The Migrant Accommodation Project

A Participatory Approach Towards Engaging Migrant Workers in the Improvement of the Dormitory

A joint research by:

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Soap Cycling Singapore
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Who We Are

In response to the COVID-19 outbreak that spread rapidly in migrant worker accommodations, the Solidarity Collective (comprising of Here With You–Migrants Helpline (HWY), Soap Cycling Singapore (SCS), and Migrant Workers Singapore (MWS)) launched a research study to better understand living conditions and the emotional and mental effects of Singapore's movement restrictions on migrants and to provide solution models for dormitory improvement.

Here With You–Migrants Helpline is a helpline for migrant workers operated by Here With You Social Services. It employs a community-centric practice which involves social workers, counsellors and native speakers volunteers working collaboratively with migrant peer support volunteers to support and empower migrants-in-distress. Since Singapore's lockdown, HWY has attended to calls from distressed workers regarding issues related to salary, work injuries, accommodation, COVID-19, and mental and emotional health. From the lockdown in April 2020 to December 2021, the helpline attended to 2122 migrant workers.

Soap Cycling Singapore is a community-centric, non-profit social enterprise that works with students, hotels, businesses, volunteers, and charities across Asia to recycle soap. In a movement to improve sanitation and hygiene, the organisation collects, cleans, and renews lightly used/unused soaps that are about to be thrown out by the hospital industry and fragrance manufacturers. Its efforts help support recycling and greener living, as well as waste reduction by distributing soap to communities that need this simple but precious resource most. During the height of the COVID-19 pandemic in 2020 and 2021, Soap Cycling Singapore helped the migrant community cope with the COVID-19 pandemic by providing about 1000kg of soap to support their hygiene and health.

Migrant Workers Singapore (MWS) is a ground-up migrants' initiative that provides a platform to showcase migrant talents and shared culture. They previously organized migrant performances in 2018 and 2019 for significant events at migrant recreation centers, such as International Migrants' Day. MWS collaborated with the Here With You-Migrants Helpline in recruiting migrant volunteers to support workers-in-distress during COVID-19 pandemic and providing them with mental health support.

Executive Summary

This report presents a participatory approach towards engaging migrant workers in identifying key issues faced in dormitory living conditions during COVID-19 and collaborating with them in co-creating solutions together.

It strives to provide a comprehensive account of male migrant workers' dormitory living conditions in Singapore during COVID-19. Hundreds of thousands of low-waged male migrant workers live in dormitories scattered around the island. These housing infrastructures are vital to the production and development of the city yet improvements to them have been sluggish. The outbreak of the COVID-19 virus led to heightened scrutiny over dormitory conditions with promises of improvements to be implemented. However, residents of these dormitories rarely have their voices heard. Through this project, we attempt to center some of these voices.

Putting living arrangements and conditions at the centre, this report gives attention to the everyday experiences of migrants living in the dormitories and highlights migrant workers competencies in contributing to solution-finding.

Part I highlights issues on: (1) Living arrangements in the dormitory such as bed space, storage, and toilet conditions among others (2) Movement restrictions within the dormitory between April 2020 and December 2021 when dormitory residents were confined to their living spaces (3) Residents' physical and emotional experiences of this confinement during the same period.

Part II presents migrant workers' suggestions from focus group discussions and interviews to improve living arrangements in dormitories and the first iteration of a design concept, Design Concept 1. We detail the improvements workers' suggested for each feature and Design Concept 1's unique modular features and layouts.

Part III elaborates how collaborative solution-finding was employed with migrant workers to refine Design Concept 1 re-design and re-imagine their dormitory room. Thereafter, we details a second iteration of the design concept, Design Concept 2. We theorize the resulting choice of Lego for data collection and present details of workers' improvement models. We also present how improvement are incorporated into a second iteration of the design concept, Design Concept 2.

Part IV discusses how new improved recommendations by the Ministry of Manpower (MOM) compare with migrants respondents' suggestions for improvements and their improvement models, highlighting areas where MOM's improved recommendations aligned with migrant workers ideal accommodation and where they have fallen short. It concludes with how future dormitory standards can be further improved for migrant workers.

Giving attention to what constitutes their accommodation quarters, its facilities and amenities, and how they feel toward and navigate their lived spaces provides insights to an array of issues that can be addressed by government and non-government organisations collaboratively. Besides adding to the discourse on migrant workers living conditions in Singapore, this report also highlights how participatory research, especially in relation to re-designing dormitory living arrangements, is beneficial and constructive for any organisation working on migrant worker issues.

Methodology:
From June 2021 to October 2021, a series of Focus Group Discussions (FGDs) were conducted online over Zoom with three to four Bangladeshi migrant workers participating in each session. Because migrant workers were not allowed out of the dormitory, hosting focused discussions online was the best way to ensure the safety of our respondents.

Participants were recruited through informal networks and the Here With You - Migrants Helpline (HWY). Before the FGD, respondents were asked about their place of residence so that they could be grouped according to their housing type. Respondents were mainly employed in the construction and marine sectors. In total, 16 FGDs consisting of 41 respondent interviews were conducted: in terms of dormitory type, 18 lived in Purpose-Built Dormitories (PBDs); 16 in Factory-Converted Dormitories (FCDs); 6 in Construction Temporary Quarters (CTQs); one in a Quick-Build Dormitory (QBD).

With the easing of movement restrictions by June 2022, we adopted a collaborative approach to involve migrants in improving dormitory conditions. We applied participatory methodology with 21 migrant workers over three participatory group in-person meetings. Respondents were presented with a conceptual design (Design Concept 1) of a dormitory living space constructed by an interior designer based on their responses from the initial round of FGDs. Following respondents' reflections and analysis, we invited participants to collaborate in deciding data collection methods to provide feedback and improvements to Design Concept 1. Art materials, writing and the use Lego® bricks were offered as options to articulate their points of recommendation. Participants presented their ideas through constructing their ideal accommodation models and this was taken to form the basis for a second iteration of a conceptual design (Design Concept 2) of the dormitory room.

Key Findings:
Concerning dormitory living arrangements

- Overcrowdedness continues to remain an issue especially in PBDs. Cramped conditions make the room messy and difficult to move around
    - Lack of privacy to speak to one's loved ones
- Poor ventilation in the rooms caused by unrepaired fans and/or lack of fans
    - Rules on allowance of personal fans are unstandardised across dormitories
- Electricity power sockets are not present in some dormitory rooms. This is more common in FCDs.
- Lack of storage cabinets and spaces creates mess and pests in the rooms

- Insufficient washing machines in the dormitories.
- Some dormitories ban hand-washing of clothes, forcing residents to spend unnecessarily on laundry services or use the washing machines
- Laundry services can cost about SGD$18/month
- Drying spaces for laundry is too small or do not get enough sunlight
- Toilets are overused in the mornings and evenings after work. Queues can range from 20 - 60 minutes
- Lack of privacy/curtains in shower cubicles
- Shower faucets, sinks, and toilets might not all be working
- Punitive measures are sometimes taken against residents who complain or make a report on faulty appliances and amenities
- Housing deductions for utility bills are calculated arbitrarily

Concerning Movement Restrictions in Dormitory During Lockdown Period

- PBD residents were subjected to greater surveillance and security policing compared to FCD and CTQ residents
- PBD residents had to go through security checkpoints located at housing blocks
- The four hours given when a Dormitory Exit Pass was applied during the period of lockdown was insufficient, given travelling and waiting time
- Recreation Centres had long queues to enter to use or visit the stores and amenities
- Workers with legitimate Dormitory Exit Passes were refused to leave the dormitory by some employers and dormitory operators

Concerning Experience of Being Confined to Dormitories

- Unbearable feelings of ‘stuckedness’ experienced physically and emotionally
- Felt prolonged lockdown in dormitory was punishing, akin to incarceration
- Migraines and eye strains result from overuse of mobile phones as the only form of entertainment
- Markets or minimarts that were available in dormitories like PBDs raised prices on their items
- Personal plans like marriage were put on hold because of lockdown

Key Recommendations

- Reduction in room capacity from twelve persons to six persons
- Single bed for workers
- Personal tables and chairs
- Personal fans by beds and stronger and more powerful ceiling fans
- One power socket per bed and adequate number of power sockets in common areas
- Bigger locker sizes or floor-to-ceiling cabinets that can be locked
- Service room/balcony for laundry (both washing and drying of clothes)
- En-suite toilets; 6 person to two toilet cubicles, two shower cubicles, two sinks
- Every dormitory to have a Dormitory Resident Committee to take in feedback from residents and collectively raise issues to dormitory operators and regulatory powers

Introduction: Migrant Worker Dormitories and the Outbreak of COVID-19

In Singapore, more than 300,000 male migrant workers from countries like Bangladesh, India, Myanmar, and China work in industries such as construction, manufacturing, marine, and landscaping (MOM 2022a). On low wages averaging around SGD$18/day, these workers build and maintain infrastructures, make goods and wares, construct and repair ships, and do the gardening in the city. The country's reliance on low-waged migrant workers to do these jobs stem from a period of economic restructuring in the 1970s and 80s that saw a transition from production and manufacturing to an emphasis on higher skills and growth in the financial, services, and tech-related sectors. Coupled with increased education levels in the population and a reluctance to fill manual labour jobs, a labour shortage ensued to which Singapore turned to importing a transient class of low-wage migrant labour (Chan & Abdullah 1999; Low 2002).

Regulatory Framework for Migrant Workers' Dormitories

This report focuses on migrant workers brought in under Work Permits (WP) as 'temporary workers'. WPs are employer-tied passes, and migrant workers on WPs do not have access to certain socio-political privileges and protections such as limited job mobility and no prospects of settling in the country (Yeoh 2004). To house the large and growing numbers of transient foreign workers, government-approved or licensed dormitories were built or converted from factories. In November 2006, due to complaints from residents, the government further banned HDB flat owners from subletting their flats to non-Malaysian workers (Ng, 2020)[2]. Today, nearly all male migrants live in such accommodation.[1] These dormitories range from 1) purpose-built dormitories; 2) factory-converted dormitories; 3) construction temporary quarters; and 4) temporary occupation licence quarters (see Table 1 for details on dormitory types) (MOM 2022b).[2]

[1] However, workers were previously not confined to such housing accommodation. Until 2006, migrant construction workers were able to rent public housing flats (most likely via the employer) within HDB estates. In 2015, the ban was extended to the marine and process sector. South Asian workers dominated these sectors. In 2017, the ban was extended to those in the manufacturing sector with the government announcing that its aim was to house non-Malaysian work permit holders in approved accommodation to better cater to their needs. See https://www.todayonline.com/big-read/migrant-worker-housing-spore-how-we-got-here

[2] See MOM's webpage for various types of housing for migrant workers https://www.mom.gov.sg/passes-and-permits/work-permit-for-foreign-worker/housing/various-types-of-housing

Table 1: Different dormitory types for migrant workers[3]

1) Purpose-Built Dormitories (PBDs) PBDs are specially designed dormitories with amenities (e.g. minimarts, kitchens), services (e.g. laundry, remittance, etc), and recreational facilities (e.g. gym, outdoor game courts) that can accommodate between 1000 – 25,000 workers. There are forty-three of such dormitories located mostly within the industrial estates of Singapore.
2) Factory-Converted Dormitories (FCDs) FCDs are industrial or warehouse developments partially converted into accommodation quarters. Workers living in FCDs could be employed by the owner or lessee of the factory, work on- or off-site, or are subcontracted workers. Depending on their size, these dormitories may house more than 300 workers and there are more than 1000 of these dormitories.
3) Construction Temporary Quarters (CTQs) CTQs may consist of either temporary structures that will eventually be removed or parts of buildings which are under construction. Only migrant construction workers part of that particular construction project are allowed to live in the compounds. During COVID-19, restrictions were placed on CTQs to have a limit of 300 workers housed within a construction site. With the lifting of these COVID-19 restrictions, the Ministry has also implemented new dormitory standards for CTQs to ensure better living standards. There is currently no maximum capacity.
4) Temporary Occupation Licence Quarters (TOLQs) These are temporary occupation licences issued by a government agency (or their managing agents) owning the land. They allow employers to establish temporary quarters on a plot of land usually near a construction site. TOLQs are mainly prefabricated temporary buildings or refurnished buildings. During COVID-19, restrictions were placed on TOLQs to have a limit of 300 workers living on-site. With the lifting of these COVID-19 restrictions, the Ministry has also implemented new dormitory standards for TOLQs to ensure better living standards. There is currently no maximum capacity.
5) Quick Build Dormitories (QBDs) These are temporary structures lasting two to three years, constructed quickly in a modular form with a low density. Each QBD can house about 500 - 1000 workers per hectare, depending on site conditions. The QBDs will have an estimated 25,000 capacity in total.

Source:https://www.mom.gov.sg/passes-and-permits/work-permit-for-foreign-worker/housing/various-types-of-housing

[3] Information on dormitory capacities post COVID-19 were provided by MOM on 11 June 2024, after a review of this report.

Dormitories are built and/or managed by profit-driven private companies. The business model revolves around generating revenue from rental yield. In this highly profitable migrant accommodation market,[4] dormitory operators are the suppliers, employers of migrants the customers, while migrant workers or dormitory residents are the consumers. However, migrant workers lack information about their accommodation before they arrive. As the onus of finding and providing accommodation falls upon the employer[5] migrant workers do not have much or any bargaining power in choosing their accommodation. They are marginalised by the social and structural circumstances of being a foreigner, transient and low-waged. Instead, migrant workers are beholden to their employers as the paying customer of the space provided by the dormitory operator regardless as to whether its costs are deducted from their wages.

To operate a dormitory of any type, a government-issued licence is required. To apply and receive a licence, dormitory operators must declare information regarding the operation and occupancy of the migrant living quarters and attain government approval to develop the premise on the land.[6] This licence is subject to renewal every three years. Dormitory premises are built on land leased by the authorities, awarded on a tender basis. The Building and Construction Authority (BCA) is responsible for calling open tenders to lease out State land for the development of PBDs and grants permission to companies looking to erect CTQs.

The length of a lease affects the quality and development type of dormitories. For PBDs, there are two types of leases: 1) 3+3+3 short-term tenancies and 2) longer-term leases of at least 20 years. Other temporary living quarters such as CTQs and TOLQs[7] can operate for as long as the project is ongoing.[8] Because only rental yields generate revenue for dormitory operators, dormitory operators on short term leases usually do not invest much into the building quality, using temporary structures like intermodal containers instead. To convert

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[4] It was reported in November 2023 that Centurion Corporation, a large dormitory operator that runs nine worker dormitories in Singapore, saw its revenue for its worker's accommodation properties rise by 16 per cent to S$40.1 million in the third quarter. See Janice Lim, "Centurion's Q3 revenue up by 15% to S$51.1 million", The Business Times, 9 November 2023: https://www.businesstimes.com.sg/companies-markets/centurions-q3-revenue-15-s511-million

[5] See Employment of Foreign Manpower (Work passes) Regulations 2012, FOURTH SCHEDULE, PART III, (2)

[6] See Singapore Statutes Online (SSO) Foreign Employees Dormitory Act (Section 8, Application for licence to operate foreign employee dormitory)

[7] Land leased for other temporary quarters like TOLQs are managed by other government agencies such as the URA, Singapore Land Authority, and the Jurong Town Corporation. See https://www.mom.gov.sg/passes-and-permits/work-permit-for-foreign-worker/housing/various-types-of-housing

[8] Additional information about dormitory leases was provided by MOM on 11 June 2024, after a review of this report.

part of a factory or warehouse premise for use as an FCD, companies must meet URA's requirements before receiving approval.

These dormitories are typically located on the urban fringe of the island city-state. Academic scholars have criticised the location of these dormitories as facilitating social exclusion and as a means to segregate workers away from the city (Yeoh et al 2017; Goh 2018). PBDs were especially built to be self-contained communal spaces. With exercise areas, clothing shops and markets, barbers, and other kinds of facilities, the intention was to provide for the needs of migrants within the dormitory space itself. This functioned as a spatial zoning strategy by the government to prevent an overcrowding of migrant workers in ethnic enclaves such as the Little India and Farrer Park area situated in the heart of the city.

The Foreign Employee Dormitories Act (FEDA) was a bill passed in 2015 regulating the licensing of migrant dormitory operators, accommodation standards, enforcement, and delivery of services, facilities, and amenities to residents of foreign employee dormitories. Before and during the COVID-19 pandemic, only dormitories with 1000 or more beds were licensed under FEDA. Nonetheless, all dormitories, including those not under FEDA, are subject to requirements and rules set by various government agencies such as BCA and URA. This covers areas such as building and fire safety and minimum living and hygiene standards. However, with the outbreak of COVID-19, the Singapore government reviewed the FEDA in April 2023 to include all dormitories with 7 or more beds under a single law (Straits Times 2021a).[9] It is hoped this will prevent another health crisis in the dormitories, through raising and enforcing housing standards across various dormitory sizes and types.

Spread of COVID-19 and Movement Restrictions

Access to adequate housing is a foundational human right (ILO 2022: 17).[10] However, availing of affordable, decent housing is a significant challenge for low-wage migrant workers, particularly in Southeast Asian countries of destination, where it is frequently the case that migrant workers are required to live in accommodation provided for or organised by their employer (ILO 2022: 12). This has led to migrant workers being subject to low-standard housing, where there is overcrowding and unhygienic conditions, including inadequate ventilation (ILO 2022). This also meant that, when the COVID-19 outbreak happened, low-wage migrant workers were disproportionately affected (ILO 2022).

In Singapore, public neglect towards dormitory conditions enabled the rapid spread of COVID-19 among migrant workers in 2020 (Yea 2020). In the early months of the pandemic, Singapore was lauded for its response to the coronavirus outbreak. However, in April 2020, numbers spiked sharply, necessitating a "circuit-breaker" (i.e. nation-wide lockdown) for three months. In May 2020, 87.9% of the cases in Singapore were from the dormitories. By the end of the year, approximately half of the 300,000 workers living in the dormitory had

[9] In April 2023, the review was completed and the FEDA was expanded.

[10] Reference: ILO, 2022, Home truths*:* Access to adequate housing for migrant workers in the ASEAN region: https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms_838972.pdf

contracted the virus. This sparked intense public debate, especially with the viral circulation of videos and photos of workers' unsanitary and overcrowded living spaces, which was covered by international media outlets (BBC, 2021; The Economist, 2021; The Guardian, 2020). Accounting for the high numbers, the Singapore government acknowledged how cramped conditions made it impossible for social distancing, enabling the spread of the virus in dormitories.

In response to the outbreak, the Singapore government's initial response was to direct workers to stay inside their rooms while dedicating significant resources to contain its spread and providing affected workers with medical treatment and vaccination.

However, Dutta (2021) argues that while the deployment of healthcare teams to the dormitories attended to the medical needs of migrant workers, security teams subjected workers and their movements to increased surveillance and containment. Moreover, dormitory conditions made it difficult for workers to practise safe distancing protocols. There were insufficient isolation areas within the dormitory and little had been done to reduce the density of rooms (Yea 2020). The rapid spread of COVID-19 within the dormitory was unsurprising to dormitory residents themselves. Workers theorised that the outbreak was a direct effect of overcrowded conditions, poor ventilation, and absence of healthcare infrastructures for migrants (Dutta 2021).

Directed to stay inside their rooms even with the lifting of the "circuit-breaker", migrant bodies were differentiated from locals/residents and subjected to further mobility constraints and restrictions. While locals and residents could still leave the home to buy necessities or to exercise, migrant workers were not allowed to leave their compounds. As Singapore transitioned toward living with the coronavirus, restrictions were eased only for locals and residents who could meet in pairs or groups, attend events, and dine out in restaurants. The majority of male migrants however, were still stuck in the dormitories. This uneven application of restrictions was deemed necessary by the government to prevent further transmission in the dormitories. However, it caused much frustration among workers who felt unfairly confined within their shared rooms, ferried to-and-fro from the workplace to the dormitory. It was only towards the end of 2021 that some restrictions were lifted, allowing a selected number of workers into the city each day.

New Improved Dormitory Standards Introduced by MOM

In June 2020, soon after the COVID19 circuit breaker, the government announced plans to build 11 new purpose-built dormitories[11] (PBDs) that could house up to 100,000 workers in total (gov.sg, 2020). They were to adopt a new set of standards and specifications that are meant to replace temporary accommodation setups by the government during this period to

[11]Lim, M. Z. (2020). Govt to build 11 dorms in next 2 years; temporary spaces for 60,000 workers ready by year-end. The Straits Times. https://www.straitstimes.com/singapore/11-dorms-to-be-built-by-govt-in-next-2-years-for-100000-workers-temporary-spaces-for-60000

reduce the density of workers in existing dormitories (Quick Build Dormitories, unused state properties and Construction Temporary Quarters) as well as to decant workers from existing dormitories so current ones could be upgraded to meet these new standards and specifications. The new standards were meant to improve the design, facilities, and management of dormitories and are to be piloted in the Quick Build Dormitories for one year.

These improved standards to be piloted were namely[12]:

1. Living Space of at least 6 sqm per resident (not including shared facilities).
2. Maximum of 10 beds per room, where only single deck beds will be used with 1m-spacing between the beds.
3. One toilet, bathroom and sink to every 5 beds.
4. More sick bay beds - at least 15 per 1,000 bed spaces.

After this year-long pilot, in September 2021, the Ministry thereafter announced a review of these standards and guidelines for migrant worker dormitories, making changes to previously proposed protocols.[13] This was conducted in consultation with public health and infectious disease experts while gathering feedback from employers, dormitory operators, migrant workers, non-government organisations and architects. This new set of living standards curated by the government aims to "strengthen resilience against future pandemics and enhance liveability." (MOM, 2021). However, there was a notable drop in these standards from the ones introduced in 2020. Some of these finalised improved standards are as such:

1. Living space of at least 4.2 sqm per resident (not including shared facilities). This is an increase from the current 3.5 sqm per resident which includes shared living spaces.
2. Maximum occupancy of 12 residents in a room. Previously, there was no occupancy limit.
3. Continued usage of double-decker beds with 1m spacing between beds. Typically, most PBDs would have 12-16 double-decker beds per room
4. One toilet, bathroom and sink to every 6 residents. An improvement from one set of toilet facilities to every 15 residents currently.
5. At least 10 isolation beds per 1,000 bed spaces in dedicated isolation rooms. When required, additional 15 isolation beds per 1,000 bed spaces can be converted from existing shared spaces (e.g. through partitions), i.e. in a pandemic, it will be at least 25 isolation beds per 1,000 bed spaces. This is an improvement from the requirement of just 1 sick bay bed per 1,000 bed spaces before the pandemic.

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[12] Gov.sg. (2020). *Improved Standards of New Dormitories for Migrant Workers*. Retrieved September 8, 2023, from https://www.gov.sg/article/improved-standards-of-new-dormitories-for-migrant-workers

[13] In September 2021, the government backtracked on these plans, reducing the proposed eleven dormitories to just two. This was decided based on the government's assessments of the evolving pandemic situation; the demand and supply for beds; inflow of migrant workers entering Singapore; availability of other housing options for workers (see https://www.todayonline.com/singapore/govt-build-2-migrant-worker-dorms-2024-improved-living-conditions-shelves-plan-11-dorms). While we acknowledge the rationalisation for reducing this number, we highlight the possibility for new dormitories to model new improved standards, and to onboard existing workers while older dormitories retrofit to conform to improved standards.

The effort by the government and its ministries to improve dormitory living standards is commendable. However, there still exists gaps between what migrant workers themselves need and the government's improved standards. One reason for this is because migrant workers' voices can be easily shadowed in consultations that involve stakeholders with more power.

To mitigate this power differential, we adopted a participatory research approach to engage with migrant workers in understanding their challenges and for solution-finding so that their voices can be heard.

Methodology: Employing Participatory Research Methodology

Arnstein (1969) conceptualised that participation of community members can be evaluated on a ladder of participation ranging from levels of non-participation and tokenism to higher levels of participation such as "collaboration" and "partnership".

An 'ideal' participatory research consists of (1) jointly identifying the problem situation, research question or issue with community members, (2) building partnerships and relationships with community members to ensure a collaborative and inclusive process, (3) jointly designing the study, (4) joint data collection and analysis, (5) sharing the findings with community members and (6) working with them to develop change plans. The level of participation by community members can vary at each phase ranging from simply 'informing', to 'collaborating' and 'empowering'. Each phase may have multiple iterations. The choice of the level of participation at each phase should be chosen to best represent community members interests and be maximised for real-world impact (Vaugh & Jacquez, 2020).

Our participatory research process consisted first of *sense-making*, *consulting* with migrant community members about the problems they faced in their dormitories and thereafter, collaborating with migrant workers for solution-finding. We also partnered with an interior designer to translate workers' ideas into design concepts that highlights their real-world potential. In this vein, our interlocutors were not just able to advise in processes, but also negotiate and have their decision-making abilities respected in influencing outcomes. This recognizes them as experts of their own lives as dormitory residents themselves, who are in the best position to articulate solutions that meet their own needs.

As part of sense-making, we collaborated with migrant workers to explore issues and themes faced in dormitories while under COVID-19 restrictions. Between 9 September and 5 October 2021, we organized a talent contest titled 'Voices from Dormitories' where migrant workers were invited to send in entries sharing their experiences of living in the dormitories. Their entries could take any artform such as poems, art work, narratives, or videos. From the

entries received, 15 of the most relevant and creative entries were selected, revealing recurring themes and issues migrant workers faced.

Concurrently, from June to October 2021, a series of Focus Group Discussions (FGDs) was conducted over Zoom with three to four Bangladeshi migrant worker participants in each session. Our participants were recruited through informal networks, the HereWithYou helpline, and through participants' own referrals. Respondents were mainly employed in the construction and marine sectors. Because migrant workers were not allowed out of the dormitory, hosting focused discussions online was the best way to ensure their safety.

