



Impact of COVID-19 Pandemic on Construction Workers – Glimpses from Few Projects in India

Presented by:

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Global Impact of COVID-19 Pandemic

- Since declared as pandemic by WHO in 2020 ; Impact of COVID-19 on global population is seen as unprecedented and massive.

From day-to-day life to global economy....

- Millions of people became sick and lost their life's
- Global workplaces:
 - Unemployment
 - Underemployment
 - Less/No wages
 - Disruption in supply chains etc.
- World Bank estimates, as many as 150 million people are likely to be in extreme poverty by 2021



Construction Sector

Construction Sector - India

- Second largest employer after agriculture
- Employs around 55 million people
- Contributes to 9 -11% of the GDP.
- Prior to pandemic disruption, There were
 - ❖ Over 20,000 ongoing construction projects and
 - ❖ Work was being undertaken in as many as 18,000 sites*.



Source: Confederation of Real Estate Developers Association of India

Typical Features of Construction Industry

- Transient nature of the job
- Presence of Sub-contractors
- High rate of turnover
- Low level of mechanization
- Migrated labor – accommodation, transportation
- Lack of skill/ education
- Mostly unorganized
- Casual nature of manpower





Impact on Indian Construction Workers

- Outbreak of COVID-19 followed by lockdowns has impacted various sectors including construction
- Impact - Availability of resources, deliverables, health and safety measures, and project delays or cancellations
- Majority of construction workforce being migratory in nature, had to encounter unprecedented challenges
 - Sudden loss of income
 - Food Shortages
 - Worries over future prospects





Occupational Health & Safety – Construction Industry

- Globally, Construction often regarded as one of the most hazardous occupation
- Construction Accidents – Indian Scenario
 - 950 Deaths per day due to occupational accidents,
 - 38 deaths per day in construction sector
 - 48000 Occupational accidents per year,
 - 11614 in construction

**Source: Patel, D A and Jha, K N (2016) An Estimate of Fatal Accidents in Indian Construction. In: P W Chan and C J Neilson (Eds.) Proceedings of the 32nd Annual ARCOM Conference, 5-7 September 2016, Manchester, UK, Association of Researchers in Construction Management, Vol 1, 577-586.*

Key Occupational Safety concerns...

- Fall from Height
- Fall of material from height
- Hit by Object
- Contact with moving machinery (caught in between)
- Slip, trip and fall
- Fire & Explosion
- Collapse of scaffolding, soil, building etc.



Key Occupational Health concerns...

- Musculoskeletal disorders (MSD)
- Exposure to high level of noise - Hearing damage
- Hand arm vibration syndrome (HAVS)
- Dermatitis
- Respiratory illness: silica dust
- Stress
- Reduced wellbeing etc.



Though some sectors could move to “Work from Home”, construction projects needs physical presence of healthy fit workers

Challenges Posed by COVID-19

- In addition to the existing risks, minimizing the spread of the virus has become a top priority
- Challenging because :
 - Often must work in very close proximity
 - Common accommodation & transportation
 - Common facilities such as dining & drinking water facilities
 - Sharing of tools etc.

In construction sector, only few categories of people like designers, procurement etc can opt for work from home

Additional Challenges....

- Limited availability of employees
- Unskilled/New workforce
- Limited Training programs
- Delayed Audits & Equipment inspections
- Regular disinfection and sanitization of workplaces
- Material delay/shortages
 - ✓ PPE
 - ✓ Sanitizers/Disinfectants



Fear of infection and disruptions caused by the pandemic can have significant impact on Mental Health of employees.

Factors –

- Restricted movement
- Temporary unemployment
- Lack of physical contact with friends, family members
- Education of Children etc.

**COVID-19 Impact
on Mental Health**



Glimpses of Control Measures taken by Organizations

Awareness through Visual Display



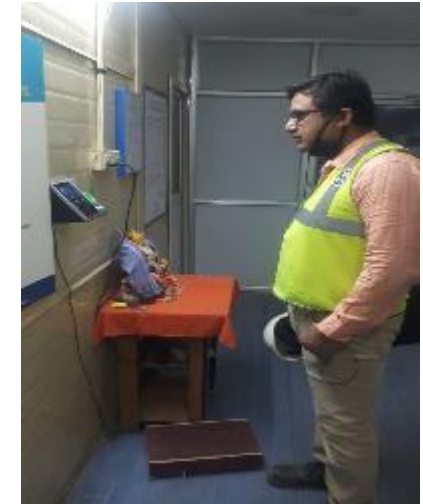
Awareness through Audio Message



Thermal Screening at Workmen Habitat and Workplace



Contactless Attendance System



Transportation



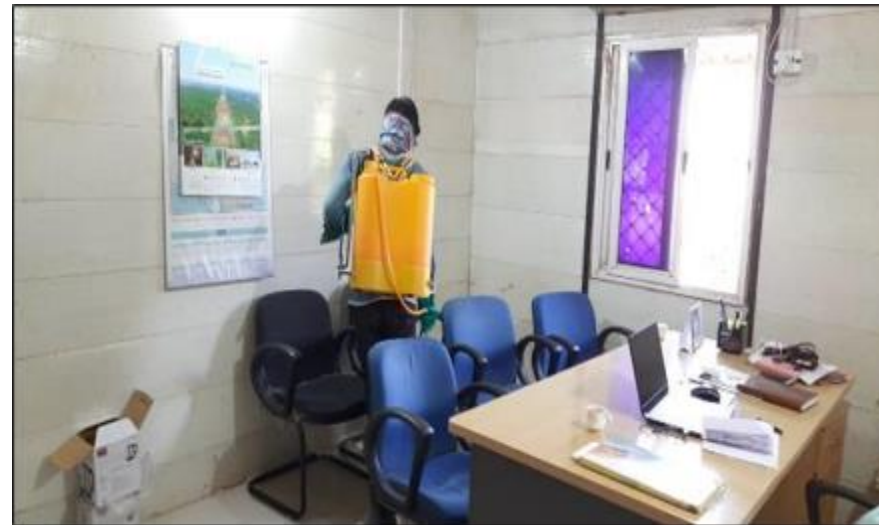
Physical Distancing at Workplace



Disinfection of Surfaces and Equipment



Disinfection of Surfaces and Equipment



Health Surveillance



Hand Free Sanitizer Dispensers



Location 1



Location 2



Location 3



Location 4



Location 5



Location 6



Location 7



Location 8

Unnamed Road
Dhelaun
Sundargarh
Odisha
Altitude: 159.5m
Speed: 0.0km/h
Index number: 32
4 May 2020 6:29:29 pm

Usage of Pulse Oximeters



Location 1



Location 2



Location 3



Location 4



Location 5



Location 6



Location 7



Location 8

Usage of Face Shield for Close Contact Work



