs. 1,800 p.a	80.3	16.7
Scholarship for Class 6 to 10 at the rate of Rs 2,400 p.a	60	37
Scholarship for Class 11 to 12 at the rate of Rs 3,000 p.a	48.7	48.3
Scholarship for graduation courses at the rate of Rs 10,000 p.a	46.7	50.3
ITI/Vocational course/professional course at the rate equivalent to annual fee of govt institutes/colleges	46.3	50.7
Are you aware of Sarva Shikshana Abhiyana ?	2.3	97.7
Do you know about free student bus pass assistance for travelling KSRTC buses to and from the place of residence?	74.3	25.7

*Source:* Based on Primary Survey, 2019

The above are the schemes available to government school going children and are general in nature and are not from BoCW. The workers are aware of the schemes that are general. However, when workers were asked which scheme was availed by them, they were unable to reply. The study reveals that the 2009 Right to Education Act, Sarva Shikshana Abhiyana, ICDS, anganawadis have ensured that no child is out of school. One student in Hosakerehalli has enrolled in the school through RTE.

It is to be noted that there is provision to extend ICDS services to children of migrant labourers and temporary residents through the setting up of Mini-anganawadis even at scattered habitats of migrant workers. As per the circular of Ministry of Women and Child Development has issued a circular (on 13th April 2011). The Sarva Shiksha Abhiyan (SSA) also has provisions for setting up of tent schools, mobile schools, residential and non residential bridge courses, induction of language tutors, special admission drives and community mobilisation programmes to enable them to pursue education, worksites schools at the location where migrant families are engaged and bridge courses/remedial courses focusing on mainstreaming of children. However, these were not found in any site. To improve the reach of education among migrant construction workers, it is very important that government should think out of the box and bring them in mainstream policy making. Specifically, introducing mobile creches at workplace, more proactive action in extending the existing scheme/incentives to migrant construction workers is the need of the hour as aptly argued by the GoI 2017 report of the Working Group on Migration of the Ministry of Housing and Urban Poverty Alleviation.

### **Nutrition Status of Migrant Construction Workers' Children**

Nutrition is one of the strong pillars to explain the status of intra-household food security. Thus, of late there has been a systematic shift in explaining the status of food security from mere availability and accessibility to nutrition status of household. At all-India level, comparable statistics reveals that between the NFHS-3 (2005-06) and NFHS-4 (2015-16), there has been a 16 per cent decrease in the underweight prevalence among children below 5 years (All India level). Underweight prevalence in children under 5 years (composite indicator of acute and chronic under nutrition) has declined in all the states and UTs (except Delhi), although absolute levels are still high. Issues surrounding nutrition have

gained prominence given their effect on cognitive development of children under five, besides affecting the economic productivity and growth in the long term. It is in this context, this section outlines the status of nutrition among construction children aged between 0-5 years.

**Table 11: Nutritional Status of Children 2015-16**

	<b>Infant Mortality Rate (IMR)</b>	<b>Under 5 Mortality Rate</b>	<b>Children under 5 who are stunted (%)</b>	<b>Children under 5 who are wasted (%)</b>	<b>Children under 5 who are underweight (%)</b>	<b>Children aged 6 - 59 months who are anaemic (%)</b>
<b>India</b>	41	50	38.4	21.0	35.8	58.6

*Source:* IMR Rates: RBI ; Other indicators NFHS 4

The most accepted indicator of nutrition status are the anthropometric measures, which highlight height for age, weight for height and weight for age. Stunting (Height for age) refers to low height for age indicating chronic hunger. Chronic malnutrition is an indicator of linear growth retardation that results from failure to receive adequate nutrition over a long period and may be aggravated by recurrent and chronic illness. Wasting (Weight for height) is an age independent measure referring to the ratio of weight to height. This indicates a recent failure to receive adequate nutrition and may be caused by diarrhoea and/or any other acute illnesses. Weight for age refers to weight that is less than expected for age due to insufficient food or illness and is the commonest indicator used in measuring malnutrition in children since their weight changes significantly with age unlike for adults. This condition can result from either chronic or acute malnutrition, or both<sup>7</sup>.

These anthropometric measurements of children are calculated using the WHO guidelines<sup>8</sup>. The children are classified as stunted, wasted, and underweight depending upon the Z-score value which was calculated using WHO Anthro Software<sup>9</sup> (see for table 12).

**Table 12: Most common anthropometric indicators to assess child nutrition status**

<b>Indicators</b>	<b>Value</b>
Stunting	Height-for-age < -2SD
Severe wasting	Weight for Height < -3 SD
Wasting	Weight for Height < -2 SD
Overweight	Weight for Height > +2 SD
Underweight	Weight for age < -2SD

*Source:* WHO, 2006

<sup>7</sup> World Health Organisation. The use and interpretation of Anthropometry - Report of WHO Expert committee. WHO Tech Rep Series 854. WHO, Geneva. 1995.

<sup>8</sup> World Health Organisation. Multicentre Growth Reference Study Group: WHO Child Growth Standards: Length/Height-for-Age, Weight-for-Age, Weight-for-Length, Weight-for-Height and Body Mass Index-for-Age: Methods and Development. Geneva: World Health Organisation; 2006.

<sup>9</sup> version 3.2.2, 2011, Department of Nutrition, World Health Organisation, Avenue Appia 20, 1211 Geneva 27, Switzerland.

A total of 277 children participated in the study. In the study, boys and girls accounted 54.2 and 45.8 per cent respectively. The age-wise of distribution among boys and girls indicate (see table 13) maximum participants (24.5 %) belonged to age four.