FGD respondents were grouped according to their housing type. In total, 16 FGDs consisting of 41 respondent interviews were conducted. In terms of dormitory type, 18 lived in PBDs, 16 in FCDs, six in CTQs, and one in a QBD. These sessions also included a moderator, translator, and two transcribers. Questions were asked in English and, if necessary, translated into Bengali. Each session lasted an average of three hours. All names used in this report are pseudonyms to protect the identity of participants.

In these FGD sessions, respondents described their daily routine, room layouts (e.g. how many beds, fans, lockers), issues (e.g. lack of fans, lack of electrical sockets, overcrowdedness), improvements, movement restrictions, toilets, utilities, and being stuck in the dormitory. These sessions were open allowing correspondence between participants while also giving space to separately raise cognate issues warranting attention. Finally, we asked workers for their suggestions to improve accommodation living conditions. These suggestions were fed to *Superfuse Collective,* an interior design firm, to conceptualise a first iteration of a design concept (Design Concept 1) of migrant workers' accommodation.

In a follow-up segment, with a slight easing of movement restrictions in 2022, we conducted collaborative solution-finding with 21 migrant workers over three meetings. Respondents were presented with Design Concept 1 and were asked to provide comments and feedback to refine the design. This process entailed empowering workers in choosing data collection methods. Participants were provided with a range of art and simple construction materials to choose the best medium to present their ideal accommodation. Respondents chose Lego® as a medium for ideation to articulate their points of recommendation. These were presented to the research team and other respondents present during the session. We delve more deeply into this process in Part III: Collaborative Solution Finding. These Lego® improvement models formed the basis for a second iteration of conceptualising the dormitory rooms. These models are included in Annex I of the report.

A summary of the migrant workers' improvement models were then provided to interior design firm, *Superfuse Collective* to generate a second iteration of a design concept for a migrant workers' accommodation.

Outline of Study

In Part I, we focus on key issues raised by workers about living conditions during the pandemic. Section I delves into a discussion on dormitories' physical spaces. Based on dormitory residents' responses and feedback during the FGDs, we examine bed space, storage, ventilation, cleanliness, and toilets among others. Section II moves into a consideration of movement constraints within dormitories shared by respondents. We investigate how restrictions and rules were enforced along with migrants' experiences of these rules in the dormitories. In Section III, we share dormitory residents' experiences of being confined in the dormitory. Stuck in their accommodation, migrants shared how they felt, the problems they encountered, and their responses to the situation.

In Part II, we present migrant workers' suggestions from focus group discussions and interviews to improve living arrangements in dormitories. Firstly, we present suggestions by migrants for improvements to each feature. After which, we consolidated workers' suggestions and brought it to our volunteer interior designer partner to generate a conceptual mess design of a dormitory room (see below Design Concept 1, p.71). Design Concept 1's unique modular features and layouts are elaborated.

In Part III, documents collaborative solution-finding with migrant workers resulting in the use of Lego. Design Concept 1 was iterated back to migrants for feedback in face-to-face group discussions when movement restrictions were eased, to seek meaningful feedback from the workers on how effectively the conceptual design captured their perspectives and to *collaborate* with them in re-designing and re-imagining their dormitory rooms. To do so, we empowered them to explore data collection methods that help them best communicate their perspectives and vision of an ideal accommodation, thereby elevating migrants' knowledge of their lived experiences and social realities. This resulted in the choice of Lego® as the chosen method for creative and thought expression. A summary of these improvement models were then submitted to interior design firm *Superfuse Collective* to reconceptualize a second design concept for a migrant workers' dormitory (Design Concept 2), which is presented in this part.

In Part IV, we provide a table comparison to highlight where MOM's new standards are aligned with recommendations made by migrant respondents and our interior designer, and where they have fallen short. The comparison is organised into different themes e.g. bedroom space, communal facilities, toilets; and coded by 'traffic light' colours of green, yellow, and red. The green tier comprises significant improvements that either align with, or surpass the suggestions for improved conditions made by migrant respondents. The yellow tier consists of incremental improvements that hold potential for positive change. These standards, however, either fall short of workers' ideal living conditions or lack specificity, making them susceptible to market forces and reliant on the goodwill of operators, owners, and employers for implementation. The red tier comprises of standards not addressed in the improved standards or significantly deviate from workers' expectations. This table is followed by a detailed explanation of the components in each tier.

Part I: Dormitory Living Conditions during COVID-19 Pandemic

Section 1: Dormitory Living Space

We begin by taking the reader through the living arrangements in migrant dormitories. Detailed accounts provided by workers living in PBDs, FCDs, and CTQs informs this section on the physicality of the rooms. From bed spaces to electrical sockets, our respondents referred us to issues that require attention and issues that have been mitigated because of the pandemic. Migrant dormitory residents' description of these physical spaces are important because these are intimate spaces and the only spaces that workers inhabited during lockdown.

Bed Space and Overcrowdedness

Overcrowded and cramped rooms remain a pertinent and serious issue for the *majority* of our respondents living in PBDs. Salman describes his room in one of the largest PBDs, "My room is 3m by 10m, staying with 12 persons. All are Bangladeshi. We have 6 double bed but we cannot follow the social distancing because very small room! When I cross the room, I maybe will touch the bodies of other people."

In Uthman's PBD, he tells us that there isn't enough space to move around with 12 persons sleeping in the room on double decker beds. "There is not enough place to move around. Two to three- persons together can pass by. If there are four persons, cannot pass. The beds side by side and there is one middle walkway." Similarly, Ikmaal tells us that "my room is 8m by 6m and 12 persons all live together very close. There is no personal space! No space to eat no space to do anything still."

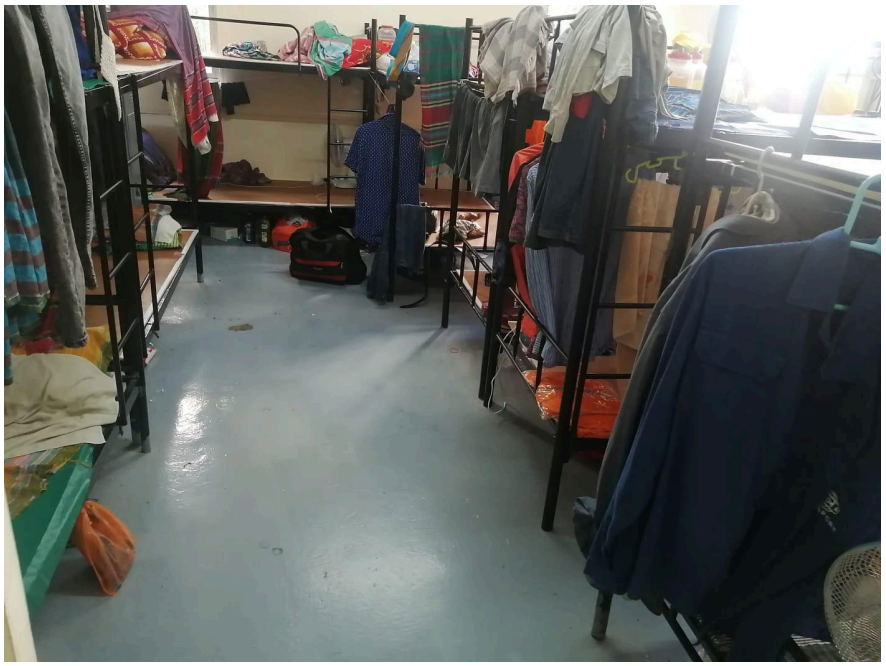




Figure 1: Picture of Ikmaal's PBD room.

Most workers living in FCDs, on the other hand, saw dramatic changes to their living spaces after the spike in coronavirus cases among migrant workers. FCDs were able to react better because certain FCDs have larger room areas with allowance to implement change or convert unused spaces into rooms. Where previously between 18-30 people were crammed together, the dormitory operator and employers made arrangements to reduce these numbers by half. Raheesh describes some changes in light of the pandemic,

"Before Covid, face many problem in dorms. After MOM changed many laws to improve dorm condition. Last time 32 people in room. Before Covid, many beds touching one another. Distance between beds need to be one metre but cannot with 32 people in the room. Now room 12 people so it is better. One bed to another bed is one metre, feeling more comfortable."

These changes to space and headcount were common among the FCD residents we held discussions with. Although a few like Jaabir continued to live in cramped rooms, the majority reported a reduction in room density. In addition, some companies split their employees up, moving them into different dormitories. This is a cautionary step that some contractors/employers have taken up in case of a virus outbreak which incapacitates their workforce, choosing to divide and house workers in different accommodations to maintain adequate manpower.

Nonetheless, for all respondents except for two, cramped living spaces and minimal distances between beds in PBDs, FCDs, and CTQs made living in the room uncomfortable and difficult. Many still saw the room as a site of infection, causing anxiety among respondents. Moreover, there was a lack of privacy. With beds close to each other, any conversation within the room is audible. This is particularly troubling if an emergency were to happen at home.

Rahul tells us that if someone were to receive a call in the middle of the night, the whole room would be alerted to the conversation and "everyone will know what problem the man is facing."

Thus, while the pandemic brought about changes for some workers, others have seen little improvements to their living and sleeping arrangements. Apart from social distancing measures to prevent the spread of covid-19, 'uncrowding' remains a priority to make living arrangements more inhabitable and comfortable for dormitory residents.

Pest Infestations: Bed Bugs

The beds workers slept on are metallic and though mattresses are given, they would rather do without them. In a cramped stuffy room, mattresses cause more discomfort. Our respondents avoided sleeping on mattresses because they felt hot at night, especially if there is poor ventilation in the room. Because of the stuffiness within the room, workers highlighted that sleeping on mattresses would make them perspire more which would lead to other problems like the infestation of bed bugs. At times workers disposed the mattresses instead.

"Even if we want to sleep on mattresses, there is a problem with bed bugs and every two months I need to buy new mattress myself. So now I use cardboard so I don't need to worry about bed bugs" – Rahul, PBD resident

"Sleep on mattress is very hot and bed bugs will come. So many workers use plywood not mattress" – Noorman, FCD resident

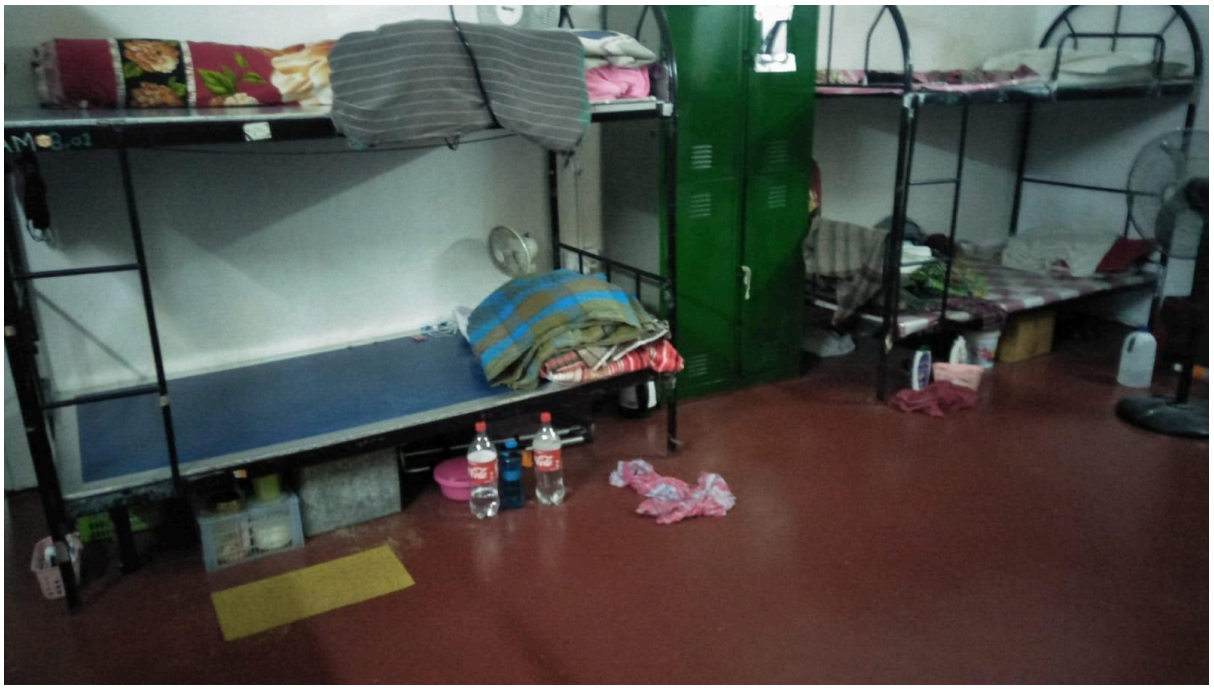


Figure 2: Example of metal double decker beds with plywood

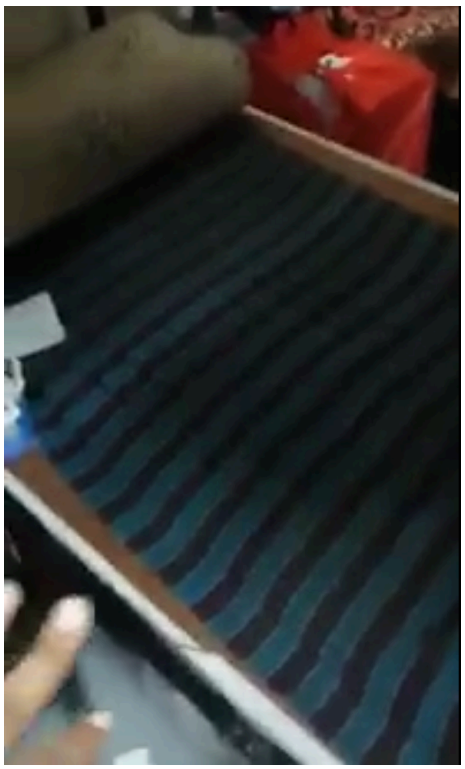


Figure 3: Plywood board covered with cloth

As such, almost all our respondents preferred to sleep on pieces of plywood or cardboard laid on top of the metallic mesh of the bed frame or on the mattress. Plywood boards are thin pieces of wooden sheets that, while not as comfortable as mattresses, allow workers to sleep better during the night. Some workers do not use the beds at all and sleep on the floor. Shuqri describes the sleeping arrangement in his PBD, "Most of us (12 persons) sleep on the floor. We don't use beds at all. We just sleep on the floor because it is so hot!"

Even though our respondents would rather have a mattress, it was impractical for them to sleep on it. Many dormitories are concerned about bed bug infestations with bed inspections conducted by management at times. Its prevention is the worker's responsibility. If an infraction is discovered, the worker or the entire room may be subjected to a monetary fine. Some dormitories provide PVC plastics to wrap around the mattress to prevent bed bug infestation but these come at a cost of SGD$21 a piece. This was an unpopular option because sleeping on top of these plastic wraps are uncomfortable, let alone pricey, and they make too much noise in the night, disturbing both the individual's and his roommates' sleep. An alternative and cheaper way to prevent bed bugs that some workers have told us is to seal the edges of the plywood which prevent the breeding of bed bugs.



Figure 4: Image still from Jaabir's video of a bed bug

The use of double-decker beds affected workers' rest too. All our respondents slept on double-decker beds and some reported that the sounds and movements from their bunkmates either sleeping above or below them would wake them up in the middle of the night. Workers informed us that if their bunkmate comes back late from work and goes to bed, the movement of them getting into bed, especially if they are climbing up to the top bunk, would affect their rest. Many of our respondents also mentioned how movements or "[phone] vibrations from below-person will also wake me up" and if "[bunkmate] wake up then other people also wake up."

Ventilation

Overcrowdedness is compounded by the lack of proper ventilation in the room. The majority of our respondents — 34 out of 41 —indicated that ventilation and lack of access to fans was an issue. Without adequate fans or windows, the living space is sometimes unbearable for many workers, particularly in a country as warm and humid and Singapore. Without proper ventilation, this could be another reason for the rapid spread of COVID-19 in the dormitories. In a room of 12 persons, the median fan arrangement is that of two ceiling or wall fans. These ceiling fans are small and are not powerful enough to ventilate the room (see

Figures 5 and 6). Some workers are allowed to own and use personal fans while others are not. Besides the lack of fans, a few dormitory structures are built from steel or intermodal containers that absorb and trap heat within the room, turning it into what Kareem calls a "boiler."

The heat and stuffiness felt in the rooms could be mitigated by the installation of more fans. But many workers like Sadeeq, who has worked both in marine and construction, and lives in a FCD with a room of 10 persons, complains that "The fan is very far so it is very hot. There is only 2 ceiling fan in the room! If you sleeping on below it is worse because there is no wind." The lack of proper ventilation is a concern raised by some of our respondents as an issue that affects their rest and, if resolved, would improve their living and sleeping arrangements.



Figure 5: Example of rotating ceiling mounted fans. Image still captured from video



Figure 6: Example of ceiling mounted fan

This issue with a simple solution is on the contrary complex for some workers living in dormitories. While goodwill donations of fans from charities or organisations may help workers to combat the heat, other workers are not able to accept or utilise these donations at all. In reality for some residents, fans are a complex administrative issue.

Kabir, who lives in a PBD room with 11 other workers, tells us that his room is extremely hot. With only two ceiling fans, the reach of the fans is limited, leaving the room stuffy, congested, and humid. But the workers living in his dormitory are not allowed to buy, bring in, or use their own personal fans (i.e. fans that are clipped onto the bed frame or placed beside their bed).

Kabir informs us that dormitory management only allows the purchase of a particular standing fan as personal fans. Workers are not allowed to buy this fan out of their own pockets. The purchase needs to go through their employer. In Kabir's words "[T]he standing fan the company (employer) must pay. If company no give, we cannot use. We cannot use personal fan…The dormitory people made this rule. I have already told the company [employer] but they are not very bothered [about helping him out]."

Sadeeq, who complained about the stuffiness above, bought his own personal fan to use in his room because he could not bear with the heat any more. Before he bought his fan however, Sadeeq had to inform his boss who sent an email to his FCD dormitory operator to inform them of Sadeeq's purchase. Sadeeq explained that "My company [must] email dorm security first. They will throw the fan if it's not from the boss. The rule say you must inform them, if not they will throw the fan."

Similarly, Uthman tells us that the dormitory he lives in has a specific size guideline for each fan. Fans that do not meet these guidelines are banned in the dormitory. Uthman tells us that "because dorm operator pays for electricity, that's why they don't want us to bring in fans because more fans mean more electricity." Nonetheless, Uthman's employer was more sympathetic to his complaints about heat and congestion and bought eight small fans of the specific variety for him and his co-workers in the same room to share.

Other workers do not face such complications in purchasing or using a personal fan (whether in a PBD, FCD, or CTQ). They are allowed to purchase fans using their own money or feel that ventilation is not an issue in their dormitories/rooms.

A few of our respondents have also reported some strict rules surrounding fan usage. While Noorman has adequate fans in the FCD's room, they are not allowed to turn them on during the day – to save on the electricity bill. These fans are only switched on when there are government inspections on liveability and enforcement of Covid-measures during the day. While Noorman has complained multiple times about this to his employer, no action was taken and this unfair treatment is experienced as blatant dehumanisation by Noorman and his roommates.

Similarly, Rifqi, an injured worker unable to work and living in an FCD, complains that he is not allowed to switch on the fans during the day. He tells us that security from the dormitory, while on their patrols, would switch off the fans even when they are in use "because they say that the fan will be broken if it is on for 24 hours."

In our discussions, there were varied responses to the repair and maintenance of fans in the room. While most of our respondents said that damaged devices like fans would be fixed upon reporting, there were some whose complaints were ignored and others whose wages were unfairly deducted as a service charge.

For instance, both Salman and Jaafar, living in a PBD and FCD respectively, had requested for their fans to be repaired since they were not working. Salman has only two functioning fans in his room, the third one is not functional. He complained about it to the dormitory management and they removed it but did not replace it. Two of Jaafar's ceiling fans are spoiled and he requested management for repairs but they have not taken notice nor do they seem bothered about it. On the other hand, Rahul and Osman brought to our attention 'service charges' that were taken from each resident living in the room. Rahul stated that they

would fix the fan or other amenities "but a service charge is deducted from us." Osman added on, saying that "each person have to pay for any damages done — 16 person have to pay for all damages, and if I report, I pay." These charges of punitive measures are concerning and will be discussed further later in the report.

This tussle over fans and ventilation is revealing of the inequalities that workers living in dormitories face. Not having access to an adequate amount of fans for the circulation of air is unthinkable to most of us in humid Singapore. These are bare necessities that must be met to give workers a basic level of comfort for rest in laborious jobs. While some workers are able to purchase their own personal fans, these are bought on their own expense. Furthermore, different dormitories have different rules and protocols for the usage of personal fans. This is due in part to the discretionary power dormitory operators have to impose arbitrary rules. In turn, it may cause confusion and discomfort to workers, especially if they are moved into a different dormitory during their stay in the country. Dependent on operators and employers, workers have limited bargaining power to resist or change such rules, even simple ones like purchasing personal fans. Instead, this issue must be made less convoluted and over-governed while giving residents' the autonomy to make their living spaces more comfortable.

Electricity

In most of our discussions, our respondents from different dormitories had enough electrical sockets for their usage. Even if there were inadequate electrical points in the room, workers could buy and use multi-extension plugs. Most beds have at least an electrical socket beside it, allowing workers to charge or connect their electrical devices.

However, this was not the case for all. Our discussions led us to discover that for some workers, access to electricity was limited.

For Farhan, Kabir, and Ikmaal, workers in their dormitories did not have enough electrical points in the rooms. They had to share the usage of these sockets to charge their phones. Even with an extension, Farhan, living in an FCD, remarked that "these plugs were far from the bed," making it difficult for him and his 14 other roommates to utilise them. Kabir felt that the lack of electrical points is a "big problem" for the workers living in his PBD. In another PBD, Ikmaal informed us that his room of "6 persons had to share 2 power plugs," making it an inconvenience for many in his dormitory.

Noorman's situation was by far the most extreme. In his room in an FCD, there were no electrical power points at all. There were only USB charging locker boxes that are located at the end of the corridor on his level. This sparked discussion among our respondents in the focus group, telling us that they have heard of such situations before, that in some dormitories, there were only USB ports to charge their phones.



Figures 7 & 8: Noorman's USB charging points. These phone lockers are the only way residents in his dormitory can charge their phones. This was shown to us on video during our online discussion.

Such an arrangement caused inconvenience and discomfort for Noorman. To charge or use his phone, he had to "go outside of room and put my phone in the lockers near the staircase to charge." Furthermore, he felt uneasy in case an emergency at home happens. If there was a crisis back home, Noorman would be unreachable if he were to leave his phone to charge in the lockers while asleep: "My phone in charging box or locker box but when people or family call me at night time – if my father sick, go to hospital, like that how?"

Without any electrical points, Noorman also found it troublesome to study for his diploma. With online classes, he felt he was unnecessarily put in a difficult situation regarding the charging of his laptop. He could only charge his laptop during his work breaks at his workplace. If there were electrical power points in his room, Noorman felt he would be more productive in his spare time. He had requested his dormitory operator to install a power point system for him and his dormitory mates, only to be rejected by the operator, who told Noorman that it wasn't his problem.

Through our discussions, we also found out that some of our respondents had to pay for their electricity or utility bills. These payments are couched as "housing deductions" in their payment/salary slips. While housing deductions are a form of allowable deductions under the Employment Act of Singapore, at times an excessive amount is collected (HOME 2017).[14]

[14] On unauthorised wage deductions see HOME Wage Theft Exploitation among Singapore's Migrant Workers https://static1.squarespace.com/static/5a12725612abd96b9c737354/t/5a1fce6f652dead776d3c970/1512033911372/Position_Paper_Wage-Theft-Exploitation-among-Singapores-Migrant-Workers.pdf

To give an example: Salman and Rahul pay SGD$20 and $50 respectively to their employers for utilities. For residents in Salman's dormitory, each worker pays $20/month only for the refrigerator and washing machine bought and provided by his employer.[15] Residents' in Rahul's dormitory pay $50/month for the usage of electricity, water, and gas in his PBD to his employer.[16] He tells us that this is common practice and the amount varies depending on the dormitory that a worker stays in. This may be reasonable deductions, depending on how much is used. However, Idris informed us that his IPA states that SGD$150 is cut from his monthly salary for utilities, an exorbitant amount taken from workers' low wages.[17,18] In comparison to the average utility expenses in Singapore, which ranges from $200 - $600 a month depending on air-conditioning usage, Idris' $150 is an excessive deduction for utilities.

Excessive deductions constitute wage theft, referring to wrongful deductions of workers' legal or contractually promised wages (HOME, 2017). This unlawful practice is not uncommon and can range from non-payment and underpayment of wages to wage discrimination and manipulation (HOME, 2017; Yea & Chok, 2018). Migrant workers subjected to excessive deductions or payment requirements for utilities often do not voice these concerns to the authorities. These calculations are usually made arbitrarily and residents subjected to such payments also do not know how much they should be charged in the first place. If documents are signed by workers that permit such deductions, there may not be any legal recourse for workers. Without a limit or a requirement to justify the deduction of utility charges based on usage, dormitory residents remain vulnerable and susceptible to such actions. Most respondents shared with us that they were not aware of channels to voice these concerns.[19]

Storage Space

Some of our respondents also sounded out the lack of storage space given to them. Often, workers keep personal belongings and other things in boxes that lay near their bed space. Though they are given personal metallic storage cupboards, sometimes these aren't big enough to hold their belongings or they have to share these cupboards with their roommates. Some workers have been in Singapore for more than just a couple of years and have accrued personal items of meaning to them which they would like to keep. Additionally, without a refrigerator or personal storage spaces for food items, food is stored in boxes or in the open.

[15] Salman lives with eight other persons in his room; a total of nine. The room has capacity for twelve people.
[16] A total of sixteen people live in Rahul's room.
[17] The daily wage for a Bangladeshi work permit holder in the construction/shipping sector in Singapore is about SGD$20/day.
[18] Idris' room has a capacity for six persons. However, because of social distancing measures, he currently lives with two other persons.
[19] Workers incurring excessive deductions may be able to seek help from MOM, FAST officers, FACE volunteers, or use the Talk to MOM feature in FWMOMCare application. This information was provided by MOM on 11 June 2024 after a review of the report.

Too many boxes in the room however, takes up room space and are fertile breeding grounds for other pests like cockroaches.

The presence of roaches and other pests are not because workers are not able to keep their rooms clean. On the contrary, almost all of our respondents shared cleaning schedules they adhered to maintain the tidiness and cleanliness of the rooms. Some dormitories also provided cleaning services without any monetary expense to workers. Instead, our respondents shared that it is the lack of storage space that leads to the persistence of pests in their dormitories:

“We share four people one locker, it is not enough. Dormitory got give box to put inside because sometimes cockroach come, but this is not good enough. The cockroach come because of the food.” – Salman, PBD resident

“We don’t have much space [to store items]. We have a lot of things because we long time here working and we have necessities. When we have these things, we don’t have sufficient space for food…that’s why cockroach coming because no place to keep food.” – Ikmaal, PBD resident

“We clean our room everyday and have a housekeeping roster, sweeping and throw rubbish. Once a month together we clean the room fully. We also don’t know why many cockroach.” – Alamin, PBD resident

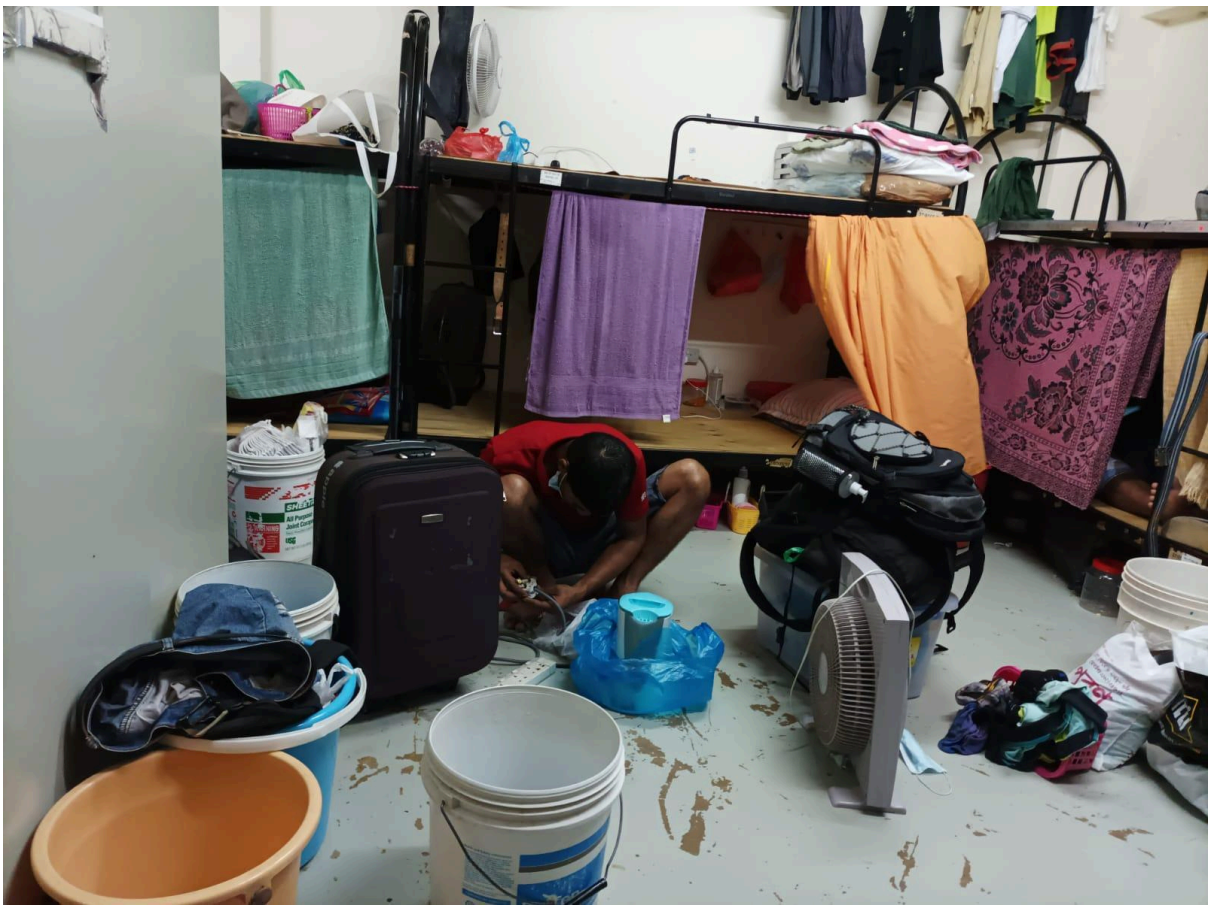


Figure 9: Cluttered space. Clothes are kept in luggages and hung on walls and bed frames; the pails are used for laundry



Figure 10: Small personal lockers provided to migrants in one PBD



Figure 11: Image still of small personal lockers provided to migrants in one PBD. The locks are faulty and have not been repaired.

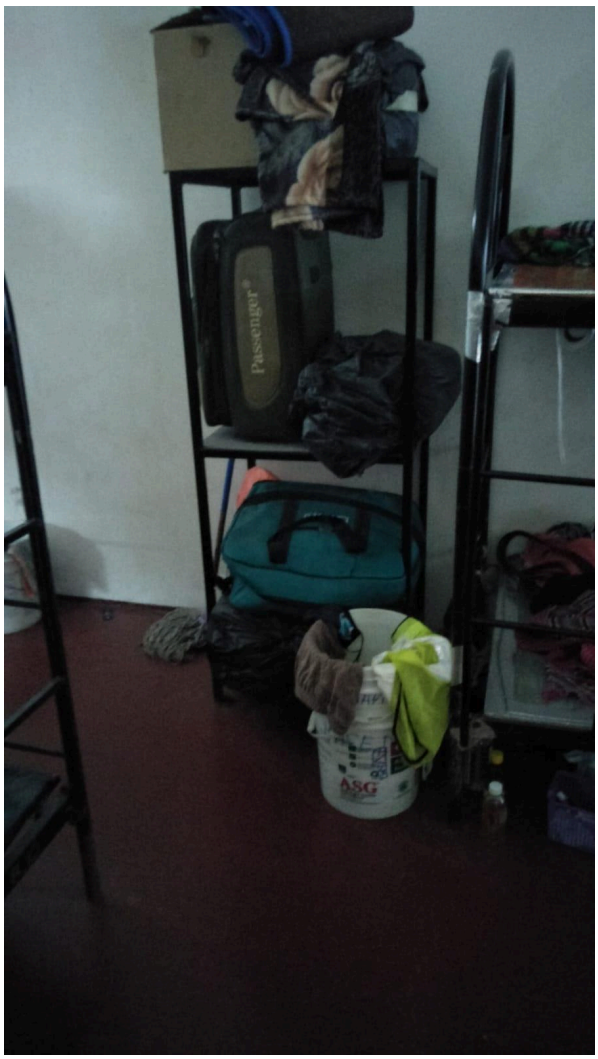


Figure 12: Shelf shared between roommates in a PBD room

Laundry

MOM's FEDA licensing conditions for dormitories require licensees or dorm operators to provide either laundry facilities (e.g wahsing machine) or services for residents. Licensees must also ensure that wet laundry is not hung within the sleeping area and must provide sufficient and convenient sheltered hanging facilities for drying laundry.[20] Although these licensing conditions are mandated, we still received complaints from our respondents about laundry facilities, services, and procedures.

To do their laundry, most workers used a basin or pail for washing. Detergent is bought in the shops. Hand-washing of clothes is either done in the toilet, along the corridors, or in designated washing areas available in some dormitories. Most dormitories also provide a few washing machines for workers at a pay-per-use rate of SGD$1 or SGD$2.

[20] This information was provided by MOM on the 11 June 2024, after a review of this report.

Some workers felt that washing machines weren't necessary whereas others thought it was useful but there was an inadequate supply of these machines. For instance, Azreel tells us that in his PBD, "My dormitory got 5000 people, 5 blocks. Each block, 1000 people share 2 washing machines…so most people will wash themselves."

Alarmingly, in our discussions, we also discovered that some of our respondents (and their fellow dormitory mates) were disallowed from doing their own washing and had to pay a fixed monthly amount for laundry services.

Muhammad is one of these workers, who has $18 deducted from his salary for this service. This deduction is not stated in his IPA. He finds it unnecessary because he can easily wash his clothes on his own. He tells us that they pay a lump-sum fee whether they use the laundry service or not. Moreover, they had to mark the collar of their clothing with an ID to identify and not mix up their clothes.

In Kabir's case, he isn't allowed to hand wash his clothes in his PBD. His colleagues and dormitory mates incur an unnecessary cost for laundry. Forced to use the machines only, which are themselves in inadequate supply to meet the washing needs of thousands of workers, it was a rule that Kabir wanted to do away with:

"They have rules of washing clothes using washing machine by paying only!... such a bad rule and this is a real big problem for many workers here." – Kabir, PBD resident

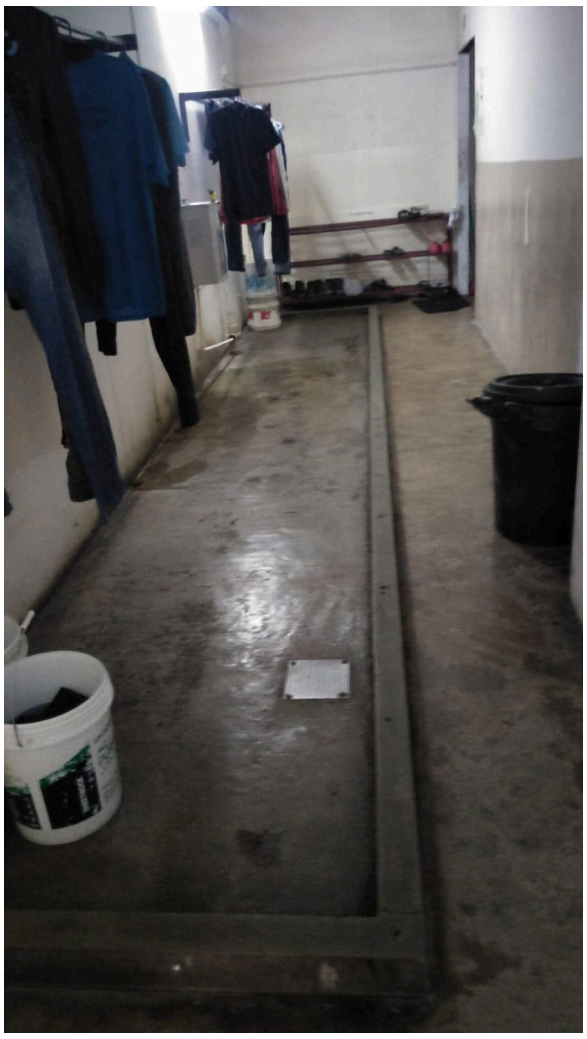


Figure 13: Washing and drying area for clothes in an FCD

To dry their clothes, workers who handwash their garments hang them to dry in the balconies, along the corridor, in their rooms, or designated drying areas. However, a problem that some workers face is the presence of sunlight for drying. For instance, Raheesh mentions "One problem is the laundry room [designated drying area] there got no sunlight. Only fan. These clothes sometimes not dry and when I collect them. Sometimes there is smell."



Figure 14: Clothesline along the corridor for hanging and drying of clothes



Figure 15: Drying and hanging of clothes in Ikmaal's balcony in a PBD



Figure 16: Image still from video of Rauf showing a small balcony used by 16 residents to dry clothes

A few respondents with limited spaces to dry their clothes felt they had to compete with others to find space. Sometimes their clothes are thrown on the ground or placed somewhere else when they come to collect their laundry. Uthman tells us “There isn’t enough space. Sometimes I wash and hang, then when I come back another person will take out my clothes. But I cannot blame him because there is not enough space.”

For individuals staying in CTQs, hanging their clothes out in the open defeats the purpose of washing them. Because CTQs are located within construction sites, dust and dirt from the site often enter their dormitories and balconies.

To store their clothes, our respondents usually folded their laundry into their personal lockers, back in luggages, or into small boxes given to them. If they have enough space on drying racks/ropes in the drying areas, they would leave them there.

However, Rahul, Osman, and Salman felt that clothing cupboards could be provided to them in their dormitories. Rahul’s locker is already filled with books and other personal belongings

and there isn't a compartment for him to hang his clothes. He hangs them on his bed but this goes against housekeeping rules in his dormitory which he has contravened manytimes, leading to warning letters. Salman similarly shares that they're not allowed to hang any clothes in his room. "They only give us a small box, all clothes in box. The box is small and many problem I suffer."

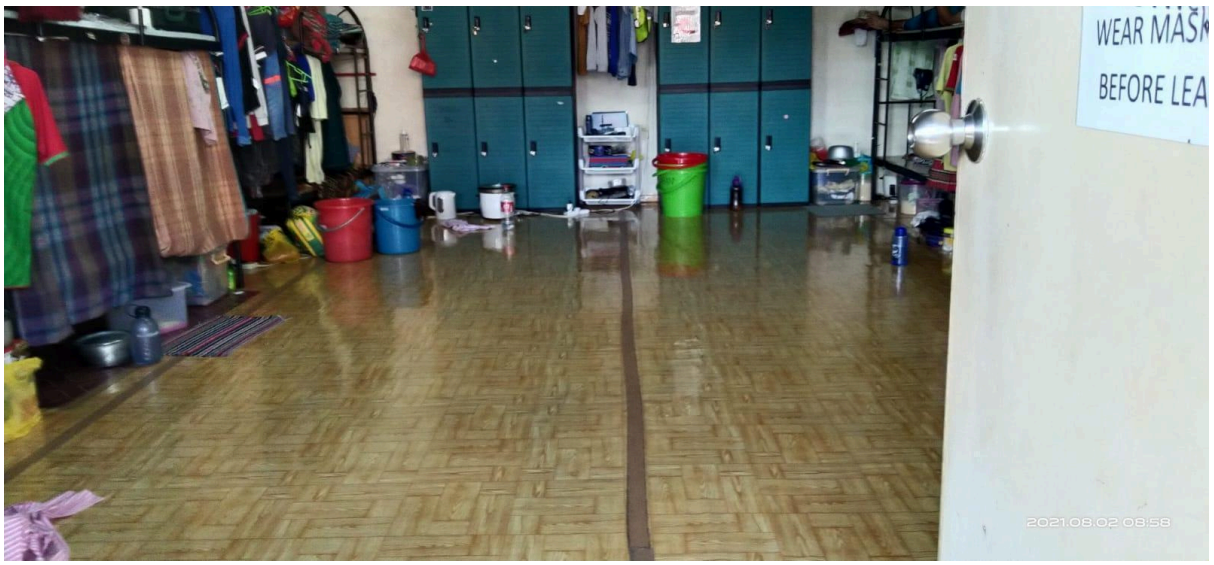


Figure 17: Small personal lockers in a room. Plastic boxes and other belongings tidily kept at the side or near the bed. Clothes hanging on bed frames.



Figure 18: Encircled is a pole balanced between ceiling beam and wall to hang their clothes

On more than one occasion, workers complained to us about unreasonable housekeeping dormitory rules. Two of our respondents experienced their clothes being thrown out into the quadrangle area because they had left their clothes hanging or laid on the beds when they went out for work in the morning. They felt insulted and anguished by the lack of respect for their personal belongings.

Toilets

In the morning, before setting off for work, a long line of workers queue up to use the toilets. “Waiting for one hour to use toilet in morning!” Farhan complains. In his dormitory of 300 workers, 15 persons share a toilet and a shower. This isn’t an exception. It’s a situation that almost all our respondents shared. Long waits for toilets, high worker to toilet facility ratios, and dirty and clogged toilet bowls and sinks were some of the many concerns raised in our discussions.

Workers queue anywhere between 20 minutes to an hour to use the toilets in the morning. Often, workers that are currently working would wake up earlier at 5 am to avoid waiting in line for the bathrooms located at the end of the corridor. Kabir shared with us his morning routine, “Every morning I wake up at 5.15am to pray. Near 6 am the queues for toilet are very long because all workers are going to work. So if I wake up earlier don’t need to queue long.”

Part of why there are “traffic jams” to use the toilets is because of an inadequate amount of such facilities. In most of our discussions, our respondents gave us details on the ratio of workers to toilets. For instance, Ikmaal tell us that “My dormitory my floor have 120 people, sharing 5 toilets and shower.” This works out to 24 individuals to a toilet/shower facility in his PBD. Similarly, Ahmad tell us that 30-35 people on his level share three toilet facilities and two shower facilities and Jaabir calculates that 108 people on his floor share eight toilet/shower facilities. Both wait an approximate 30 minutes in the mornings to use the toilet.

For some workers, this occurs at night as well. Noorman, whose workplace is close to his FCD tells us, “One floor has 80-100 people, 6 toilets, 8 shower place. After finish work, always traffic jam and big queue to go toilet! Some of us finish working at 10pm, by the time we shower finish 11-11.30pm. This is very difficult for us!”

Our respondents also said that water pressure in the toilets are low/poor. This could have an effect in elongating the waiting time for toilets:

“The speed of the water is very slow! Sometimes 20-30mins to bathe! That’s why so long queue!” – Kabir, PBD resident

“The water not so fast or strong, so it takes long time to shower. The water slowly slowly drop not strong enough” – Rahul, PBD resident



Figure 19: Open shower rooms with no privacy in an FCD



Figure 20: Shower cubicle in CTQ

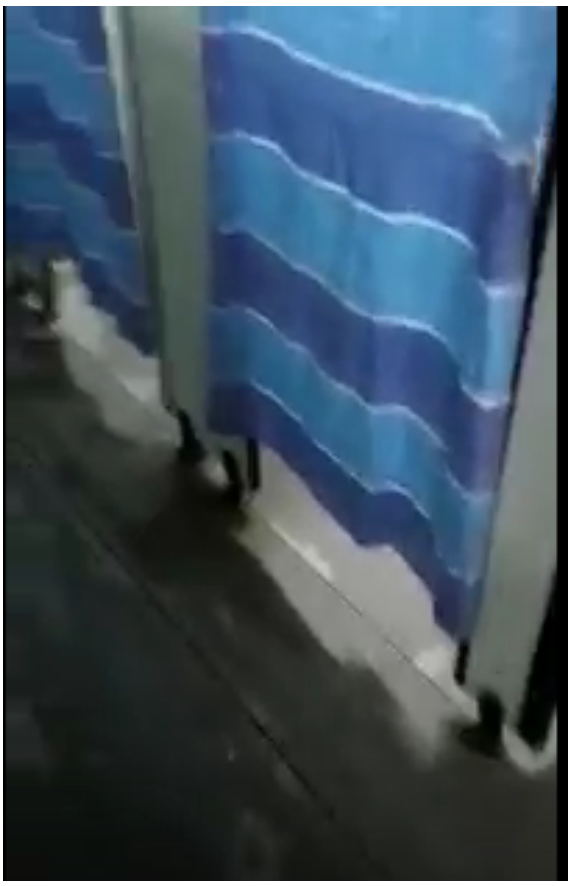


Figure 21: Image still of shower cubicle with no doors

Besides long queues and low water pressures, many of our respondents reported spoilt or unusable facilities in the toilet. For example, some shower heads weren't working or others didn't have a showerhead at all, with a tube/hose connected to the waterspout instead. Azreel informed us that in his PBD, "sometimes the shower not working, sometimes the toilet also has no water coming out [for flushing]...so 3-4 [facilities] are unable to be used."

Additionally, in the pictures and videos workers sent to us of their toilets, they showed us faulty urinals, toilets, and clogged sinks. Moreover, because of COVID-19 social distancing regulations, the amount of facilities like sinks/basins and urinals were reduced and marked out as unusable (see figures 22 – 24).



Figure 22: Faulty clogged and dirty sink



Figure 23: Faulty clogged and dirty sink



Figure 24: Dirty urinals and social distancing protocol in toilet

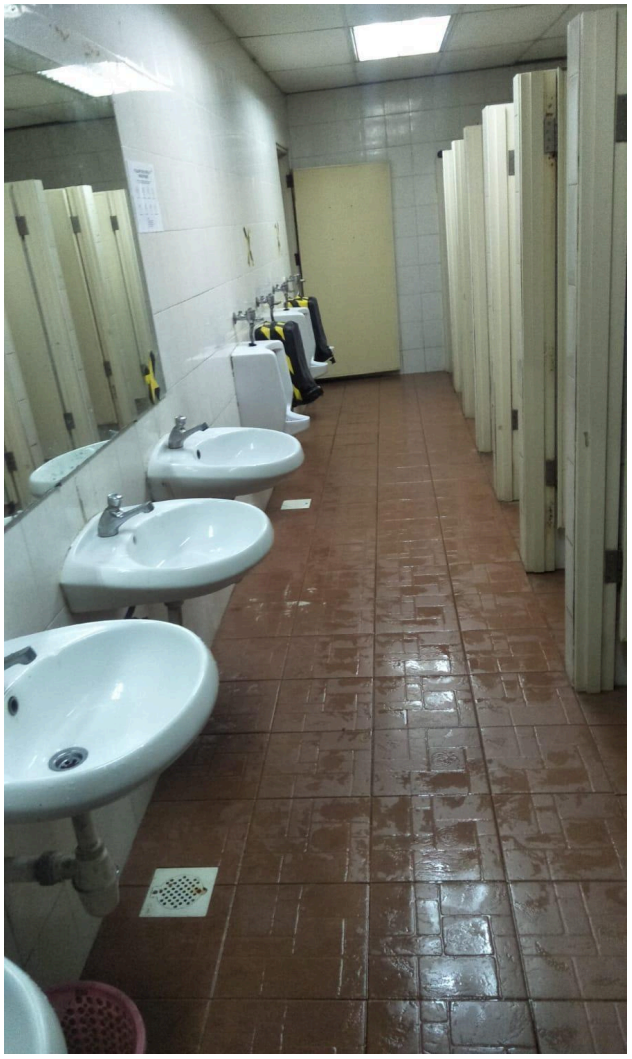


Figure 25: Toilet in PBD serving 80-100 residents

Overall, the majority of the FGD respondents felt the toilets were a problem (in terms of cleanliness and ratio). In cases where respondents were satisfied with the hygiene and sanitation of toilets, this was attributed to janitors employed by the dormitory, primarily because of COVID-19. Due to the fear that the virus can be spread through bioaerosols from the flushing of toilets (Allen 2020), there has been an increase in enforcement inspections by the authorities. According to our respondents, during these inspections, social distancing measures in toilets are checked. Not wanting to get into trouble with the authorities, some dormitories have also stepped up in keeping the toilets clean and hygienic.



Figure 26: Clean toilet in an FCD

However, some respondents felt that these were token measures. Noorman tells us that after the authorities leave, “everything goes back to normal.” He laments that during these inspections, the authorities don’t bother speaking to workers to inquire about dormitory and toilet conditions. He doesn’t know if they are properly checked in the first place. He stressed that the cleanliness was “for show” and not a consistent effort. For example, when it came to the provision of hand soap, “Now there’s many kinds of inspections and teams monitoring the site. That’s why the toilet has an extra [soap] dispenser now — to show that we have soap! Sometimes we have dispensers/bottles that say soap, but actually inside only water.”

Nonetheless, dirty and wet toilets were a common complaint among respondents. This is inevitable when 80-100 people are sharing the facility at the same time.

“Everyday [our toilets are] cleaned and we have a separate cleaner. They clean very well...But it’s so crowded and so many people. In the morning it’s very smelly and dirty because so many people.” Sadeeq, FCD resident

“Toilet in the morning cleaned by dorm people. But many people use it 24 hours, it’s still dirty. They just clean for the one time only, so still dirty”. Ikmaal, PBD resident

For a few respondents, cleaning frequencies were irregular and respondents felt that cleaners were not doing a good job. For instance, in his CTQ, Kareem mentions that the workers who clean the toilets do not use detergents and soaps, “they pour water only. No scrub toilet or anything lah.” In Rauf’s PBD, employed toilet cleaners come once every fortnight.
Dormitory inhabitants who had to clean the toilets themselves found it most difficult to maintain a certain level of cleanliness.. Working long hours throughout the week and sometimes weekend, workers may not have the time to do so given their schedules. Worst still, Rahul shared with us that they may incur a monetary fine if the toilets were not properly cleaned. In some cases, cleaning agents are not provided to workers. Consequently, workers had to buy the supplies with their low wages. Only a quarter of our respondents said that their dormitories or employers paid for their cleaning supplies.