The results presented in table 13 clearly indicate the presence of the double burden of malnutrition (DBM) in the study area. On the one hand, stunting, which explains the chronic under nutrition in the study area is around 11.2 per cent, with hardly any incidence of wasting i.e., acute under nutrition. On the other hand, the higher incidence of overweight is observed (71.8 %)<sup>10</sup>. This figure definitely challenges the existing notion wherein malnutrition is always used in connection with under-nutrition. Such an emerging trend could be largely because of the changing landscape of nutrition intake due to changes in lifestyle, easy access to processed foods, lack of sanitation, lack of physical activity due to the easy access to other forms of entertainment among children and so on<sup>11</sup>. Any attempt to address the issues surrounding DBM will also facilitate to achieve the Sustainable Development Goals (Goal 2 and Target 3.4) and the Commitments of the Rome Declaration on Nutrition, within the UN Decade of Action on Nutrition. This certainly calls for thinking beyond conventional measures to tackle the problem. Specifically, both parents and children need to be better informed about the daily nutritional requirement of the body, and the proactive role of anganwadi centre in monitoring the food habits of young children also plays an important role in creating the awareness. Because, any intervention at early age not only helps in reducing the double of burden of nutrition at early age but also prevents the adulthood obesity and related consequences.

Across gender, obesity/overweight is observed more among boys (41 %) followed by girls (31.6 %). Across occupation category, the incidence of DBM is higher among the unskilled labour family. Across caste, ST followed by OBC household children reported higher incidence of nutrition problem.

**Table 13: Age distribution of sample children**

<b>Age in Months</b>	<b>Number of Children</b>
0-12 months	20.9
13 -24 months	14.8
25 - 36 months	21.2
37 - 48 months	24.5
49-60 months	18.4
Total	100

*Source:* Based on Primary Survey

<sup>10</sup> Also refer to Appendix figure 1 and 2

<sup>11</sup> See for details: Uustialo *et al* (2002); Mendez and Popkin (2004) ; Chopra (2004);

**Table 14: The status of nutrition of construction workers' children in the study area**

Indicators of Nutrition security	Overall	Gender		Occupation			Caste					Religion			
		M	F	Skilled	Unskilled	Others	SC	ST	OBC	General	Others	Hindu	Muslim	Christian	Others
Stunting	11.2	5.4	5.7	2.9	5.7	2.5	0	5	3.6	0	2.1	7.2	2.5	1.4	0
Overweight	71.8	41	30.6	21	32.8	17.6	26.7	2.8	30.3	1	10.8	55.2	7.5	2	6.8

*Source:* Based on Primary Survey

## Summary

Urbanisation-induced migration is the new order of the economic development the world over. The process inevitably brings forth numerous challenges to the migrating worker – specifically women and children. It is in this context, taking the case of Bengaluru City, that the present paper has attempted to examine the status of education and nutrition among construction workers' children. The analysis is based on primary survey conducted in 14 sites in the city. The analysis so carried out helps us to argue that the migrant construction workers have not availed any benefit from the government. During the survey, it was observed that almost all migrant construction workers were not registered under the BOCW (98%). Hence the assistance provided for the migrant construction workers' children in terms of scholarships, bus pass etc remains unclaimed. Hence, the government initiatives to help the construction workers have remained untapped.

The parents are aware of the free and compulsory education for children in the study area. However, the measures announced by the government like tent schools, mobile schools and crèches at construction sites were missing. It was observed that education of children also suffered as the project completed or the contract ended with the developer. As a result, when construction in one site or one project was completed, the workers moved on to another site. This made it difficult to the children to remain in one school till they completed their study or to be regular to the school. In such a situation, many of them also lost interest in studies.

The survey also uncovered the nutrition status of these children. The prevalence of the double burden of nutrition was clearly visible in the study area. This among others was attributed to the changing food habits – specifically towards the consumption of processed foods in the urban setting and ignorance about the healthy food habits seems to affect these children. Given the current ongoing pandemic, its possible impact on this segment of the society is worth investigating further. Specifically children who are out of anganawadi/school and thereby deprived of the right to education along with their mid-day meal, which was otherwise available. Though the government has introduced many schemes to combat the social and economic strains of the pandemic, its real reach and effectiveness is yet to be seen in the coming days. Online education, which has become the new normal even for younger children, the unmet demand for the availability of smartphones and internet connections, which is far from the reach for these children/parents would definitely have a far-reaching impact on their learning capabilities and also their employability in coming days. This may also contribute significantly to the number of school drop-outs in the near future.

## Policy Recommendations

- The children in the areas surveyed were mostly enrolled in schools except for 2.3 per cent in the age group between 13 and 17 years. There was no specific reason for them to stay away from school. They were simply not interested in studies. There were also children who were irregular to school. And if their issues were not addressed at an early stage, they might eventually drop out from the school.
- The risks encountered by the construction workers and their families, particularly children, affect their health, well-being, safety and much more. Our study reiterates that there is need for more

responsibility from the government and the corporate side to systematise the processes to ensure better lives for the construction workers' families, particularly children.

- 98 per cent of the migrant construction workers were not enrolled in the BOCW; thus, their access to any benefits gets completely missed out, making it as good as non-existent. Even the ones that are enrolled are clueless about the benefits and about processing it. It is extremely important that a systematic process should be put in place to ensure that they benefit from the well-designed schemes that focus on the welfare of children of construction workers, particularly their health and education.
- The existence of the double burden of malnutrition (DBM) calls for thinking beyond conventional measures to tackle the problems in the study area. Undoubtedly, the sustained intervention of anganawadis is welcome to ensure food and nutrition security at an early age; there is also equal need to educate both parents and children about the daily nutritional requirements of the body and need to follow good food habits at an early age.

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