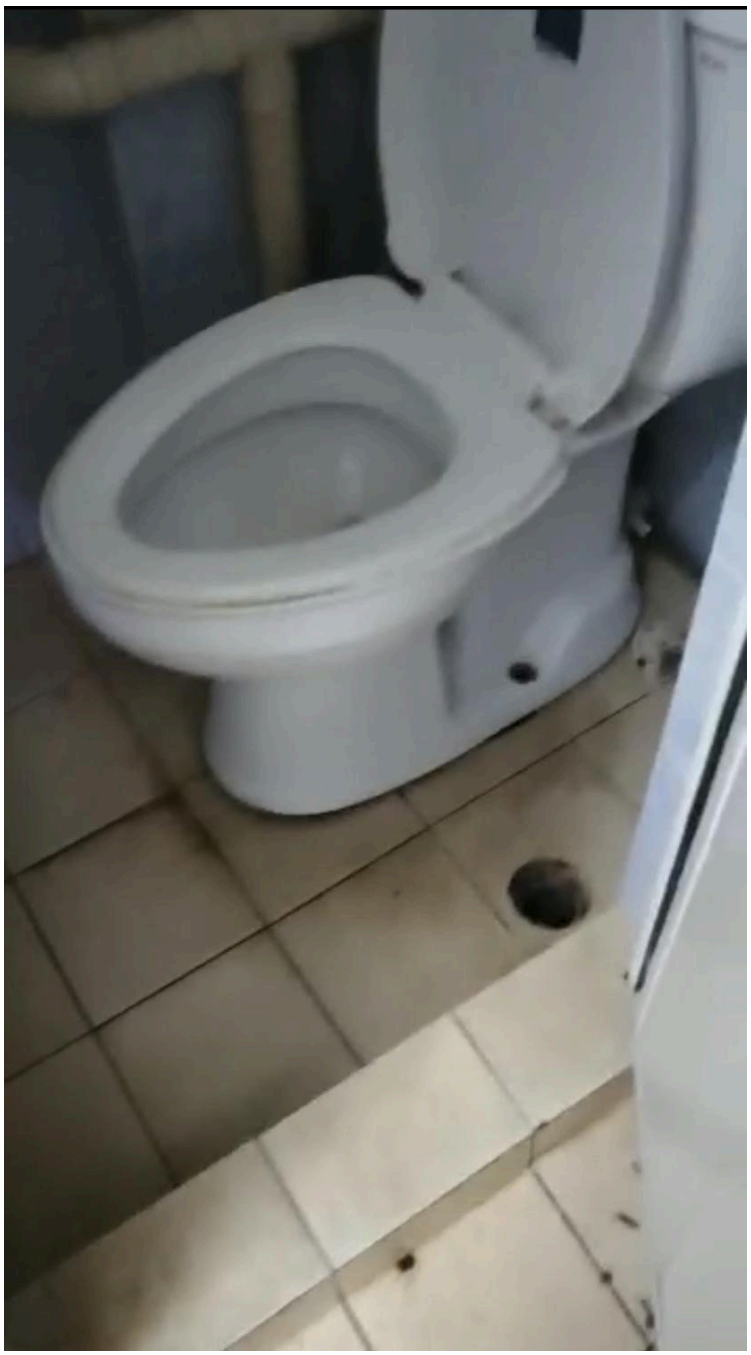


Figure 27: Dirty toilet bowl. Drainage is uncovered leading to the presence of bugs, cockroaches, and an unpleasant smell. Up to 16 people share this toilet.

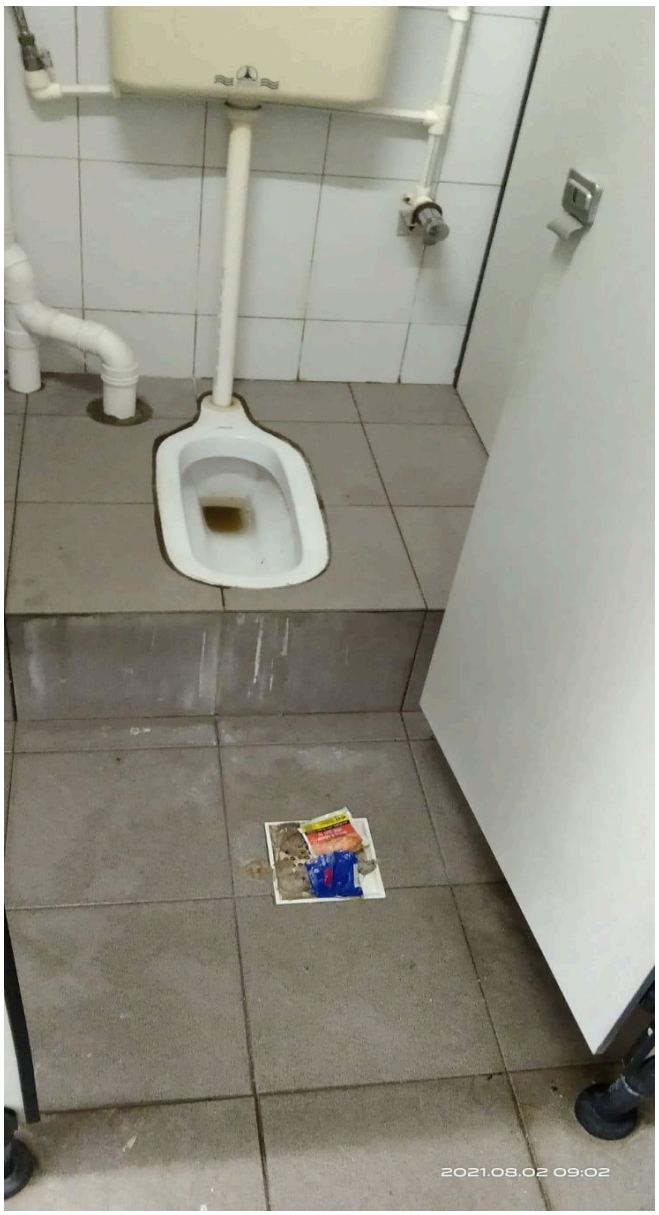


Figure 28: Dirty toilet. Poor flushing system

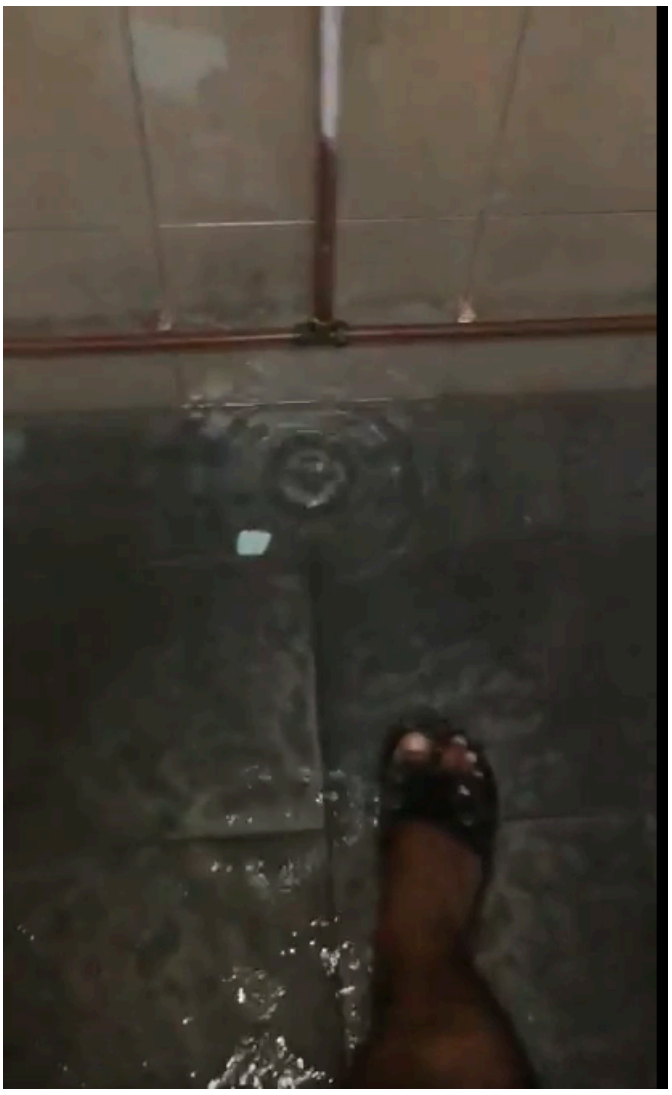


Figure 29: Wet/flooded toilet floors with leaking pipes.

When we queried if they had complained about faulty facilities and the level of cleanliness, our respondents told us they were hesitant to do so. This contrasts against the reporting of spoilt appliances like fans or lights that needed repair. There were two reasons shared by FGD participants (1) Workers saw cleanliness as an individual responsibility (2) Reporting was punitive. If the complaint was about employed cleaners or dormitory management, many respondents feared repercussions too. Raheesh informs us,

“If there is any kind of problem, I cannot complain and no one will listen. Last time [in the past] I heard my seniors complaining and they were harassed by dorm people. So better to don’t complain.”

Similarly, Uthman shares,

“If I complain anything for example about the cleaner, the cleaner will make trouble for me or black face [throw shade at] me. The security will also take note which worker is the one

who complained to management. They will observe my activities and finding trouble with me."

Workers' apprehensions toward reporting poor conditions is not new. However, fear of raising grievances has mainly been discussed in relation to power imbalances in the workplace (Bal 2016; Yea & Chok 2018). Clearly, these relations are also entrenched in migrant accommodation (cases of punitive reporting will be discussed in greater detail in the next section). Workers should not be deprived of clean, hygienic, and functional basic amenities. An open channel for migrants to complain and report without repercussions is required to foster a safer and liveable space.

Overall, the cleanliness and state of toilets remain an issue even with certain changes because of the pandemic. Workers' material, hygienic, and temporal experiences presented and discussed above foregrounds the reproduction of inequalities in relation to the significant space of the toilet.

Water & Light

In the course of our research, we found out that at least two-thirds of our respondents were drinking water from taps in the toilet. Not everyone had access to water fountains/coolers or there was a lack of these fountains/coolers in the dormitories.

For respondents who regularly drank from water points, they had one on each floor. The majority however, had water points located only on the ground floor or in the dining area of their respective dormitories. Thus, those that stayed on the fourth, fifth, or even eighth floors found it particularly troublesome to access water fountains/coolers. To save them trouble climbing down and up several flights of stairs, they filled their cups or bottles from the toilet sinks.[21]

While workers felt that this was not a substantial issue, it was a problem for the few workers we spoke to living in CTQs. In Rahman and Kareem's worksite, water comes directly from a portable water tank installed in the construction space. Water from the tank is piped into the CTQ. However, because of the construction that goes on, at times the pipe is damaged and workers are left without water for a couple of hours until it is fixed. Furthermore, it is not uncommon to have dirt from the ground seeping into the pipe, contaminating the potable water supply. Rahman says,

"Water for both toilet and drinking come from the same water tank downstairs. Sometimes it is dirty because the pipes get touched and they have to fix it. Sometimes there is dirt because of the damage…When pipe is damaged, around 2-3 hours have to stay without water waiting for people to come and fix it."

[21] Most dormitories do not have lifts/elevators. Even if they do, some prevent residents from using them.

Because the tank is placed in the open under the sun, our respondents complained that they had to drink hot water. While there may be a water cooler point, it caters to 300 workers living in the CTQ. Lines are long and the water may not be cold because of frequent usage. Workers couldn't take frequent cold showers either. Complaining about how hot it is to live in a CTQ, Kareem remarks, "Take shower also no use! Because water also boiling! No cold water."

Other than damaged or unrepaired light fixtures, all our respondents felt that there was adequate lighting in the rooms.

However, some workers felt that light fixtures were too close to their beds, caused heat and disturbed their rest. This is especially so for workers on the top of double decker beds. With the ceiling lights right above them, resting on their beds at night was impossible. It was too bright and heat radiated from the lightbulbs. If their roommates came back late because of overtime, the turning on of the lights would wake them up. Ikmaal says "No choice, some people come back 11.30pm, they have to turn on the light. We have to understand." Rahul on the other hand, mentions that his roommates rarely turn on the lights "because it makes the room hotter" especially for those located directly below them. In order to read, Rahul uses a "secret light." To this extent, workers felt that personal lights near or affixed to their beds makes for a more conducive environment. Personal lights allow for studying and/or reading and eliminates or reduces the glare from common lights for better rest.

Wi-Fi, Tables, Chairs

During the three-month lockdown in Singapore in 2020, following a visit to a worker's dormitory, the Minister for Communications and Information announced that the government would roll out Wi-Fi infrastructures to all dormitories within two weeks (Mothership 2020). We conducted our FGDs a year later and asked workers about Wi-Fi connectivity in the dormitories.

While nearly all our respondents reported having access to Wi-Fi , a minority did not. Additionally, some had to pay for it and connectivity issues drew a mixed response. In line with what the government had promised, workers like Farhan and Jaabir both had Wi-Fi infrastructures installed in their FCDs. While Farhan's Wi-Fi connectivity was good, Jaabir's was intermittent. Others had to fork out a sum of between $10-15 a month to access wifi. Uthman mentioned that "During lockdown it is free. But now I have to pay $12 per month to use wifi" while Aadil "pay[s] $12-15 per month for Wi-Fi in my dormitory."

Workers who didn't have Wi-Fi , do not want to pay for it, or felt that connectivity was poor, relied on mobile data coverage which ranged from $10-60 depending on their plan. However, as most stayed in dormitories that are located at Singapore's urban fringe, mobile connectivity was often disrupted by Malaysia's network.

All our respondents felt that their rooms could do with tables and chairs. These could be used for reading, working, and for eating. For instance, besides the beds, lockers, and personal belongings, Kabir's PBD room was bare. His roommates and him sat on the floor to have their dinner most nights. Others like Rifiqi wanted tables and chairs but felt that "room no space" and that "if the room is bigger with more space, should have tables and chairs."

Improvements Due to COVID-19

From our discussions, improvements mainly came in the form of required social distancing measures in the room. Especially for residents living in FCDs as shown above, government regulations have pushed dormitory operators and employers to take the necessary steps to improve living arrangements for workers.

Room headcount and cleanliness were the main areas that authorities targeted in light of COVID-19. Our respondents acknowledged such efforts that the government, dormitory operators, and employers had done to improve living arrangements:

"Covid is sometimes a blessing. It showed the government and the organisations that there are a lot of issues in the dorm. Now hopefully soon government will take the steps, reduce room to 6 persons or less. Some companies also take a few workers to stay elsewhere. Dorm operators also try to improve. Last time they don't care. Now they are very serious about it. Definitely due to Covid, a lot of things like room cleanliness improve" — Aadil, PBD resident.

"Before COVID-19, the arrangements were 20 people in one room in double beds, but after COVID-19, it became 9 people in one room in single beds" – Hanif, FCD resident

"There were 20 workers sharing the same room before COVID-19, but now, the company has reduced the number of workers in each room" – Moneem, FCD resident



Figure 30: Single beds in a dormitory room after Covid enforcement

From our FGDs, there were improvements to cleanliness and overcrowdedness in most Factory Converted Dormitories (FCDs). However, in PBDs, long-standing issues workers presented above remained. PBD residents continued to live in cramped conditions and other issues like poor ventilation, heat, poor toilet conditions, and inadequate power points and storage space continues to affect almost all residents:

“Dorm is nothing change. Sometimes only give token like hand sanitiser, face mask. But most nothing change.” Ikmaal, PBD resident

“Nothing has changed much except the canteen now converted to become rooms.” – Muhammad, FCD resident

“Nothing change lah, everything still the same! Food also so bad!” – Rifiki, PBD resident

While there were increased inspections carried out by the authorities, our respondents felt that these checks were inadequate. Inspections examined the most visible aspects of the dormitory only (room headcount and tidiness/cleanliness) which dormitory operators and employers were able to work on. This allowed token improvements or “for show only” as referred to by our respondents.

Enforcement officers also rarely spoke to dormitory residents about living conditions. As Noorman above, told us,

“Stayed three years here and lots of time MOM visit but I have never seen MOM or officers asking workers to share and explain their problems and complaints to them directly. They also come when all workers go to work…BCA and MOM must come and see how we are living, our toilet, must see everything that we go through.”

These thoughts were common among our respondents. Rahman further commented that officers would come every fortnight but the dormitory operators will be informed of their arrival. “So before they coming, dorm people will clean very nicely for when they come. When they come they walking around the dormitory to inspect the rooms, they don’t speak to anyone. They see and go.”

Workers’ voices need to be heard during these inspections. And they must be able to voice their opinions without repercussions. As illustrated above, dormitory residents led us to discover problems that otherwise may not be heard. These are significant issuesthat matter to residents living in these quarters, revealing the everyday inequalities present in migrant accommodation.

Section 2: Dormitory Restrictions

During the lockdown (which started on the 7th of April 2020), new movement restrictions within the dormitory were added and rules further tightened up. In this section, we queried respondents on the types of restrictions, rules, and enforcements they encountered in the dormitory. These range from zoning strategies, exit passes, punitive reporting, and interactions with security officers.

Movement Restrictions Within Dormitory

The pandemic brought about strict movement restrictions within the dormitories. To prevent clustering or intermingling between persons, residents' were subjected to new rules, and amenities (if any) like gyms or recreation rooms were closed. For instance, residents from Block A weren't allowed to enter Block B, or residents from Room A weren't allowed to enter Room B and so forth. These rules controlled the mobility of residents and restricted the spaces they could inhabit within the compound.

However, the application of these rules were largely inconsistent or erratic. Among the residents we held discussions with from PBDs, FCDs, and CTQs, we found out that PBD residents were subjected to higher and more intensive forms of surveillance and control compared to the other dormitory types.

From most of our respondents in FCDs and CTQs, while these rules were present, they were not strictly enforced. FCD and CTQ respondents like Farhan, Ahmad, Muhammad, Kareem, and Moneem told us they were free to move about the dormitory, entering others' rooms and going to different levels in the building. Moneem states that "managers say workers can't move from one room to another, but it's okay for workers lah. We usually go to other rooms and we wear mask. Wherever we go, we wear a mask. As long as wear mask, managers are okay."

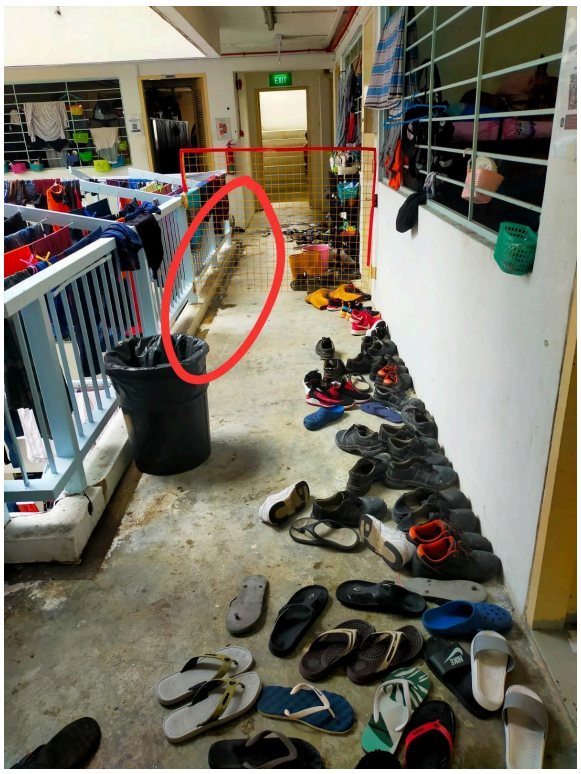


Figure 31: Plastic mesh (encircled by respondent) in PBD corridor to prevent intermingling between rooms

A reason could be that most workers within an FCD were employed under the same company. The risk of contracting and spreading the virus is minimised when resident workers are only allowed to the worksite outside of the dormitory. In certain CTQs (as well as in most work sites), zones are drawn up to control the movement of migrant workers. For example, in Masum's CTQ, as it is the case for Syakir and Mufiz, there are various zones designated for different jobs, different subcontractors, and hence different workers. Masum describes the boundaries within his worksite and CTQ,

"There are three zones. Zone A, B, and C. Within the working site and dormitory is the same. Workers in Zone A live in dormitory Zone A like that. For my CTQ, Zone 1 and 3 all working same company. So Zone 1 can mix together with Zone 3, that is okay. But Zone 2 we cannot mix because they subcon [subcontracted] workers. Sometimes BCA will come and check this make sure no mixing."

On the other hand, PBD residents' experiences were vastly different. They were strictly not allowed to enter another's room. Security guards patrolled the blocks, with some dormitories having checkpoints to make sure workers are not crossing into another block. Many, if not all our PBD residents felt they were constantly monitored. As such, there is an augmented sense of being surveilled over in PBDs and this experience is aptly described by Uthman:

"Totally cannot gather anywhere. Only can stay in room or maybe go minimart downstairs. Can gather in two or five persons (depending on social distancing measures informed by

government) within room only but dorm is very messy. There is no two or five persons… When we go to canteen, there are a lot of queues and you don't know who is with who! Cannot eat in canteen also, must bring back room… Beer shop, got specific table, and only two persons allowed [to sit at each table]. Staff sometimes MOM officer will watching us from distance…Dorm management staff will observe how many persons are sitting together, sit for how long, and if sit too long tell them to leave to let others sit… MOM[22] visit everyday. And everyday 2-3 persons get fined (because never wear masks etc). MOM officer will take picture send to dorm management who send to company, and company cut the fines from workers' salaries around $20… They will take our identity pass also, that's how they identify us. They keeping the pass and this prevents you from going out even with an exit pass…That's why we all knowing not to do any unnecessary things. We follow the rules very closely because we know if anything happen, they take picture and send to boss… Safest place sometimes is own room. Very seldom go out of room.".

Uthman points to movement restrictions within his dormitory compound. With their movements closely watched over, workers are not allowed to intermingle within the compound and are quickly ushered back to their rooms. 'Security checkpoints' were put in place to prevent residents from entering into a different block other than their own. Their dormitory identity passes were checked at such checkpoints. Private security and government officers also patrolled the dormitory and at times, issue out warnings or monetary fines as punishments for infractions. While respondents understood the need for these rules and measures, at times they felt it was excessive and its execution demeaning.

This was especially the case when private security or patrolling officers shouted or barked orders at workers. PBD residents felt that they were treated inhumanely. Many felt that officers didn't speak to them, but insulted them. At times, a worker is singled out and humiliated in front of others. This often occurs when residents lined up for their rations and catered food or other packages they may receive from charities (Lee 2020). Residents were also harassed when they moved around the compound. Officers would check the content of their bags and question where they were going, even if it was to the toilet. These unwarranted verbal abuse and rude behaviour from officers toward residents were dehumanising, causing residents to feel stressed, humiliated, and outraged.[23] However, because these were authorities within the dormitory, residents felt they were powerless and could only "keep quiet," "don't complain," and "just follow." While residents mentioned that perhaps language or communication barriers forced officers to raise their voices, there was no need to be rude or offensive in their tone.

[22] MOM officers may be hired personnel under MOM's Assurance, Care, and Engagement (ACE) group or Forward Assurance Support Teams (FASTs) that are deployed to dormitories to maintain order and provide assistance to workers in relation to COVID-19.

[23] FCD residents, on the other hand, felt that security officers in their dormitories were reasonable. They didn't face issues of being shouted at and thought these officers were 'nice' or taking instructions from MOM or dorm operators.

Recreation Centres, Exit Passes, Different Standards

Movement restrictions also prohibited workers from going outside of the dormitory. Aside from the workplace or recreation centres, residents were to remain in the compound at all times.[24] To buy essentials, workers could visit the minimart within their dormitories if there was one, apply for an exit pass to the recreation centre (RCs), or order online.

To visit RCs, residents had to apply for a Dormitory Exit Pass through a mobile application a week in advance. To be eligible, workers had to test negative for COVID-19. They booked a time slot through the application and are given a window of four hours for each visit. RCs also limit the capacity at 300 per visit window. However, because dormitory residents were mainly working through the week, it was difficult to secure a slot on a weekend to go to the RCs.

Nonetheless, even if one was fortunate to get a slot, our respondents felt that it was a waste of time. The four hours given to visitors included travel and waiting time. Some of our respondents lived a distance from RCs and took about 30 minutes to get there. Additionally, one had to wait in line and take a Rapid Antigen Covid Test before being allowed in. This limited the amount of time they could spend in the RC. Biblop and Uthman described this whole process as a hassle and an inconvenience:

"No one interested to go there. If we go there also many time waste, nothing to do. Only go around 1 hour plus. We go there have to take ART test, very long queue! There I heard from some friend, waiting around 30-40 minutes, sometimes 1 hour also take time to do ART. So almost 2 hours gone [including travelling time]. Left with another 1-2 hour. No one want to go there." - Biblop, FCD resident

"We're only allowed to go to RCs, migrant workers not allowed to go to community. Previously allowed to go RCs for 3 hours but now extend to 4 hours. But even 4 hours is getting squeezy because of ART test in the RCs. They are asking for us to queue, wait outside for ART result. It is time consuming but the dormitory management are not counting that time! They just see the exit pass time and don't count travelling and ART test time." - Uthman, PBD resident

These were common sentiments shared among all our respondents regarding RC visits. There were logistical issues regarding RC visits and workers were not interested in visiting at all. Many hoped instead to go out into the community or visit their usual hangouts before they were locked down.

During our discussion on RCs, respondents importantly directed our attention to the issuance of exit passes. For many of our respondents, even if they were approved for an exit pass,

[24] Migrant worker recreation centres are public spaces built to cater to the needs of workers. There are eight recreation centres, located within close proximities of dormitories.

dormitory management or employers prohibited their leaving. This contravened or overstepped orders and directives from the Ministry of Manpower. If workers were approved for an exit pass, they should be allowed out to visit the RCs or for medical appointments. However, fearing the possibility of virus transmission within the dormitories, some management and employers preferred to contain the workers within the compound.

Moneem and Hanif, both FCD residents, told us that even with an exit pass, "company don't allow" or "boss put own restriction." Their employers were worried of the possibility of an employee catching COVID-19 while out and spreading it to the rest of the workers. This would reduce manpower for the company, affecting productivity and profits. Because workers could not go against the wishes of their employers, even if these actions violated government approval, employers were confident that this would go unnoticed.

Our respondents felt that these rules were applied arbitrarily. They felt it was unfair. Some of their friends from other dormitories with approved exit passes were allowed out, but they were not. They thought it was unreasonable of their employers or dormitory management to restrict their movement even with government approval. This affected Noorman's own life in a drastic way. Noorman received approval for a three hour exit to apply for admissions to college. However, his dormitory operators did not allow him to leave. They told him that he should follow their rules regardless of an exit pass or not. Noorman was outraged by this, "Dorm rules, MOM rules, company rules, my foreman rules, BCA rules, how many rules do we follow? If MOM give permission, then why dorm lock me in? I take permission to go outside for important time to do admissions. I have exit pass but they [dorm operator] don't give permission and say it's their own rules."

This inconsistency also affected the ability to receive online deliveries for a handful of our respondents. If residents were not allowed out of the dormitory or if the RC did not have the items they wanted, they would try to buy it online and have it delivered to the dormitory. However, this was also prohibited for some of our respondents. Rahul gives us an example, "This long period of lockdown is very difficult for us… Because not every worker can go to the RC, RC also have online delivery service. But when we ordered and wanted to collect the necessities after we finish work, my dormitory don't allow us to collect these stuff even if we ordered from the RCs. This is a problem."

Such inconsistent application of rules across the dormitories was viewed by respondents in our discussion groups to be problematic. From dormitory restrictions, house rules, exit passes, and online deliveries, all our respondents thought that a lack of standardisation of rules for all dormitories brought confusion. Certain freedoms or privileges that they or their friends received they felt should be shared among all dormitory residents. It is also not uncommon for employers to move employees to different dormitories during their stay in Singapore. Being moved around for accommodation, workers had to adjust to new rules each time they shifted. These discrepancies along with the many rules that are in place were especially disorienting during a period of uncertainty and isolation.

Complaints and Punitive Measures

With all that respondents shared regarding their living arrangements, conditions, and dormitory restrictions, workers felt disempowered from being able to make improvements. The one and perhaps only option is to make complaints to operators and employers, hoping for redress or some changes. Yet, even this channel is tricky. At times it punishes rather than resolves.

In the workplace or with regard to employment issues, punitive measures for reporting violations mainly manifests through forced repatriation. Because migrant workers' statuses are tied to their employment contract or permit, there is little room for employment mobility. This gives employers a great deal of power over workers (Bal, 2015). If a worker wishes to report a non-payment of salary for instance, it is common for employers to threaten repatriation. Fearing losing their jobs, migrant workers may submit and withdraw their demands. This forms one of the many strategies employers use to coerce and discipline workers (Bal, 2015, 2016; HOME, 2017).

In the dormitory space, the context is definitively different. Usually, employers choose not to interfere in the dormitory space, leaving discretion to operators/managers instead. Although workers will not be threatened with forced repatriation, punitive measures manifest through harassment or "making life difficult" for workers.

Workers who complain about dormitory issues ranging from any of the problems identified in the previous section, may see the complaints fixed. At times, this comes with a literal cost as alluded to by Rahul and Osman earlier, who needed to pay for broken or damaged fans and lockers. According to Rahul, when they made reports in the past, the whole room would have to share the cost of the damage items. In other instances, "trouble" is made for workers who reported.

Aadil, a PBD resident, describes how life is made difficult for residents who complain about cleanliness and sanitation in the dormitory, "We can complaining to management and dorm security, and these problems will be solved. But then, because we complaining, management tell security to watch us. They observe us. And I may also get fined because of any wrong-doing." Hearing Aadil's example, Kabir chimes in saying, "If we complain, we will get harassed! My dormitory security guard have cameras on their bodies so the guard can see who is complaining."

Body cameras may be an exception to the norm, but the noting down of, observance, and harassment of residents who reported are not. These residents are deemed trouble-makers and trouble is returned in favour. Life is also made difficult for workers through management finding faults in the dormitory rooms. After telling us how his room was charged for repairs, Rahul tells us,

“In my dormitory, they actually take complaints seriously. But they would make life more difficult for you. If issue complain, they will disturb you in other ways. They will ask you questions, ask you to change things, and will keep checking on your room. Giving you more problem, more headache. Because we [residents] don’t want to face this, we don’t complain anymore.”

This sentiment was shared by the other PBD residents we held discussions with. Because reporting may cause the entire room trouble, workers chose to remain silent to avoid more problems or “headaches” meted out to them.

“Migrant workers worry about complaining. So instead they keep quiet and don’t complain. If they complain, more problem.”. – Salman, PBD resident.

Through the course of our research, we discovered that punitive approaches were more prevalent in PBDs than in FCDs. Our respondents from FCDs reported cordial relations with management and security, stating that their problems were listened to. However, on two instances, Rifiqi and Jaafar, two FCD respondents, complained about being subjected to surveillance because of their injury and salary reports respectively.

Rifiqi, who suffered from a left lower arm fracture rests in his room for most of the day. His room is located next to the security’s rest area who takes pleasure in bullying Rifiqi. Everyday, while Rifiqi is resting, the security officer would come into the room on several occasions to turn off the lights and fans. Rifiqi felt that he was being unfairly targeted by the guard, who hoped to elicit some kind of reaction from him. Jaafar faces salary issues (not being paid his monthly and overtime wages) and is targeted by the in-charge of the dormitory who is also his foreman. The foreman specifically tells dormitory security to keep a close watch over Jaafar and not allow him out of the room.

Such directed and childish behaviour causes greater distress to these workers already facing injury or salary issues. The purpose of such actions toward Rifiqi and Jaafar is to make life unpleasant for “trouble-makers” while they undergo the claims process. Because these workers filed reports against their employers, employers grew unhappy and relations strained. Thus, employers may solicit security officers to keep a watchful eye on these ‘unproductive’ or ‘useless’ workers.

In Kareem and Rahman’s Construction Temporary Quarters (CTQ) on the other hand, punitive measures include threats of removal from the CTQ. Kareem states that “complain also no use because the company people is the dormitory people. If complain then company people will shouting say ‘you don’t stay here lah! I send you to other dormitory.’” This was detrimental and punishing for CTQ residents because they preferred to live on-site compared to faraway dormitories. Living in a CTQ gave workers more time to rest as there isn’t a need to wake up early in the morning to travel long distances to worksites. The added hour or two of rest was for Rahman and Kareem enough to outweigh the cons of living in a CTQ.

These cases of punishment (or threat of punishment) brought up by respondents reveal how power asymmetries exist not only in an employment setting but also within workers' own living spaces. Attempts to make living conditions a little more comfortable or liveable are sometimes met with reprisals. Dormitory operators may decide to inconvenience or trouble workers who made complaints individually/collectively, or may instruct security officers to keep watch over a particular worker. Because complainants are identifiable, workers refrained from making suggestions or improvements to avoid retaliation or any unnecessary attention. This systematically silences workers from delivering further recommendations on their own residences.

Section 3: Stuck in the Dormitory

"Now it is very boring time. Still waiting when we can go out and have a free life. Now all dorm people waiting for good news - when can go outside? Now it's very boring. You cannot meet friends, cannot go outside, cannot go market, cannot go park. Very worrying because all stay inside dormitory so long already. Even my cousin here one and a half years I cannot meet with him. Close friends also cannot, people everyday working hard want to meet friends enjoy also cannot. Everybody wants to go out, they are very bored and tired!" – Salman, PBD resident

Since the start of the circuit breaker in April 2020, migrant dormitory residents have been cooped up in their residences. The lockdown saw differentiated restriction measures between locals/residents and migrant dormitory residents that carried way past the initial three months. During the circuit breaker period, locals/residents were allowed to leave home to shop for necessities, buy food, or take brief walks. Subsequently, as measures eased, this group was allowed more freedoms with vaccinated travel lanes providing opportunities to go abroad. Migrant dormitory residents, on the other hand, remained confined to the dormitory.[25] The only time they left the compound was to go to work, amplifying their status as labour subjects. For most FCD residents, their worksite was their dormitory. And while workers were allowed to visit Recreation Centres, not all had the opportunity to as we showed above.

Limited to the confines of the dormitory while the rest of the community returned to some sort of normality, migrant workers could not do anything but wait. In this waiting, feelings of frustration, anxiety, restlessness, and longing, as expressed by Salman, fester and grow. The unpleasantries of living in the dormitory overwhelms and residents' mental and emotional health take a toll. A study conducted by Yale-NUS College on 1000 migrant dormitory residents confirmed that workers' displayed higher symptoms of depression and stress caused by restrictions (Saw et al 2021). In this section, we present what respondents shared regarding their extended lockdown. This is important not only because of the circumstances, but in all of our discussions, respondents stated that the "main problem now is cannot go out." How were respondents coping with restrictions? What did they have to say about restrictions? And what problems surfaced because of restrictions? This section covers qualitative responses to differentiated migrant mobility restrictions.

Feeling Stuck

"Brother, the whole fifteen months is just in one building." Noorman rhetorically replied when we asked about mobility restrictions dormitory residents faced. His succinct response

[25] Our focused group discussions took place between June to October 2021, almost a year and a half since the lock down period. It was only in November/December 2021 that the government decided to ease some restrictions for dormitory residents. However, these new measures were conditioned. Only 3000 vaccinated workers out of over 300,000 dormitory residents are allowed out per week. Their visits were time controlled (8 hours) and limited to certain areas in Singapore.

was emotional. It threw the question back to our team conducting the focus group discussions: How would we feel if we were stuck in our own rooms for 15 months?

“Like prison” was a recurring simile among respondents and an expression that Noorman used as well. It felt like being in jail. Coupled with the tight security, surveillance, and restrictions within the dormitory, this association between imprisonment and dormitory heightens. Uthman shared that he feels suffocated having spent more than a year and a half in his small room with twelve persons. He had never experienced anything like this and problems surfaced because of these restrictions. Furthermore, the rules “make us feel like a prisoner, like we are doing crimes. We have no rights to say anything.”

Some respondents felt that the different mobility measures for migrants was a punishment for something innocent or a crime they did not commit. Hanif describes that thought shared among dormitory mates and himself as “we feel like we did not do anything wrong but are in prison”. Indeed, it was a systemic and structural failure of the dormitories that allowed the virus to spread (Dutta 2021).[26] Cramped and overcrowded dormitories enabled the virus outbreak — conditions that migrant workers themselves attributed as the cause for the outbreak. These conditions were something they were not able to change. Even if they had tried to voice such concerns pre-pandemic, they were silenced or ignored (ibid).

The punishing incarceration in the dormitory also manifests in the waiting that residents did. The anticipation itself was punitive as workers yearned to go out to meet friends or escape the stuffiness and suffocation of the room. They were caught in a limbo and this abeyant state was dreadful, distressing, and also painfully boring. Salman alluded to boredom at the beginning of this section and Hanif reiterates it telling us “Everyday everybody waiting to go out. Staying in the dormitory has become so difficult! So many boring! Rest inside also difficult. Cannot rest! How long you want me to sleep in the room?”

Lying in wait and in anticipation, respondents spent all their time on their mobile phones watching videos, playing games, or reading the news. This led to a problem of eye strains and headaches. Moneem narrated this problem:

“Now maximum problem is the eyes. Because the holiday and rest day only staying inside room, time pass only using phone. Phone light directly come to eyes. This problem not only me, so many people eyes problem now because of the phone. Morning until sleep finish, only see the phone to pass time. So many problem! Night time cannot sleep properly then next day go to work eyes very tired. This can cause many problem at work. Last time can go out, don’t need to see phone, so eyes no problem when can go outside.”

[26] See also https://www.scmp.com/week-asia/explained/article/3080466/how-did-migrant-worker-dormitories-become-singapores-biggest

This was a point repeated across discussions. Respondents informed us that they looked at their phones from morning till night. Furthermore, many respondents felt it was impossible to rest in the room. Their living conditions, as described in the first section, made it uncomfortable and sometimes unbearable. Moreover, resting was inclusive not only of lying down on their plywood beds. Resting was the ability to go out into the city to "refresh" themselves. This meant going out to socialise and enjoy away from the dormitory.

Syakir, a CTQ resident tells us, "Now COVID-19, main problem is cannot go out. Feeling is very boring. Sometimes I'm feeling so angry and so tired. It is so boring. I need to refresh. If can have off day go outside and meet my friend, I can enjoy and can refresh." Similarly, Alamin describes how his emotional and mental health would improve if he could go out, "If can go out, all the sad things can forget. But now cannot forget, everyday sad feeling. Staying in the room more sad. Before waiting for Sunday, public holiday, can go out. Now holiday coming also sad, many sad."

Recognising the need to attend to migrants' mental and emotional health, the State set up the Assurance, Care, and Engagement group (ACE). ACE took over from the government's inter-agency task force in managing and containing the spread of COVID-19 in migrant dormitories (CNA 2020a). It sought to provide assurances to migrant dormitory residents through a medical support plan coupled with stakeholder engagements to keep workers in good health. In 2020, the Ministry of Manpower's ACE Division released a statement citing an implementation of a network of twelve on-site medical centres and sectoral medical centres to provide continued access to medical services (MOM, 2020). However, our respondents felt that while it improved migrant workers' access to medical services, it did not help with their emotional and mental turmoil. For workers, the solution is simple: go out. Sharif and Rahul commented that while they are thankful for mental health programmes, the programmes "do nothing for us". They wanted freedom. Like Alamin, they felt that if workers were allowed out, "everything problem can be solved."

Thus, the distress of confinement is inundating. Azreel states, "People in the dorm are depressed… For mental health, meeting friends help. If we can meet each other that would help.". Meeting their close friends and relatives outside of the dormitory gives them the privacy to talk about their feelings. Hanif confesses that he "can't talk to anyone about sadness…everything keep inside the heart nobody to talk to. Sometimes family calling, but don't say anything to them because don't want them to worry."

In addition, dormitory residents, particularly those living in PBDs, were spending more money on necessities and other items. Many PBDs had their own markets or minimarts where dormitory residents could shop for necessities or ingredients. With the lockdown, these shops had monopoly and could raise prices as they wished. Workers did not have a choice. If they wanted to cook or if they ran out of soap, the only point of purchase were these shops. Ikmaal informs us:

"I want to share another experience. Now during Covid, we cannot go out. No shopping mall outside we can buy. Sometimes we cook and we have one shop below at my dorm. One only. That's where all my dormitory people go. We have no choice. Whatever material is there, we must buy. We have no choice. Spoil things, invalid things, we just have to buy. We cannot check. We take the food and we take the price. They say one tomato is $3. This is so expensive. There is no regulation. The fish also spoilt. But we no choice. We need to buy and we need to cook. If we go NTUC or some outside shopping, we can see the price. The sign is clear. Here, whatever the counter say, we must give."

The lockdown gave shop owners the opportunity to capitalise on migrants' immobility. They controlled the prices and charged as they wished, knowing that workers had little or zero alternatives. Already on abysmally low wages in Singapore, store owners profiteered from the situation. In some cases, workers informed us that their expenses had increased by SGD$70 for the month and could not afford fresh vegetables. This price gouging was an issue that workers wanted to highlight and bring attention to. It was another consequence of being stuck in the dormitory and being taken advantage of.

Conclusively, residents have an aggrandized relationship to their dormitories and living space. The discomfort and lack magnifies and becomes more profoundly experienced. Their relationship to the outside, to the common spaces they visit in the city also grows more intense. They have a longing and desire to move about in the city as they once did. However, entrapped, residents feel isolated, abandoned, exploited, and their statuses as non-citizens is made more distinct.

Differentiated Bodies

The differential treatment between migrants and locals/residents was blatant. Workers struggled with the contrasting measures and thought it unfair. They felt neglected while the rest of the population moved about. Even full vaccination statuses were not adequate for more freedom. The situation made it apparent to migrants that they embodied difference; an Other to be managed apart from the 'community.' Observing and experiencing differential treatment, workers were hurt, frustrated, and confused.

Many of our respondents thought that when they received their second dose, they would enjoy more freedom as did the rest of the population.[27] But they were left disappointed. Syakir told us that "all men thinking 2nd dose already can go out freely. But I vaccinated already for two months, still waiting! All thinking go for vaccine maybe got hope! Got chance to go out like others. But so long already still the same! Even if vaccinated all same." Responding to Syakir, Mufiz echoed Syakir saying, "I also thinking same thing. If second

[27] Vaccination rates among migrant workers are close to 100%, with 88% having received booster shots in December 2021. See https://www.straitstimes.com/singapore/88-of-eligible-migrant-workers-have-received-covid-19-booster-shots

dose can go out already like Singaporean. But never happen. I only can do company errands. Now all men only can hope. All thinking one day can go out."

Migrant residents' prolonged waiting in turn confesses that their bodies were to be managed differently. Migrant workers, in their large numbers, were still perceived as threatening to the health and safety of the population or community. Irked by this sense of stasis, Masum who has worked in Singapore for over ten years, laments:

"We know government so many thing do for foreign worker. But I cannot think. I cannot understand why they still stop us [from going out]. Why still cannot go out? Other Singaporean in lockdown all can go out. Now also having so many cases [among locals/residents], why only the foreign workers they stop? I still don't understand this!"

Perplexed, residents like Masum felt veritably discriminated against for being a foreign worker. He goes on to say:

"It's like we're inside the zoo. All this government officer come in and see us. Checking on us. Make sure we submit temperature check and update our health condition on the MOM app…Why only these rules for us? So many rules for foreign workers. But for Singaporean don't have so many rules, actually maybe only social distancing. If after vaccinated, can five person eat and go out together, but foreign workers cannot go out. How like that? Don't have anything for foreign worker. I know they do many things for us, and I am thankful. But this different rules for workers, this one cannot."

Similarly, Raseel states, "I don't understand why Singaporeans can go out but only migrant workers stuck in dorm."

Structures of labour exploitation and immigration policies shape migrants' journey and stay in Singapore. As work permit holders, migrants' lack access to social citizenship privileges, social protection, and collective organisation (Baey & Yeoh 2018; Torres et al 2013). Additionally, the application of different rules to different bodies during the pandemic further rendered salient the privileging of certain bodies in the city-state. Masum and others made sense of this differential treatment as a further entrenchment of differences and inequality because of their transient status.

Segregated and sequestered in the dormitory, Masum likened the experience to a zoo. He felt the contrasting rules for migrants was demeaning and dehumanising. It cemented their status as the 'Other' requiring further containment, exclusion, and rules. This intensified form of social control over migrant bodies was justified as caring and providing for the health and safety of dormitory residents. However, it was perceived by migrants as prejudicial, undermining, and harmful to their physical, mental, and emotional health.

Moreover, if it was a matter of following safe distancing measures, migrant residents thought they could do the same. Biblop shared that "If they allow us [to go out] of course we will

follow [the rules]. Wear mask, follow safe distance, limit how many person can gather. We can also respect the rules and regulations."

Similarly, Salman states "...government give Singaporean [their own] rules. If Singaporean can follow, we can go outside and we can also follow. If they give penalty, of course migrant worker will also follow."

This stark difference in mobility was frustrating for dormitory residents. Workers were questioning these policies and asking why they were being treated adversely? Why did they still have to wait? Why did Singaporeans have their own rules? What about these rules that migrants could not follow? These restrictions made more visible to migrants themselves the systemic discrimination transient workers faced in multi-cultural Singapore. Migrants became more politically cognisant of their social statuses. Subjected to discriminatory movement restrictions on top of poor living conditions, many became fed up with the treatment and injustice and chose to leave.

Leaving Singapore

Since the pandemic started in 2020, countries tightened border controls, closed borders, and restricted travel. Transnationally, this left working migrants — whether expats or low-waged — grounded in their host country. Fortunately, for some migrants in 'middle-' and 'high-skilled' jobs, they had the option to return home and work remotely. Other migrants in essential jobs and services such as healthcare did not have this benefit. Similarly, low-waged male migrants employed in construction, marine, and manufacturing sectors could not leave. With strict border controls, employed migrants were grounded, the in-flow of low-waged male migrants bottle-necked, and there was no guarantee that contracted workers returning from vacation could re-enter Singapore (CNA 2020b).

Thus, migrants were unable to utilise their annual leave[28] to return home and visit their families. The circumstances left migrants in an unpredictable, tricky, and precarious situation. In order to return, workers had to cancel their work permit contracts.

This was an option that many migrants considered and carried through with. Migrants whose contracts expired or were expiring also chose to return home instead, leading to a disproportionate outflow of workers (Business Times 2021). In our discussions, migrants revealed that friends, colleagues, and roommates were choosing to leave because they could no longer tolerate conditions in the dormitory, especially movement restrictions. Hanif informed us that,

[28] It is not uncommon for work permit holders to return home for two weeks to a month during their stint in Singapore. According to the Employment Act, workers have between 7 to 14 days of annual leave depending on the duration they have worked for the company. Levy fees are waived while employees are away capped at 60 calender days. Overseas leave is subjected to employers' approval.
https://www.mom.gov.sg/passes-and-permits/work-permit-for-foreign-worker/overseas-leave

“many workers did not share with MOM and company, but they talk among themselves about wanting to go back to India or Bangladesh because being in Singapore and being stuck in the dormitories they cannot ‘tahan’ [tolerate]. They all waiting for Singapore situation to be better then come back.”

Likewise, Syakir told us that two of his colleagues decided to cancel their permits in August 2021 to return home and wait out the situation. His colleagues did not want to stay in Singapore any longer because they felt suffocated and thought it was better to return for their own wellbeing.

Unable to apply for overseas leave, this became a tactic employed by workers, particularly among those who could afford to. Our respondents told us that “some workers working here many years already, 10–15 years got money and savings, can cancel permit and go home, waiting for Singapore situation better then come again.” Whereas newer workers “have no money so they no choice stay in Singapore even though so many are angry. So many workers feel like they did not do anything wrong but are in prison.” However, there were those that were driven to desperation because of the conditions. Masum told us that “because of this [movement restrictions] a lot of workers go back. Some don’t have money also go back, they cannot tahan already!”

Nevertheless, migrant workers were still anxious about when they could take leave to return. It was a question that respondents and their colleagues were asking but the authorities and employers would not give an answer. The majority of workers did not want to cancel their permits in-lieu of debts they owed from recruitment fees. They were hoping and waiting for better news to come. Moreover, workers had not seen their families for over two years. For instance, Hanif told us he missed his wife and family. Since his marriage in January 2019, he has not seen his wife. He is waiting for things to return to some sort of normality when he can apply for leave or when his permit expires to return home. Similarly, Raheesh left for Singapore before the birth of his son and does not know when he will be able to return to Dhaka to meet his wife and child. He described his situation as “troubling” and felt helpless.

Along with this uncertainty, the pandemic also disrupted migrants’ timelines, targets, and plans. Transnational migrants plan their migration journey and stay. They compose and establish targets and objectives that they hope to meet through economic migration. This takes the form of earning enough money to return to build a home, start a farm or a business, and pay for children’s or sibling’s education among others.

However, strict border and mobility controls interrupt or delay timelines and plans. For example, Biblop states that “Everyone have target how long they want to work in Singapore. Maybe two years or five years. When people fill up [meet] the target, then they go back Bangladesh maybe open business. But now covid coming, difficult to plan. Especially those want to go home now, cannot go back.” As such, some workers felt they have stayed past a time that they wished to in Singapore. Confinement within the dormitory and lack of

information on travel regulations and restrictions also amplified the confusion, anxiety, and unpredictability surrounding their stay. The situation was also dire for workers eager to come to Singapore. Their livelihoods were put on hold as they could not find stable employment in their countries.

Personal plans were also postponed. Responding to Biblop, Asyraf shared about his friends whose marriage plans were delayed because of the pandemic, "Worker come already Singapore working, thinking next year they want to go marry. But because of covid, the time coming already but cannot go back." These dreams and desires had to be deferred and migrants became tired of waiting. They were looking out from a place that wanted to keep them in. They wanted to leave. While some had the capacity to repatriate, others like Syakir were still "waiting for leave."

Thus, such circumstances coupled with immobility within Singapore caused much distress among male migrants. Stuck in unfavourable conditions, some workers chose to leave their jobs and return home to wait out the situation. Others chose to remain because of financial or other personal reasons, bearing the wait hoping for better news. For a handful of respondents from our FGDs, their impression of Singapore drastically changed because of the situation. This can be exemplified through Masum's exclamation, "Next time I don't want to come Singapore already. All these [different] rules they put to workers, they treat us like not human. Next time I will go to other country." He no longer saw Singapore as a good country to offer work. Instead, Masum was thinking of destinations like South Korea or Europe for his next migration where he believes he would be treated with dignity.

Part II: Suggested Improvements from Focus Group Discussions and Interviews, Iterating Design Concept 1.

In this part, we consolidate migrants' suggestions for improvements made during interviews and analyse them for convergence. We substantiate these needed improvements with workers' own verbatim suggestions that we received during our focused group discussions.

These suggestions were then provided to an interior designer, Kevin Ong from *Superfuse Collective*. Taking workers' consolidated suggestions into account, our interior designer constructed Design Concept 1.

Suggestions for Improvements from Interviews

Through our interviews and FGDs, workers made suggestions on various ways to improve dormitory living conditions materially. In this part, we consolidate migrants' suggestions for improvements made during interviews and analyzed them for converging themes. We substantiate these needed improvements with workers' verbatim elaboration.

Room Occupancy

Suggestion: Residency occupancy cap of six persons

All of our respondents asserted that dormitory rooms are overcrowded. With occupancy numbers between 12-16 persons, respondents felt there was no space and privacy in addition to difficulty in communicating and managing the tidiness and cleanliness of the room. For example, Salman tells us "When we reduce people [in the room], there will be more understanding. 12 people one room very hard to reach understanding. 4-6 persons in one room is easy maintenance." Salman refers to the difficulty in communicating with 11-15 other persons in a room to keep it tidy. A reduction in the number of persons allows for lesser conflicts to occur and hence, a better living situation. Rifiqi laments the overcrowdedness in a dormitory room. He tells us that with lesser people sharing a room, "there will be enough walking space in the room." When too many beds are cramped into a room, workers have limited space. With lesser people, Uthman feels that there will be space to have a table to eat and work on. Moreover, it makes the room seem less "suffocating." This stands in contrast to government suggestions of an occupancy cap of 12 persons. While we welcome an occupancy cap where there was none previously, our respondents state that the number must be reduced to create a more liveable space.

Single Beds

Suggestion: Only single beds, at least 1m apart

Most dormitories house workers on double-decker or bunk beds. This leads to issues in sleeping, ventilation, and injury among others. Again, Salman communicates that "double beds not good. Can have injury. If worker is old, many times happening never climb ladder properly and fall, injure back. This is not good…Distance between beds also must increase. Many time worker talking all everyone in the room can hear." Gilani refers to difficulty in getting sufficient rest on double beds. "If double bed, one sleeping down [bottom bunk] hard to sleep because one sleeping on top [top bunk] if any movement making a lot of noise." While workers did not specify the amount of bed space they required, their suggestions for improvements implied the need for single beds and increased personal space.

Bedside Amenities

Suggestion: Bedside tables; personal light

Respondents felt that if possible, it would be useful to have a bedside table. With a bedside table, workers do not need to do everything on their beds. For instance, Osman states, "If bedside can give table is good. We can read and study and do writing. Now my room no table, everything I doing on the bed. Is no good." In addition, having a personal light or a bed lamp will minimise light disturbance caused by the common ceiling light at night. Ahmad states "If at night I want to read or write, maybe disturb others because the light is on. Some people already trying to sleep. If light on, how to sleep. I think if we having own personal light it is better."

Furniture

Suggestion: Common table in room for eating, studying, reading, and writing with chairs for six persons

In mainly overcrowded rooms, there isn't space for a common table and chairs. Workers often eat their meals and do their writing/studying on the floor. Farhan hopes for a table: "If there is a table for reading, it will be good because we always read on floor." Jaabir tells us "If having table better, like this I can read Quran on the table and not on the floor." Rahmaan echoes this saying, "We need tables and chairs so that people can sit and write." Providing these basic amenities is a step toward reconstituting the dormitory room as a liveable space.

Ventilation

Suggestion: Personal fans by beds in addition to stronger and more powerful ceiling fans

Many workers felt that there was poor ventilation in the room. Without proper and good ventilation, the room becomes extremely hot. Heat causes discomfort and also affects sleeping/rest. With temperatures between 32-35 degrees celsius in Singapore coupled with a crowded room, living in a dormitory room can be uncomfortable. Muhammad complains that the room heats up, especially during the day and that their fans are not powerful nor do they have a good reach. Others like Kabir complain that it gets stuffy and warm, especially so on stale nights, making it difficult to sleep. Many workers suggested air conditioning but noted that it may not always be practical. Workers suggested that each resident should be at least provided with a personal fan.

Laundry/Drying areas

Suggestion: An increased area for drying laundry

Uthman asserts that "no enough space to dry clothes. Sometimes I wash and hang, then when I come back another person will take out my clothes. But I cannot blame him because there is not enough space". Osman similarly argues that "we need more drying area. My clothes only dry after 2-3 days hanging. Sometimes I must dry my clothes in the room, hang on the bed. Laundry in room can cause more bed bugs to increase [because of the wet clothes]." Workers engaged in manual labour, especially those involved in marine shipyard work, have to wash their overalls everyday. With a limited set of uniforms or 'work wear', it is important that workers readily have clean and dry attire everyday. Designated and an increase in drying areas for each worker or room will be essential to this.

Power Sockets

Suggestion: Minimum one power socket per sleeping area and a sufficient number of power sockets in common areas

Most of our respondents felt they had enough electrical sockets for their usage (charging of phones and other personal devices). However, this may not be norm across the different dormitories in Singapore. Our report noted a respondent living in an FCD whose room does not have any power sockets and could only charge his device in charging ports outside of his room. Workers propose that there should be a standardisation of a minimum of one power socket beside every bed in the room.

Storage

Suggestion: Bigger locker sizes that can be locked to keep belongings; in-built space in locker or separate cupboard to hang or store clothes

Ikmaal complains that there is a lack of storage space/room in the dormitory. He shares his locker with three other colleagues while the dormitory management provides them with plastic container boxes to store other belongings. Ikmaal wants bigger lockers for personal use to secure his items so he would not have to worry about theft. Additionally, in many dormitories, there just isn't space for workers to hang and keep their clothes/laundry. Many, as seen and accounted by our respondents, hang their clothes on the wall and bedframes. In certain cases, this breaks a dormitory rule. Instead, workers like Rahul would like to see cupboards in addition to personal lockers where they can hang and keep their clothes clean.

Toilets

Suggestion: En-suite toilets catering to less than seven workers with two toilets, two showers, two sinks

Across the different dormitories our respondents live in, toilets were one of the biggest issues brought forward. In some cases, 120 workers living on the same floor share a common toilet of 6-10 water closets, showers, and sinks, not all of which may be functioning properly. With overuse of the toilet, there is a long waiting time to use dirty and smelly toilets. Ikmaal compares his situation back home [Bangladesh] to the dormitory: "I can compare with my own home, we have our own toilet, kitchen, and washroom, maybe 3-6 people share. Like this can maintain. But 120 or 100 people sharing, how to maintain? It's not possible. Whatever is in Singapore, I just tahan [tolerate]. We should clean toilets 2 times a week but I don't think dormitory operator got enough manpower to clean properly all the toilet. How to maintain?" Similarly, Uthman, as among others, tells us that there simply isn't enough toilets, that "the situation of the toilets needs to be improved everywhere [across all dormitories]." Respondents felt that having en-suite toilets would make it easier for them to clean it on a weekly or bi-weekly basis; the maintenance of the hygiene and cleanliness of the toilet would be an easier task.

Kitchens

Suggestion: En-suite kitchen: 2 stoves for 6 persons

In some purpose-built dormitories, a common kitchen is located on the ground floor. It is a cooking space shared by all residents in the block. However, most dormitories lack a kitchen, or there isn't enough kitchen facilities for everyone. Even though our discussions didn't focus on food, our respondents brought up the issue of the poor quality of catered food. Complaining about the staleness, oiliness, and nutrition-lacking food they received, respondents felt that ideally, an en-suite kitchen would be good. While we recognize the fire-safety hazards that such an arrangement may have, it is necessary to include this aspect voiced out by respondents. Masum speaks to us saying, "Maximum [most] dormitories all don't have kitchen, cannot cook. If got kitchen better. Catering food so lousy and dormitory area no makan place. Cannot go out to buy." Building upon Masum, Mufiz states "Everyday I miss my homemade food, that's why I thinking have attached kitchen better…if one dormitory room 6 people, can 3 people can sharing 1 stove."

Food Storage

Suggestion: A fridge in each dormitory room

Respondents told us that there isn't much space to store food, especially perishables. To have a refrigerator would allow workers to keep food stuff hygienically and safely away from bugs and pests. According to Uthman, "If we have a fridge, it will be very useful for us. Actually, downstairs, in the kitchen, near the locker, there is a space for fridge but don't have. If they allow to put fridge, we can eat better and store things. Like that no rats no cockroaches. Easier to keep food. I think this one [with a fridge] can improve a lot for us. If we go market and buy food, got no place to keep. It's very hard for us." Sadeeq also tells us, "It is very difficult to cook. I live on top floor so there is no fridge and I cannot keep my food after cooking. Now [during COVID] very difficult, I cannot cook also, not allowed. I eat catering food. Sometimes eat but sometimes throw because the food is no good."

Water Access

Suggestion: Sufficient water coolers / water points on each floor

Not every dormitory has a water cooler / water point. Because of this lack, workers draw drinking water from the taps in the toilet. According to Ikmaal, he states, "Drinking water and shower water is the same. Using toilet the tap the water to drink. Here there is no water cooler. If can provide water cooler will be good."

Study Rooms / Quiet Rooms

Suggestion: To have a dedicated quiet room or space for studying

Often, workers are enrolled into courses requiring them to complete assignments and/or study. Noorman laments that there isn't a quiet space for him to do his work. "Now I'm studying, I start my class and do assignments. Some people are listening to songs, some people are shouting, how I study? Don't need a nice library but it will be good to have an extra quiet room to study." Sadeeq echoes Noorman, saying, "In the dormitory, the rules is 11:30–11:45 like that off all lights. Everybody working already so want to sleep. If never finish assignment then how do I do? 7am wake up go worksite then 11pm come back how to study? I need extra time for studying. I don't need extra laptops or what, I need extra space. My one I need to write. I read and write the assignment."

Recreation / Facilities

Suggestion: More recreation facilities/outdoor spaces

Our respondents also asked for more recreational facilities for exercise and/or to hang out outside of their rooms. This aligns with the Ministry's response to include and expand on facilities and amenities inside dormitories.

Feedback Channels

Suggestion: Dormitory Resident Committee

In the dormitories, it is difficult for residents to voice out certain concerns to the management. There may not be open or safe feedback channels to the dormitory operators/management or the Ministry. Residents are therefore hindered from suggesting

improvements or raising other issues like mistreatment by dormitory staff. Our respondents would like to be allowed to form dormitory resident committees in order for workers to collectively raise issues to the dormitory operators or regulatory powers that concern their wellbeing and living situation. For instance, Farhan tells us “I think better to have committee so worker can tell management if got problem. We can let them know our requests.” Rahul shares similar sentiments, stating “Dorm operators need to know migrant workers’ lives and the problems we facing in the dormitory. They don’t know. They need to consider us not as workers but as residents. Actually we are customers and dorm operators need to meet our needs. If there is a problem, sometimes they don’t listen. They must listen to the worker and help us solving the problem.” Salman pointed to a more serious concern, “Dorm operator don’t want to let any worker leak to MOM all the problem [inside dormitories]. If leaking, MOM will come down and they [dorm operator] don’t like. I hope that worker advising committee can form in the dormitory so we can feedback problems to MOM.”

Design Concept 1

For improvements to be better visualised and iterated, migrants' verbal suggestions for improvements were submitted to an interior designer to reconceptualize and redesign a dormitory room. Noting the importance of creating a liveable and habitable space first, our interior designer focused on workers' suggestions in relation to the room. With a widened room to allow for more airflow and employing a modular conceptual plan, Design Concept 1 is the first attempt to reconceptualize a dormitory space.

The idea for modularity is to maximise the space in the room. Discussions with our respondents pointed us to much unused space in the dormitory room, especially below and around the bed. Design Concept 1 proposes having foldable tables that can be used individually or assembled to form a larger communal table. These foldable tables can be kept under residents' beds when not in use. In addition, a flip up table could be installed at the foot of the bed and put down when not in use. Modular storage boxes can also be fitted below the bed and double up as chairs/stools.

During FGDs, migrants had directed us to small cupboards and cabinets that do not provide enough storage space for their clothes and belongings. Most of these cupboards and cabinets are half-height and do not make full use of vertical space. Design Concept 1 proposes cupboards that are floor-to-ceiling to maximise and provide sufficient storage space.

It also proposes dedicated lights for each resident, a wider opening at one end of the room for more ventilation and ceiling fans to keep residents cool.

Design Concept 1 proposes a maximum of 6 migrants to a room. It attempts to align with the governments' new improvement standards of 4.2 sqm per resident. This is broken down into the following:

- 1.8 sqm for a single bed
- 0.9 sqm for a wardrobe
- 0.5 sqm for a foldable table
- 1.0 sqm flexible space

However, as this is only adequate for a workers' living space, the design concept proposes a total defined area of 7.4 sqm per worker (excluding living amenities) to provide for movement space and distance between beds spaces.

In line with Ministry improvements to build ensuite bathrooms, Design Concept 1 includes a shared ensuite bathroom. However, while the Ministry proposes 1 set of shower, W/C, and tap and sink to 6 residents, Design Concept 1 proposes 2 x shower; 2 x W/C; 2 x tap and sink to 6 residents instead. This is more aligned with what respondents suggested. Ensuite bathrooms along with doubling the toilet amenities reduces waiting time for toilet use in both

the mornings and evenings. It also proposes a shared kitchen with 2 stoves for 2 workers to cook concurrently.

Additionally, through our FGDs, pictures that migrants shared of their rooms, and a handful of ‘virtual tours,’ our interior designer noticed that most dormitory rooms employ a deep and narrow design. Instead, Design Concept 1 proposes widening the room to increase the walking gangway size to enhance walking space, and a larger fenestration at the end of the room for better air circulation and to allow more natural light in. It also proposes rearranging the beds and using cupboards to space out adjacent beds. This provides more room to combine modular tables for communal activities in the center of the room, or dismantling the tables to create open space for communal prayers. This potentially changes the setting of the room which could aid in improving mental health.

Design Concept 1 also proposes the addition of a balcony for recreational use. It is meant as a therapeutic and positive space where plants can be added for workers to wind down after a hard day’s work.

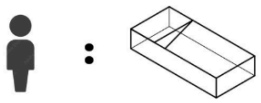
To address laundry needs, a spacious laundry area with a washing machine and clothes drying space is proposed behind the toilet. It introduces the use of a retractable laundry rack that can be extended out when it is sunny and also allows laundry to be dried indoors. This in-room laundry area differs from communal laundry drying spaces in some workers' dormitories. The absence of designated laundry areas prompted some workers to hang damp clothes in their rooms, leading to the proliferation of bed bugs in humid conditions. Providing a dedicated laundry space aims to resolve some of the issues our respondents highlighted above. Below is the detailed conceptual design.

Re-Designing Migrants' Living Spaces

DESIGN CONCEPT 1

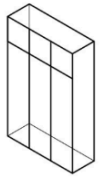
Determining Living Spaces

Spaces Defined by Functions (Individual):



Single Bed
1.8sqm

Function:
Sleep/ Rest



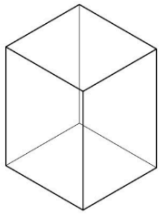
Wardrobe
0.9sqm

Function:
Storage



Table
0.5sqm

Function:
Study/ Activites



Living Space
4.2sqm

Function:
Domesticity

7.4sqm

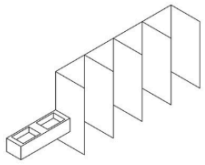
Total Defined Area
7.4sqm / Worker



Proposed Defined Area
45sqm

Function:
6 Migrants to a Room

Spaces Defined by Functions (Shared):



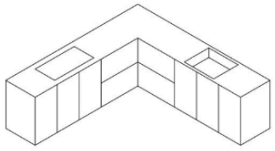
Shared En-suite Bathroom
2 x Shower
2 x W/C
2 x Tap and Sink

Function:
Bathroom



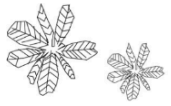
Laundry Area
Retractable rack for
better house-keeping

Function:
Sufficient Ceiling Space to
Dry Clothes



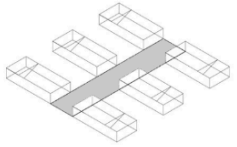
Shared Kitchen
2 x Stove
1 x Large Format Sink

Function:
Sufficient space for 2 groups
of concurrent Cooking



Balcony

Function:
Therapeutic
Positive Space



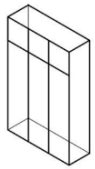
Gangway

Function:
Passage for
walking

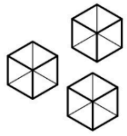
Dormitory Space (Proposed): 45sqm/6pax + 1 x Ensuite Bathroom + 1 x Dedicated Laundry area + 1 x Dedicated Kitchen + 1 x Balcony Space

DESIGN CONCEPT 1

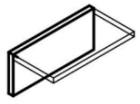
Proposed Strategies



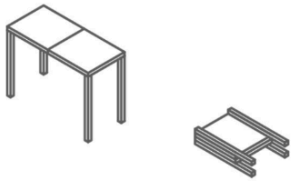
Wardrobe:
- Full height to maximise storage (ie Luggage on top shelf)
- Sufficient space for clothes
- Sufficient space for personal belonging
- Internal locker space



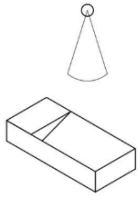
Modular Storage:
- Modular storage fitted under bed (otherwise un-usuable space)
- To keep when not in use
- Can be used as chairs



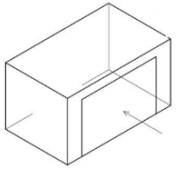
Flip up Table:
- Flip up table attached to foot of bed for personal use
- Can be kept when not in use



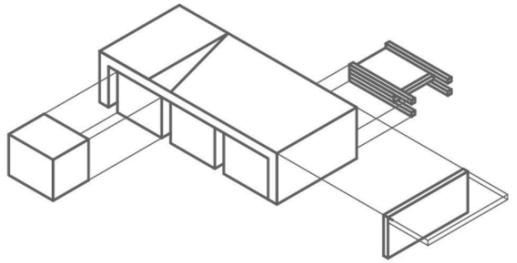
Modular Foldable Table:
- Foldable table that can be kept when not in use
- Can be combined with other tables to cater to communal acitvities



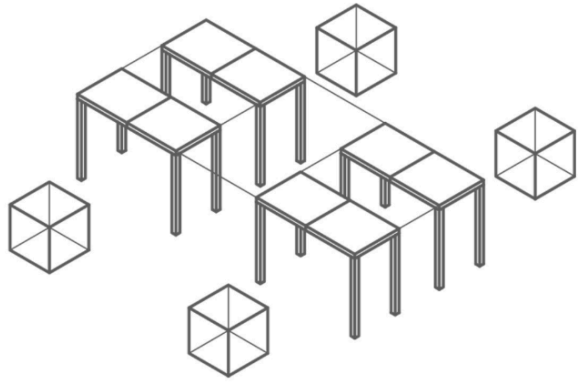
Lighting:
- Dedicated lights for each pax
- Propoer planning of lighting-looping plans
- Ceiling fan



Room Design:
- Wider opening and less deep space for more ventilation and lesser dark areas

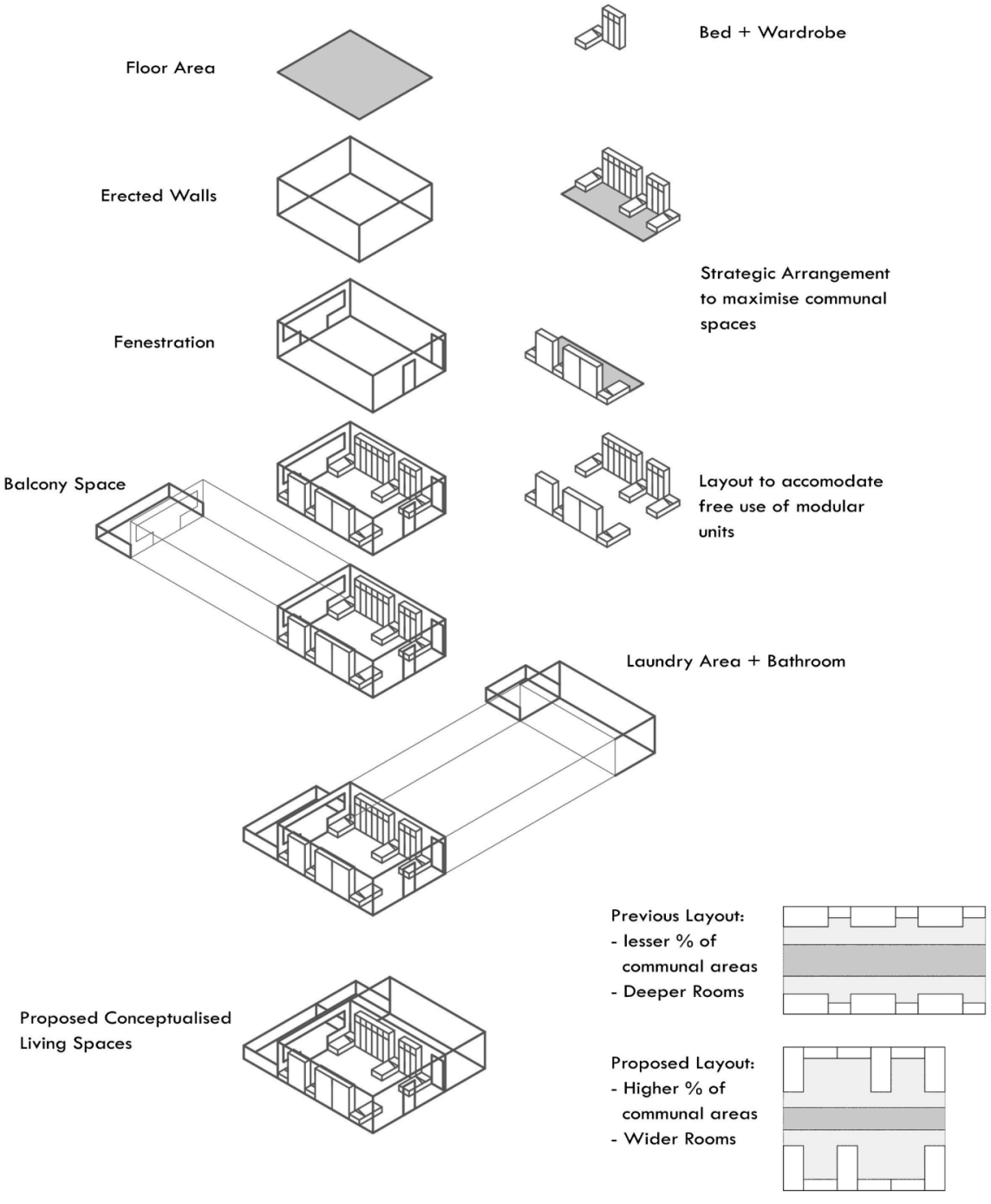


Modular storage can be stowed under bedframe
Modular Foldable table can be stowed under bedframe
Flip up table can be installed at the foot of bedframe



Modular storage can be used us chairs
Modular Foldable table can be combined for communal activities if needed

Proposed Living Spaces



Part III: Collaborative Solution-Finding - Redesigning Dormitory Rooms

In this part, migrant community members were engaged on a *collaborative level of participation* to re-imagine and re-design a dormitory accommodation arrangement.

In multi-stakeholder engagements, migrant workers' voices can be easily shadowed in consultations that involve stakeholders with more power. Choosing to collaborate with migrant workers meant intentionally selecting research methods, tools and processes that emphasize shared decision-making and co-leadership to level power disparities and center migrants' voices. This recognizes and elevates migrant workers' lived experiences and social realities as residents of dormitories. It taps on their strengths as builders who work with their hands, and trust in their creative and innovative potentials to contribute to solutions for a problem that directly impacts their lives. It also allows researchers to play the role of facilitators and become learners of community members themselves.

To refine Design Concept 1 to reflect better migrant workers' needs, Design Concept 1 and the findings from migrants' initial suggestions were returned to migrant community members to gain their feedback and perspectives.

From the relationships built from the initial sense-making and problem identification process, we were able to gather migrant community members for face-to-face meetings. We presented Design Concept 1 and explained how consolidated findings of suggestions for improvements made during focus group discussions contributed to it. We then invited the migrants to reflect on how effectively Design Concept 1 captured their perspectives and vision of an ideal accommodation and to then decide the method and medium of data collection that best expressed their ideal dormitory constructs.

We offered various mediums to empower migrants with alternative means to express their perspectives and best elucidate their ideas. Of the options available, migrant participants chose the use of Lego® as the medium that best facilitated the expression of their proposed solution of a dormitory construct.

Using Lego®, workers were enabled to engage with their imagination by tapping on their strengths as builders "thinking through their fingers" to reveal tacit and complex knowledge that are not easily expressed verbally. This enabled the workers to provide modelled solutions based on their intimate and experiential knowledge of the dormitories that reveal especially spatial and ratio details, thus, emphasising the benefits of a participatory process.

Workers' reflections, feedback, along with Lego Models they built to reimagine healthier and better living spaces (detailed below), culminates in Design Concept 2.

Method

Migrant participants were invited as individuals or informal group associations. A total of 21 workers were engaged over 3 participatory group sessions between June and July 2022.

Each session commenced with a presentation of the dormitory model designed by Superfuse Collective. Interior Designer Kevin Ong would first provide a general overview of the model, followed by a detailed explanation of its specific components. After the presentation, participants were invited to reflect if what was presented aligned with their ideal living standards.

Facilitators engaged in discussions with participants to determine the most effective method of communicating their thoughts and feedback on improvements of Design Concept 1. Participants and facilitators mutually agreed that representing their ideal accommodation through a construct was the optimal approach. Facilitators futher explored a range of mediums with participants, ultimately agreeing on the most suitable medium that could effectively translate their thoughts and feedback to elucidate their ideal accommodation construct. Consequently, participants presented their feedback using the medium that best facilitated the expression of their ideas.

The sessions followed a similar set of basic assumptions as Lego® Serious Play (Frick et al., 2013), mainly:

- *Everyone has a voice*. Everyone within the group can contribute to the discussion and the generation of the solution.
- *The answer is in the system:* No one in the group has the answer to the challenge (neither the facilitator nor the group's leader). All participants are free to express themselves and are encouraged to listen to each other.
- *There is no ONE right answer:* Differing views and perspectives are a good thing and must "come out in the open without anybody saying which is 'right' or 'wrong'".

Participants had the option of working alone, in pairs, or in small groups to build their models. A range of materials was provided from which they could construct their model. Namely, markers, colour pencils, paper, watercolour paint, duct tape, coloured ice cream sticks, glue and Lego® (blocks and personnel figures). They could use any of the materials available to build their models and were given the choice of combining more than one medium or material. Facilitators held short discussions with the participants to decide which medium best worked for them. Participants were invited to take as long as they needed to complete their models as long as their prototypes helped to reflect what they hoped to have in an ideal dormitory structure.

Upon completion, each individual or group shared their model solution with everyone. After their presentation, other groups were given the opportunity to ask questions. This gave participants who constructed the chance to clarify, reflect on their construction, and make

changes to their models. Finally, photos of the models and videos of the presentations were taken to document the outcomes.

Exploring Mediums for Participation

While workers were still under movement restrictions in March 2022, Here With You held groupwork in dormitories and recreation centres, which revealed that using tactile and art materials — such as paint and canvas, drawing paper, wooden blocks and miscellaneous materials — garnered spontaneous and detailed responses from migrants. Tactile materials provided migrants with an expanded dimension of communication between volunteers and migrants to overcome cultural and language barriers (Here With You - Migrants Helpline, 2021). In addition to art materials, migrants were also offered Lego® pieces. Of the options available, migrant participants chose Lego® to construct their improvement models and present their proposed solutions of an ideal dormitory construct.

Why Lego®? The Advantages of Lego® Prototyping

The use of *Lego*® brought additional benefits that are well documented in Lego® Serious Play (LSP) literature (Kristiansen et al., 2009).

Lego® was the preferred method for participants to construct their ideas for three key reasons. First, building with Lego® taps on the complex exchange of sensory information between the human brain and the hands — which possess fine motor skills and nerves — that stimulate the imagination (Wilson, 1998). Building physical 3-D models to communicate ideas taps upon the inherent interconnection already existing between the brain and hands and is "a primordial way that the brain uses to construct its own knowledge of the world" (Rasmussen Consulting, 2012). By "thinking through our fingers" or "thinking with objects", we stimulate creativity and utilise forgotten modes of thinking and seeing which are imperative to the articulation of tacit and complex knowledge (Papert, 1996).

Second, Lego® is a helpful tool in aiding design visualisation. Our decision to use Lego® was motivated by Mihaly Csíkszentmihályi's (1990) theory of the state of "flow". By the state of flow, he refers to a heightened state of focus and immersion in a particular activity where a person is able to perform in an optimal level of creativity, fulfilment and skill. 'Flow' occurs when the task has the right amount of challenge that stimulates arousal while still adequately managed by a person's skills, thereby pushing past apathy and boredom, but without inducing worry and anxiety (Csíkszentmihályi, 1990).

Third, Lego® is a relatively easy to use medium to facilitate the visualisation of solutions and create tangible outputs due to its tidiness and ability to positively impact its users "social, emotional, language, physical and cognitive development" (Root, 2022). Root (2022) posits that Lego® combines visual and manual processes that could strengthen imagery, visualisation and imagination skills in adults and that through the aspects of play, participants

may “beneficially lose their sense of self” to reveal more information in less time than just visual and verbal processes alone.

In contemporary examples, Lego® is used in co-designing urban planning engagement (Tewdwr-Jones & Wilson, 2022), participatory action research (Camacho, 2019), and participatory development communication (Hinthorne, 2012). These examples depict Lego® as a useful medium to facilitate the expression of tacit knowledge, feelings, and lived experiences in creative, visually stimulating, and dialogical approaches that emphasise horizontal processes of knowledge exchange in contrast to top-down ‘expert’-driven analysis and initiatives. Moreover, Lego® offers a low-tech approach to facilitate the participation and voice of community members that respect their perceptions of their own needs and their agency in solution-finding.

Findings

Almost all participants gravitated towards using Lego® to construct their models, likely due to its ease of use and tidiness as suggested by Root (2022). The use of Lego® gave participants the chance to reflect and think deeper, in essence becoming “designers of their own rooms”. Participants constructed a total of 10 Lego® models, each depicting an accommodation unit. These models included specific facilities and amenities that workers perceived were necessary to have in their accommodation, the facilities to residents ratio, and how they would have them arranged spatially. It also unveiled innovative solutions which were not surfaced during verbal interviews, some of which the participants did not even initially envisage.
The models and purposing of accommodation space can be viewed in Annex 1.

A table summary of migrants’ Improvement Models can be viewed in Annex 2.
A low resolution copy is shown below.

Models	No. of beds per room	Lights	Lockers	Windows	Fans	Tables and seats per persons	Sinks per persons	Showers per persons	WC per Persons	Washing Machine per Persons	Laundry Space	Refrigerator per persons	Stove per persons	Kitchen sink per persons	Unique Feature(s)
Model 1	6	Individual Lights	Individual Lockers		Individual fan			3 : 6	2 : 6	2 : 6	Large Laundry Space. 4 laundry racks: 6 residents				This model deals with unbearable heat in the dormitory. It emphasizes cooling, airflow and ventilation through a large window at one end of the room, and a door at other end to allow air to flow through. It also proposes having 2 large industrial ceiling fans, individual fans and a personal light for each resident. It also proposes a dedicated laundry area consisting of 2 washing machines and a large space for 4 racks for hanging laundry
Model 2	6	Individual Lights	Individual Lockers		Individual fan	6 : 6 Individual Table and seat each.	2 : 6	2 : 6	2 : 6	1 : 6	3 laundry drying racks : 6 residents	1 : 6	2 : 6		Emphasizes personal space which includes a personal desk, locker and light beside their beds. It also includes a "hospital-style" curtain that can be drawn for more privacy. It also emphasizes 2 toilets for 6 workers, 3 clothing racks, a washing machine and a cooking space with refrigerator for storing food.
Model 3	4	Individual Lights	Individual Lockers		Individual fan	1 : 6 Central Table and seating for 6 residents.	1 : 4	1 : 4	1 : 4	1 : 4	Service Balcony	1 : 4	1 : 4		This model creates more space by having only 4 workers share a dorm room. Partitioning between each bed space allows each bedspace to become its own "bedroom". This leaves enough space for a central dining/social area. A barrier or wall separates the sleeping and dining areas from the kitchen and toilet. It proposes a separate service balcony for washing and drying laundry.
Model 4	6	Individual Lights	Individual Lockers	2 windows in the front of bedroom and 2 windows at the back. Window at laundry room where laundry	Individual fan	Study table in study room and dining table in dining room		2 : 6	2 : 6	1 : 6	3 External Laundry racks : 6 residents.	1 : 6	2 : 6	2 : 6	Emphasizes multiple rooms. Each for different purposes and corridor space. A dining room, study room to make calls or do work for any courses they are taking. It also suggests having windows in each room to ventilate them and an external laundry drying area so that clothes can dry faster.
Model 5	6		Individual floor-to-ceiling lockers	Windows at the dining and reading area, 2 windows in the room. Back door opens up to the balcony. Windows for the laundry area and kitchen area.		2 : 6 Tables in front corridor for reading and dining and seating for 6 residents	2 : 6	2 : 6	2 : 6	1 : 6	Large laundry-drying area next to a large window	2 : 6	2 : 6		The front door of this model opens up to a shoe rack for shoe organization, a sitting area for shoe wearing and hot and cold water dispensers. The seating area leads into a front corridor that functions as a common room, furnished with bookshelves, compartments and 2 tables at the end, for reading and dining. This group also highlighted the issue of privacy when taking phone calls. They proposed a balcony that can be accessed from the back of the room with two chairs for seating and a door that can be locked to take private calls. The bedroom has a gangway large enough to pray in a group and floor-to-ceiling individual lockers.
Model 6	6		Individual person-height lockers	Windows at the sitting area, 2 windows at the central service "hall", 2 windows at the bedroom.		1 : 6 Table in front corridor for reading and dining and seating for 6 residents		2 : 6	2 : 6	1 : 6	Laundry-drying area next to the window in service hall	2 : 6	2 : 6	2 : 6	This dorm design features a front corridor that also functions as a communal dining space which then leads to the central service 'hall', from where the bedroom and toilet area can then bed accessed. The central service 'hall' contains commonly used facilities: 2 refrigerators, 2 basin, 2 stovetops and a laundry-drying area, aerated by 2 large windows. A smaller service room with the washing machine connects the central service 'hall' to the 2 toilets on either side. The bedroom is aerated by 2 large windows and furnished with person-height lockers.
Model 7	8		Individual floor-to-ceiling Lockers	2 Windows in the bedroom. Windows at the laundry drying areas, large opening at the balcony.		1 : 8 Central Table with seats in the middle of the Bedroom		2 : 8	2 : 8	1 : 8	Laundry-drying area next to washing machine window in service corridor	1 : 8	1 : 8	1 : 8	Included in this design is a service phone just outside the room where calls can be made for emergencies or if something is faulty in the room. The bedroom has 8 single beds, floor to ceiling lockers and a large central communal space for praying, and where a table may also be placed. Adjacent to the bedroom is a large balcony with plenty of quiet space for workers to make private calls to their families. Connected perpendicular to the balcony is a service corridor with laundry facilities, kitchen with stoves and the toilets.

Model 8	6		Individual floor-to-ceiling lockers	Window in room, dining room, sitting areas		1 table and a sitting area with 4 seats in the front in the tea-area 1 table and 6 seats in the dining room	3 : 6	3 : 6	3 : 6	1 : 6	6 poles : 6 residents. Laundry can be hung externally from window of service room (like in HDB flats)	1 : 6	2 : 6		This design features a small sitting area in the front of the room for having tea. Communal tea-drinking is common in Bangladeshi culture and this dorm uses a small space to allow workers to participate in this social ritual. The tea drinking area opens up to the bedroom which connect to a dining room with a table and chairs enough for 6 people. Next to the dining room is a kitchen and service balcony with 2 stoves where up to 2-3 people can cook at the same time. It includes a food preparation area, refrigerator and washing machine. The window of the service room also serves as the place where laundry can be hung externally on bamboo poles (like in HDB flats).
Model 9	6		Individual floor-to-ceiling lockers	2 windows in the bedroom and 1 window next to the laundry place.	Personal Fans		2 : 6	2 : 6	2 : 6	1 : 6	Laundry area is indoors, next to window and washing machine.	1 : 6	3 : 6	2 : 6	This design features two main sections. A bedroom section on one side and an adjacent section that contains the cooking facilities, toilets and laundry areas. The bedroom is aerated by two large windows. A storage room dedicated to cleaning equipment as well as a shoe rack at the entrance solves issues of clutter. A fire extinguisher can be located close to storage and stoves for times of emergency.
Model 10	6		Individual floor-to-ceiling lockers	2-4 windows in the bedroom		Dining table in the living room for 6 residents.	2 : 6	2 : 6	2 : 6				2 : 6	2 : 6	This design features a 'living room' that contains a dining area with 6 chairs, a sofa and television for residents to relax and recharge before another hard day of work. The entrance opens up into the bedroom with 6 beds and accompanying personal lockers. The room has at least 4 windows. The bedroom leads to a 'living room' space. Adjacent to the living room is the kitchen area with 2 stoves for 6 persons, and the toilets containing 2 showers and 2 toilets. 6 residents can divide themselves into groups of 2. While waiting for 2 residents to finish cooking, 2 residents can use the showers, while the remaining 2 can use the toilets. This reduces the time residents spend queuing to perform daily activities.

Bedroom Space

Themes that surfaced related to the bedroom space centred on personal space and privacy. Migrant participants felt that Design Concept 1 was inadequate in providing privacy required by workers. They proposed simple structures that create an increased sense of personal space and privacy. One innovative solution is the use of hospital-style curtains that can be drawn around beds to provide a temporary "room" that reduces light and sound disturbance from neighbouring beds. Another proposal involves board partitioning between bed spaces.

Migrant participants evaluated the proposal from Design Concept 1's, which suggested the use of space-saving modularity and transforming furniture, including foldable tables and storage boxes that could also function as chairs. While these ideas might initially seem innovative, participants concluded that such designs would likely entail substantial manufacturing and implementation costs. Furthermore, expressed skepticism regarding the practicality of these designs and doubted whether dormitory owners or operators would adopt them.

Instead, migrants' improvement models included regular tables and chairs, a personal bedside light, charging points and a personal locker with improved storage capacity. All participants approved of the Design Concept 1's suggestion of having floor-to-ceiling lockers as it provides adequate storage for clothes and personal belongings as well as luggage. For personal communication with their families, they constructed dedicated places such as a study room or a balcony at the back of the bedroom to make phone calls in private.

Spatial Arrangements—Specific Purposing of Areas and Rooms

A recurring theme among all models is that participants preferred rooms or areas that were purposed for dedicated activities. Participants proposed for amenities like the toilets and kitchen to be ensuite, and designated areas within the unit for specific purposes that include dining, studying, recreation, cooking, laundry, and also storage of cleaning equipment. The detailed purposing of each area ensures adequate space for life's daily routine needs.

Laundry: Dedicated Service Balcony or Service Room for Laundry

Participants proposed a service balcony or room where 1 to 2 washing machines can be provided for 4 to 6 residents, alongside a dedicated **large** laundry drying area. Participants specified that there should be **3 laundry poles to 6 residents**. Laundry hanging areas were proposed to be outdoors or outside the accommodation so that wet laundry can receive adequate sun and wind for drying. One group's model described a design where laundry can be hung outside the service balcony on bamboo poles similar to that of HDB flats. If the laundry drying area is indoors, they require it to be close to windows for adequate ventilation.

While MOM Licensing requirements mandates for laundry facilities or services and sufficient and sheltered drying areas for laundry, the specific design and ratio/number of the laundry/drying facilities come in different sizes and designs in relation to dormitory layout,

and residents have different usage patterns.[29] The lack of specificity is a possible area for improvement.

Dedicated Areas for Dining, Recreation and Learning

Participants' models proposed dedicated spaces for dining, recreation, and learning. One model proposed a common 'living room' area containing a sofa and television as well as their dining space so workers can relax and recharge before the next day. Another model proposed a dedicated tea-drinking area just outside the entrance of the room with tea amenities, where people can participate in communal tea drinking as is common back home.

Some models proposed a common corridor at the front of the room that can function as a dining area, furnished with a dining table and chairs so that residents do not have to eat on their beds or on the floor. The dining area can also be located as part of a central space in the middle of the bedroom, as part of a common 'living room', or as a dedicated dining room. This dining area can also double up as a study room where bookshelves can be placed, and cubicles for those wishing to study or read. One model proposed for a dedicated study room altogether.

Ventilation

Participants gave considerable weight to ventilation, especially in the bedrooms and laundry space. Participants intentionally constructed multiple windows and ventilation points into the bedrooms, most suggested at least 2 windows in the bedroom, one model going as far as to suggest for a bedroom to have windows on 3 sides of the room, one next to each bed, leaving the only remaining side of the room for the door. Another model suggested that every room requires a window regardless, including the kitchen, dining room, and sitting areas along the corridor.

Three models took into consideration airflow and suggested openings at two ends of the room, 2 wide windows in the front and 2 wide windows at the back of the room or a door opening up to a balcony to allow for air to pass through the room.

For fans, almost all models proposed for each resident to have individual fans but one innovative model incorporated the use of two large industrial fans to cool the room, aside from individual fans.

It was also important to all the participants that the laundry area has adequate windows for ventilation. All models included a window beside the laundry hanging area regardless of whether the laundry was to be hung out of the window or indoors.

[29] FEDA licensing conditions was provided by MOM on the 11 June 2024, after a review of this report. A fuller description of the licensing conditions are covered in Part I, Section 1, under the sub-heading "Laundry".

Room Occupancy
Almost all groups proposed models consisting of 6 beds. Only one model proposed having a room of 4 beds and another proposed a room containing 8 beds. Most participants empathically stated that "6 is enough for one room".

Kitchens and Food Storage
Almost all models included a refrigerator to be present in the kitchen, while 2 models constructed 2 refrigerators to be provided for 6 residents. Aside from a refrigerator for food storage, participants felt that cabinets and shelves should be constructed in the kitchen to put cooking utensils and other food items.

Most participants constructed 2 stoves, 2 kitchen basins and 2 separate cooking preparation stations for a kitchen shared between 6 residents. Participants specified that it should be such that 2 residents at minimum can prepare food at the same time. Only one model constructed 1 set of refrigerator, stove, and sink to be shared between 4 residents and one model with 8 residents.

Toilets
Most models contained 2 to 3 showers, water closets and basins to be shared between 4 to 8 residents with most models constructing 2 showers, 2 water closets and 2 basins to be shared amongst 6 residents.

During their presentation of the models, participants explained that having 2 toilets, 2 showers and 2 stoves in the kitchen allows the 6 residents to organize themselves into 3 groups of 2. A pair of residents are able to take turns perform each daily activity at any one time whether it be using the toilet, showering, or food preparation, thereby providing the optimum setting that enables residents to minimize time between activities and avoid long queues. This provides the most efficient use of time to complete their daily routines, especially at the start of the day and after a hard day's work, when these facilities are most heavily utilized. This enables residents to have more time for rest before another hard day's work. Additionally, participants shared that a minimum of 2 sets of facilities ensure that there would be at least one set of toilet facilities available for use.

A Novel Method for Further Development

Through this participatory approach, migrant respondents exhibited their ability to apply critical evaluation skills, which also highlights their reasonableness in proposing improvements.

This exercise demonstates that, given an appropriate environment and the necesary tools, migrant workers are capable of participating in decision-making processes, selecting the most effecting methods for research data collection and preliminary data analysis for research

purposes. They were able to select the medium they deemed most effective for communicating their ideas on what they perceive as decent standards of living. It also establishes the use of Lego® as a novel, innovative and effective method for receiving feedback, ideating possibilities, eliciting details, and uncovering latent thoughts and meanings that may not have been revealed through other traditional methodologies.

This consultation provided clear and tangible insights into migrant workers' strong desire for more privacy, storage, personal lights in their rooms, maximum occupancy limits, kitchen and toilet-to-resident ratios, and their urgent need for improved ventilation and laundry hanging spaces. This also underscores migrant workers' capacity for knowledge generation and their reasonable expectations of ideal accommodation.

Participatory research seeks to involve community members as much as possible in each part of the research. Due to time and manpower constraints, our participatory research process could only engage workers in designing a simple study, in decision -making on the methods of collecting and analysing data. Future studies can consider involving workers on a higher participatory level in designing a more extensive study involving more actors, a further round of interpreting results, and disseminating follow-up findings to migrant community groups.

Design Concept 2

Design Concept 2 is an aggregation of migrants' comments and perspectives into a single conceptual design, re-conceptualized by Kevin Ong from interior design firm, Superfuse Collective. Comments on Design Concept 1 were noted during the participatory research while the Lego® Models that migrants built and presented points were documented in detail (as seen above) and passed on to our interior designer. Design Concept 2 is the second iteration of a re-conceptualized dormitory space. It is divided into a resting and recreational segment and a functional segment for daily routines.

Similar to Design Concept 1, respondents agreed that there should be a maximum of 6 persons to a room. However, as Design Concept 1 was mainly a singular shared room with an ensuite-toilet, respondents felt that privacy was still inadequate. Additionally, one group of respondents developed a novel idea to install 'privacy curtains' around the bed, akin to those seen in hospitals. The respondents' rationale for curtains was to block out unwanted light and noise from neighbouring beds while giving the resident privacy to video call with family members. This was taken into consideration for the design of Design Concept 2. When drawn, the curtains demarcates a personal area space around the bed of 6 sqm, which forms a 'unit' for each resident.

Respondents noted the lack of specificity with fans from the first iteration, which was factored into the second design concept design. Design Concept 2 proposes that two communal ceiling fans ventilate the whole bedroom of 6 residents while each resident also having an individual personal wall fan within a 'unit'. Keeping to the same design of prototype 1, windows at the front and end of the room ensure a clear passage of airflow through the room. The living area and kitchen/dining area are ventilated with one ceiling fan each.

Our interior designer also proposed the use of three-quarter or half-walls to support ventilation. He proposes three-quarter height walls for the toilets so that air can be ventilated out. The laundry-drying areas can have half-height walls furnished with windows so more light and wind can access the damp laundry easily.

Although Design Concept 1 emphasises modularity, and migrant respondents liked the idea, many also felt it may be costly and impractical to have such modern furnishings. Instead, most participants would rather have fixed spaces for reading and studying. Hence, Design Concept 2 proposes a study table affixed to the cupboard with a personal light, giving migrants a personal study area beside their bedspace.

Participants were in agreement that much space underneath their beds and above the cupboards were underutilised. These unused spaces can be better appropriated for storage. Our respondents liked the floor-to-ceiling cupboard that gives more storage space for clothes and their belongings. This was retained in Design Concept 2.

Accounting for the single bed of around 1.8 sqm, storage space of 0.9 sqm, a table of 0.5 sqm and a personal space of 2.8 sqm, this works out to a demarcated personal area of 6 sqm per person. This space excludes spaces between demarcated personal areas or shared walkways in the room. Reducing the demarcated personal area space of 6 sqm risks sacrificing important aspects of a workers' needs for reading and writing, privacy, and storage.

Design Concept 2 also took into consideration purposive rooms/areas for dedicated activities proposed by respondents. For instance, in all of the Lego® Models, migrant pairs underscored wanting a living/recreational area beyond just the bedroom space. Having a different room for relaxation does not limit migrants to the shared bedroom space, expanding options for residents to utilise. With more allocated spaces for recreation and dining, workers are not confined to doing all their activities in a shared bedroom. Our interior designer proposed a living room space of 16.8 sqm, enough for a sofa and television or a small communal seating area that offers a sound buffer between the main door and the private quarters of the bedroom.

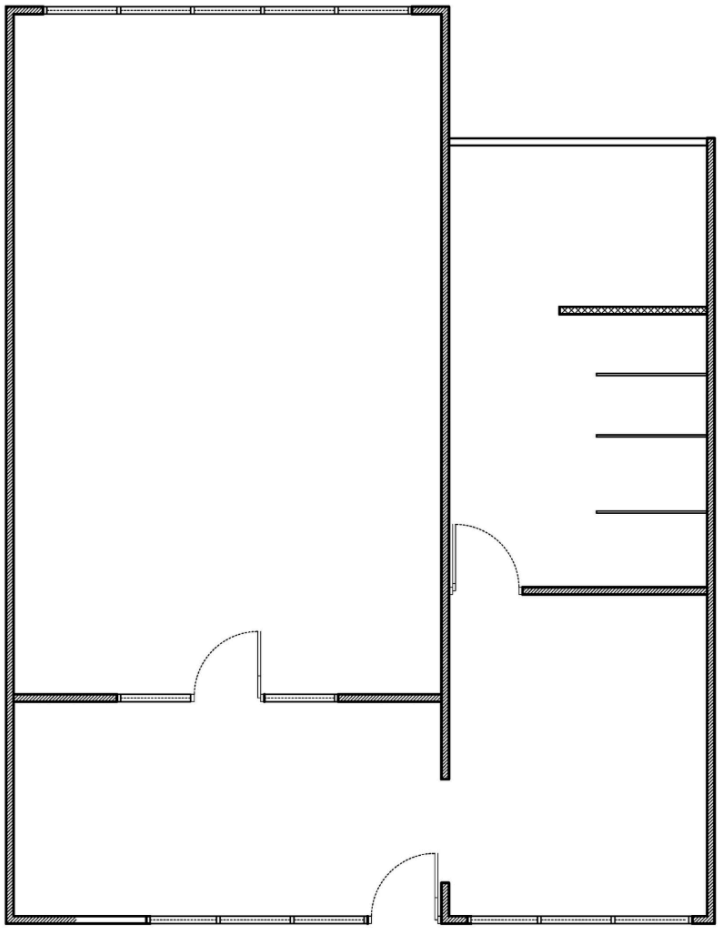
Migrant respondents had also requested a kitchen where 2 people can cook concurrently. This is factored into Design Concept 2's design whereby 2 stoves have been included, with one sink for sharing to allow for more space for food preparation. Our interior designer proposes 16 sqm for the kitchen and dining, seating 6 people comfortably.

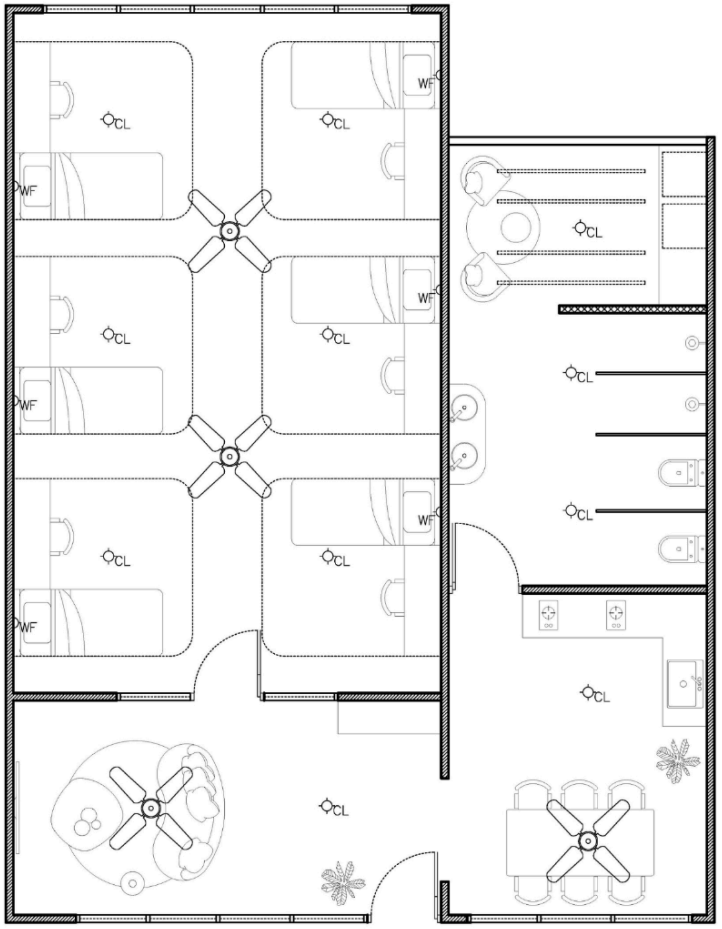
Materiality is a significant area which has not yet been explored. Our interior designer indicates that it is a big part in making a dormitory homely, warm and dignified. Currently, workers' dormitories mostly use concrete floors, steel beds and lockers that convey a sense of coldness and isolation. Our interior designer proposes the use of carpentry and laminates for the furnishings of the bed, table, and storage to improve a room's aesthetic and invoke feelings of homeliness.

The whole unit can be treated as a module. During scaling and development, a second module can be mirrored and built adjacent to it such that the open laundry areas provide more distance between units. Design Concept 2 can be also used as a conceptual floor plan that puts forward the principle for personal spaces to be buffered by spaces with communal functions. In this case, the living and kitchen areas buffer the more personal bedroom areas.

We invite readers to study Design Concept 2 displayed below. Following which we laid out a comparison between our two design concept designs conceived in consultation and collaboration with migrants, with the government's suggestions for improved standards below. This gives readers a sense of how participatory research fills in the gaps and captures or highlights certain living arrangements otherwise missed in verbal methods of conducting researching or receiving feedback.

DESIGN CONCEPT 2





LEGEND

EXISTING STRUCTURAL WALL

EXISTING NON-STRUCTURAL WALL

EXISTING HALF HEIGHT WALL

Existing 3/4 HEIGHT WALL

OVERHANG / OBJECT ABOVE

PROJECT TITLE	PROPOSED FLOORPLAN FOR DORMITORY
CLIENT INFO	–
PROJECT TYPOLOGY	Dormitory
PROJECT NO.	–
DRAWING NO.	102
DRAWING TITLE	PROPOSED FLOORPLAN w/o DIM
SCALE	1:85
REVISION	A, Op 1
DATE	26 September 2023

SUPERFUSE

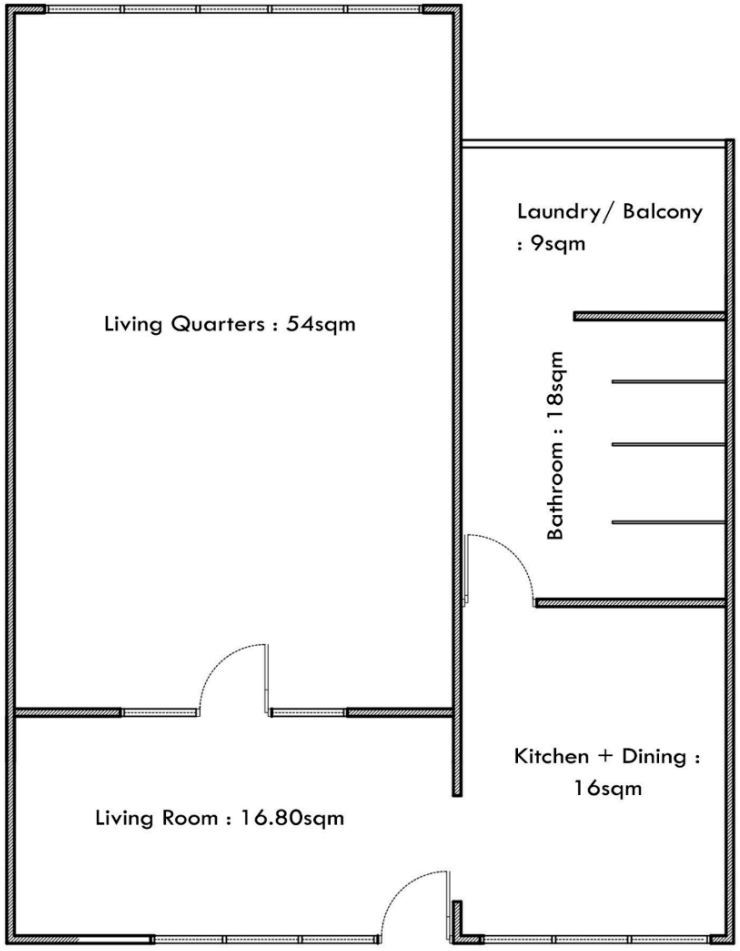
Re-Designing Migrants' Living Spaces

DESIGN CONCEPT 2

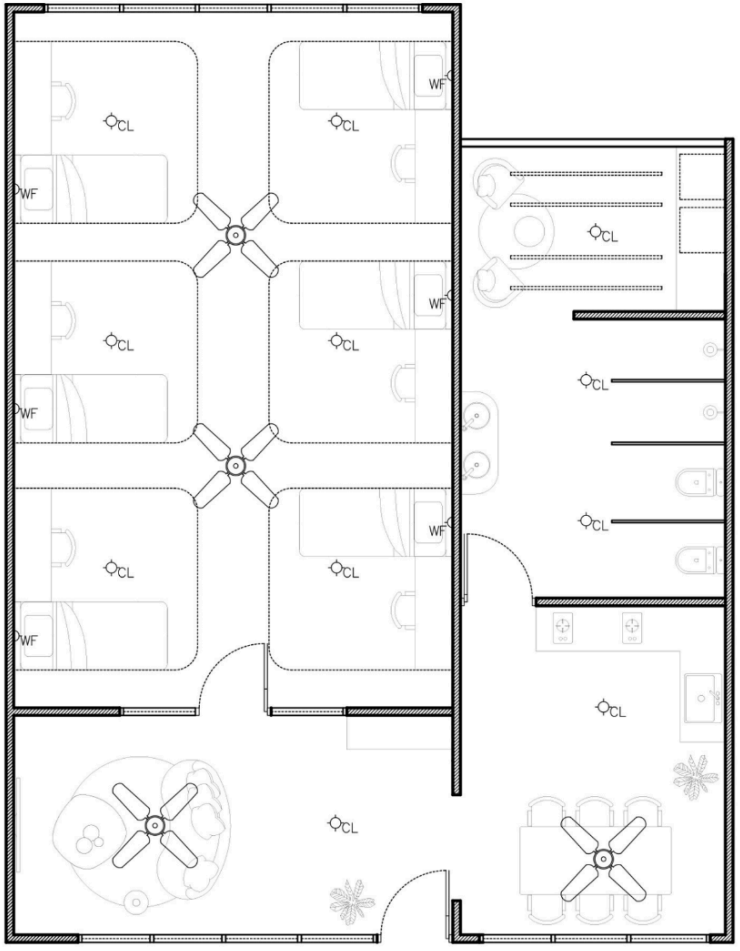
Proposed Floorplan and Lighting Plan for 6 Pax



~114sqm



Proposed Floorplan for 6 Workers

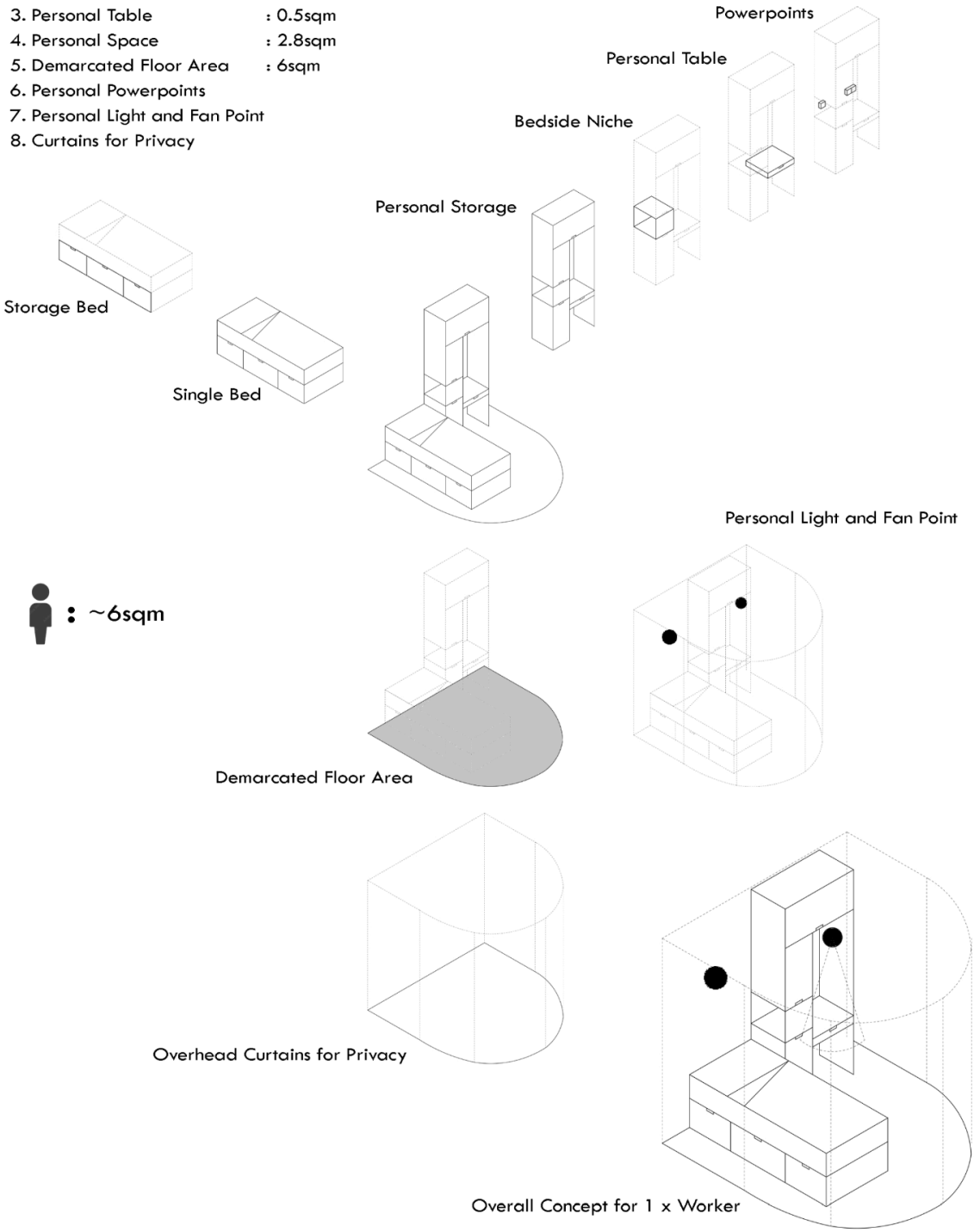


Proposed Lighting Plan

DESIGN CONCEPT 2

Proposed Living Area: Individual Level

1. Personal Storage : 0.9sqm
2. Single Bed : 1.8sqm
3. Personal Table : 0.5sqm
4. Personal Space : 2.8sqm
5. Demarcated Floor Area : 6sqm
6. Personal Powerpoints
7. Personal Light and Fan Point
8. Curtains for Privacy



Re-Designing Migrants' Living Spaces

DESIGN CONCEPT 2

Possible Design Concept: Materiality



Part IV

MOM introduced new improved standards in September 2021 in consultation with public health and infectious disease experts while gathering feedback from employers, dormitory operators, migrant workers, non-government organisations and architects. This new set of living standards curated by the government aims to "strengthen resilience against future pandemics and enhance liveability." (MOM, 2021). The improved minimum standards aim to provide a better living experience that is both practical and affordable.[30]

Nonetheless, in this part, we compare MOM's new improved standards with the recommendations made by migrant respondents and our interior designer in **Table 2** below. It highlights where new standards are adequate and where they have fallen short. The comparison is organised into different themes e.g. bedroom space, communal facilities, toilets; and coded by 'traffic light' colours of green, yellow, and red.

- The green tier comprises of significant improvements that either align with, or surpass the proposals of improved conditions suggested by migrant respondents.
- The yellow tier consists of incremental improvements that hold potential for positive change. These standards, however, either fall short of workers' ideal living conditions or lack specificity, making them susceptible to market forces and reliant on the goodwill of operators, owners, and employers for implementation.
- The red tier comprises of standards not addressed in the improved standards or significantly deviate from workers' expectations of an ideal living accommodation. MOM is also encouraging employers and the housing industry to provide better standards if they are abe to do so and cater for the housing needs of their workers.[31]

Thereafter, we explain the individual components in further detail.

[30] This information was provided to us by MOM on the 11 June 2024, after a review of this report.
[31] This information was provided to us by MOM on the 11 June 2024, after a review of this report.

Table 2: Comparison between workers' suggestions and government improved standards

Standards	Current	Government Improved Standards	Migrant workers' suggestions and interior designer's proposals	Reasons by migrant respondents and interior designer
Outdoor Recreation area and facilities	Recreation facilities/outdoor spaces required for dormitories above 1000 residents	Recreation facilities/outdoor spaces for dormitories with 50 or more residents. Size of recreation area depends on size of dormitory	More recreation facilities/outdoor spaces depending on size of dormitory	Workers asked for spaces to exercise and spend time outside of their rooms.
Power sockets	No requirement	Minimum 1 power socket per resident per sleeping area Sufficient number of power sockets in common areas encouraged.	Minimum 1 power socket per sleeping area and "sufficient number" of power sockets in common areas	Resident each have devices that require charging and require quick access to (e.g handphones). Individual sockets per person prevents overloading when too many people use one socket.
Portable water	Provide adequate water (including potable water) to the dormitory	1 x hot / normal water dispenser: 24 residents per floor	1x hot water point / water cooler on each floor.	Residents need easy access to both hot and cold portable water.

Wi-Fi	Wi-Fi in common areas for residents	Wi-Fi in common areas and rooms for residents that is priced into overall bed rental charges. Residents are not charged separately for Wi-Fi.	Stronger Wi-Fi in rooms. Wi-Fi should not be charged.	Internet access is required for many services in Singapore and to communicate with friends and families.
Living space	≥ 4.5sqm per resident (including sharing living facilities e.g ensuite kitchen, toilets and yard spaces)	≥ 4.2sqm per resident (excluding shared living facilities)	~ 6 sqm per resident (excluding shared living facilities) ~17.8 sqm / pax (including shared living facilities)	Additional living space is needed to increase privacy, and allow for separate dining, study and laundry areas.
Ventilation	Subjected to BCA's prevailing ventilation requirements for natural ventilation, e.g. windows for openings to be at least 5% of the floor area of the room.	Provide "adequate number of fans in rooms, reasonably spaced out throughout room, to provide sufficient air circulation.	Large windows in front and the back of the bedrooms. Windows at dining at sitting areas. Windows next to the laundry area.	Large windows placed at opposite ends of the room and at sitting areas ensure adequate air flow through the room. Windows beside laundry areas allow laundry to dry in time work and keeps laundry from becoming wet for long periods of time.

	Mechanical ventilation (e.g. fans) must be provided when natural ventilation is inadequate for daily living activities	If Air Conditioning (AC) option is provided in room, additional requirements include: Install filter at least of MERV14 rating for air cleaning	Personal fans by their beds in addition to stronger and more powerful ceiling fans.	High temperatures in Singapore affects rest and ceiling fans don't have a good reach. Personal fans ensures residents who receive little reach from ceiling fans can still remain cool and rested at night.
Feedback channels	Current requirements provided in Foreign Employees Dormitory Act Licence Conditions requires licensees to provide, maintain and inform residents of appropriate feedback, fault-report or grievance channel and a requirement for dormitory operators to address them in a timely fashion.	No improved requirements	Allow workers to form dormitory "residents' committee" to receive and channel feedback so that workers can raise issues regarding their well-being to dormitory operators, management or MOM if they feel unheard. Have a service phone or a feedback phone line in the dormitory to address dormitory issues.	This provides an safe avenue where improvements, grievances and issues can be raised safely, to avoid reprisals, so that relevant issues surfaced early and dormitory operators can understand their residents' needs better.

Communal facilities (laundry)	Laundry facilities Ensure sufficient and convenient laundry hanging facilities	Laundry facilities Ensure sufficient, convenient and *sheltered* laundry hanging facilities	Laundry facilities Provision of ≥ 1 washing machine : 6 residents Designated area to dry laundry. ≥ 3 laundry racks / poles : 6 residents	A stipulated minimum number of laundry rack / pole per person allows laundry to dry faster and prevents clothes from being damp for too long.
Occupancy per room	No maximum residents per room. In practice, 12-16 residents per room.	Residency occupancy cap of 12.	Residency occupancy cap of 6	Too many people in the room leads to a loss of privacy. It is difficult to agree with more people to keep the room neat and tidy and reduce the possibility of conflicts. Fewer people in the room provide more walking space and reduce feelings of "suffocation".
Bed type	No requirement for spacing between beds, mostly double-decker beds	Minimum 1-meter spacing between beds, double-decker beds allowed	Only single beds Beds at least 1m apart	Double-decker beds are fall risks. There is a lack of privacy. The movement and noise of bunk partners make it difficult for one to get rest. Single beds provide more privacy and less disturbance to rest.

Bedside amenities	No requirement	No requirement	Individual bedside tables Personal bedside lights for reading and individual tasks.	Reading and writing can be done on a bedside table instead of doing them on the bed. Personal light minimizes light disturbance to others in the room.
Lockers	No requirement	No requirement	Ceiling-length personal lockers that can be locked to keep belongings. A separate space (within lockers or a separate cupboard) to hang or store cleaned clothes.	Personal lockers will provide adequate and secure space for workers to store personal belongings to prevent theft, and a clean place to keep cleaned clothes.
Privacy	No requirement	No requirement	Curtain or board partition dividers between beds. Balconies behind or outside rooms can be designated areas for private phone calls.	Curtains or partitions between beds provide some personal space between beds and reduces light and noise from neighbouring beds. Spaces outside the rooms provide privacy for making calls to friends or family members especially when matters are personal.
Toilets	≥ 1 set of common or en-suite toilet, bathroom, sink and urinal: 15 residents	≥ 1 set of en-suite toilet, bathroom and sink: 6 residents	≥ 2 sets of en-suite toilet, shower and sink: 6 residents	Reduces queuing time and provides an alternative toilet if one toilet is choked or spoilt.

Communal facilities (e.g. cooking, dining, reading)	No segmentation required	Designed to allow segmentation for dedicated use by ≤120 residents per section	En-suite kitchen for 6 residents.	6 residents is the optimal number of residents per room
Cooking facilities	≥ 1 cook stove : 6-8 residents	≥ 1 cook stove : 6 residents	≥ 2 cook stove : 6 residents	Workers prefer to cook due to its affordability and the poor quality of catering food. Adequate stoves allow residents to prepare culturally-specific home-cooked food easily.
Kitchen sink	No requirement	No requirement	≥ 2 kitchen sink : 6 residents	Allows 2 residents to do food preparations simultaneously and reduces queue times.
Refrigerator	No requirement	No requirement	Refrigerator in each room to store perishables.	Easier to keep perishable food so that cooking is a more convenient option. Prevents rodents and other disease-carrying pests when storing food.
Dining facilities	≥ 1 seat: 6-8 residents	≥ 1 seat : 6 residents	1 dining table ≥ 6 seats : 6 residents	To have adequate dining seating that matches the number of residents per room
Study and reading rooms	No requirement	No requirement	Study tables and chairs in a separate quiet study room or common corridors with bookshelves.	Workers who wish to do reading, writing, study or do online courses to upgrade themselves have a quiet place do so.

Prayer rooms	No requirement	No requirement	A dedicated prayer space for daily prayers	Provides a place for workers to fulfil their religious obligations in dignity.

Green Tier: Significant Improvements

Noteworthy improvements include power sockets in each sleeping area for convenient access to electricity, the provision of portable water on every floor, and the availability of strong and reliable Wi-Fi in dormitories that do not require workers to fork out additional expenses.

Power Sockets

In relation to electrical sockets, MOM's new improved standards require a minimum of 1 power socket per resident for each sleeping area and a sufficient number of power sockets in common areas. This is aligned with our migrant respondents' suggestion of a standardisation of a minimum of one power socket beside every bed in all dormitory types. While most respondents felt that they had enough for their usage, this may not be the norm across the different dormitory types in Singapore. Our report earlier noted a respondent living in an FCD whose room does not have any power sockets as charging facilities were located outside the room. The requirement for power sockets at residents' bedside as a standard goes a long way to provide residents with ease of access to electricity for charging their phones and devices.

Portable Water Access

For water points, our research documented how not every dormitory currently has a water cooler / water point. Because of this lack, workers draw drinking water from the taps in the toilet. For example, Ikmaal states, "drinking water and shower water is the same. Using toilet the tap the water to drink. Here there is no water cooler. If can provide water cooler will be good." Thus, we welcome the assurance of portable water on each floor suggested by the Ministry.

Wi-Fi Improving Wi-Fi infrastructure and access in dormitories also helps many workers living in dormitories located on the edges of the island. Cross connection with neighbouring Malaysia's mobile data networks may frustrate or incur additional data expenses.

Outdoor Recreation Spaces

Moreover, the introduction of mandatory outdoor recreation spaces for larger dormitories supports the mental health of residents. These enhancements are significant improvements to current dormitory conditions.

Yellow Tier: Incremental Improvements

Living Area

One area requiring attention is the living space (excludes shared spaces) allocated to each worker. MOM's improved standard prescribes a minimum of 4.2 square metres (sqm) per resident. However, even when our design partner attempted to maximize space using space-saving modular furniture in Design Concept 1, basic living furniture required by migrants already came up to 3.2 sqm. This breaks down to 1.8 sqm for a single bed, 0.9 sqm for storage, 0.5 sqm for a foldable table and a multiple use storage box that functions as a chair to create more personal space. Our design partner advised that 4.2 sqm would not be

enough for residents to navigate their daily activities as a single bed, table and storage alone would come up to 3.2 sqm, which leaves a resident with only 1 sqm for personal living space. Our design partner initially proposed a higher minimum area of 7.4 sqm total defined space for each worker in Design Concept 1, not accounting for common spaces such as walkway spaces in between beds, dining, kitchen, toilet, and laundry facilities.

In further addition, migrant workers' response to Design Concept 1 and our subsequent collaborative solution-finding with the migrants revealed more practical recommendations of a single bed, non-foldable table, regular chairs, which reverts to the regular use of space without the flexibility offered by modular furniture.

However, taking into account migrant workers' new proposal of a privacy curtain or privacy barriers, we moderated this space in Design Concept 2 to 6 sqm designated space per resident, leaving at least 2.8 sqm for a residents' personal living space, after taking account basic furnishing. This is similar to the governments' original suggestion of 6 sqm per resident exclusive of shared living spaces proposed during the onset of the COVID19 'circuit breaker'.

As such, based on migrant workers' recommendations, we propose MOM reverts back to its original plans of 6 sqm per resident to take into account personal living space in improved dormitory designs that includes the single bed, table, chair and improved storage capacities. This offers a space buffer in-between beds.

Ventilation

Ventilation standards can do with more specificity. MOM's standards simply mention the need for "adequate" fans, leaving room for interpretation. In contrast, workers expressed a clear need for individual fans to ensure comfort and rest in Singapore's warm climate. Workers shared that fans are essential for a good night's sleep and current fans are not strong enough and do not reach them. Almost all of workers' Lego® models also indicate a preference for personal fans next to their beds. It would therefore be more appropriate to provide explicit guidelines that guarantee individual fans for workers. Without a definite number, 'adequate' remains ambiguous and subjective.

Laundry-Drying Areas

Regarding laundry facilities, MOM's improved standards only specify "sufficient, convenient, and sheltered" areas for hanging laundry, without addressing the number of laundry racks each resident requires or the availability of washing machines. Workers assert that they do not have enough space to dry their clothes and have to regularly compete with their colleagues for laundry-drying spaces. In some dormitories, the present lack of laundry and/or drying facilities direct workers to hang and dry their laundry in their rooms.

In their improvement models, workers defined 'adequate' by specifying a maximum ratio of 2 residents to 1 laundry rack to ensure that everyone's laundry can be efficiently dried and at

least 1 washing machine. We urge greater specificity in these standards because of insufficient drying areas in dormitories.

Feedback Mechanisms

The Foreign Employess Dormitory Act Licence Conditions already includes a requirement for licensees to provide, maintain and inform residents of an appropriate feedback, fault-reporting or grievance channel with regard to dormitory facilities and / or conditions. It also makes provision for dormitory operators to address feedback, faults and grievances in a timely manner, keep records of the feedback, measures taken to address them, as well as maintaining these records for at least one year within the dormitory's premises[32].

While crucial, these provision are currently inadequate as migrant workers often find it still difficult to voice their concerns to dormitory management due to punitive reporting measures that manifest in the form of harassment, additional costs to residents or reprisals in the form of excessive monitoring of individuals who report. This creates an unsafe environment for workers to voice their concerns.

The lack of safe and open feedback channels to dormitory operators/management, or to MOM also hinder residents from providing suggestions on improvements or raising issues like mistreatment. Respondents articulated that part of the reason why some dormitory conditions remain problematic and unresolved is because dormitory management do not listen or might be unaware when conditions are bad.

Migrant worker respondents propose establishing an independent dormitory resident committees, preferably recognized by MOM, to receive and channel feedback to dormitory management and MOM could ensure problems are collated safely, listened to, and addressed in a timely manner. On a room level, workers' models propose, minimally, the installation of a service phone line where feedback or fault-reporting can be made.

MOM's improved standards risk becoming simply a one-off improvement exercise without an independant resident-monitoring mechanism or feedback loop. Additionally, Here With You Social Services recommends a whistle-blowing policy that protects individuals who make reports or allow individuals to make reports anonymously so that reporting will remain a safe and genuine avenue for receiving feedback.

Red Tier: Significant Deviation from Workers' Expectations

Occupancy Cap

The first aspect pertains to the occupancy cap, bed types, bedside amenities, and privacy provisions. While MOM's improved standards have set a cap of 12 residents and a maximum

[32] Singapore Statutes. (2023, June 1). *Foreign Employee Dormitories Act Licence Conditions*. Retrieved December 21, 2023 from https://file.go.gov.sg/fedalcs.pdf

of 6 double-decker beds per room, workers still find this arrangement too crowded. They emphasized the need for a cap of 6 residents as it is easier to work together with a smaller group to manage the cleanliness of the room and reduce conflicts among roommates. There will also be more space for an additional table, enough walking space, and makes the room less 'suffocating". Also, the workers' improvement models also overwhelmingly kept a room's occupancy to between 6-8 residents.

Lack of Single Beds

The new standards introduced by the Ministry of Manpower keep double-decker beds in the designs. However, as our respondents illustrate, double-decker beds are problematic most importantly because they affect the sleep quality of workers, thereby affecting their productivity at work the next day. Double-decker beds also pose an injury risk and offers little privacy. Workers highlighted that double-decker beds pose a fall-risk for workers ascending bed ladders onto the top bunk; additionally, movements, phone calls, and noises from a bunk bed partner disturbs a good night's rest. **All** respondents' constructed single beds in their improvement models and indicated it as a requirement, with one offering an innovative solution of a hospital bed-like curtain that can be drawn for further privacy.

Single decker beds were originally part of MOM pilot of new improved standards and were feasibly rolled-out at QBDs during the COVID19 pandemic. MOM has also been encouraging employers and the housing industry to choose bed layouts that best suit their workers' needs.[33] As such, we urge the government to revise its new improvement standards to revert back to a standard of using only single deck beds in dormitories.

Bedside Amenities

MOM's new standards currently do not include workers' need for bedside tables and personal lights for reading and studying. However, residents emphasized a requirement for bedside amenities such as bedside tables and lights for reading, writing and studying at night. Currently, workers perform these activities only on their beds. They pointed out that a bedside light would reduce the disturbance from a common ceiling light and expressed their desire also not to disturb others when they require the use of a light. Furthermore, in almost half of the improvement models, workers constructed or indicated the requirement for individual lights.

Storage

In addition, the ministry's improved standards do not take into consideration the personal storage needs of workers. Respondents overwhelming highlighted a lack of storage space in the dormitory for their personal belongings. Many shared that they had to share lockers with other colleagues, having to store their belongings in plastic container boxes on communal shelves and a lack of space to hang their dried clothes or laundry which results in them

[33] MOM shared that while it acknowledges double-decker beds allow more circulation space in the room or space for other amenities, MOM also encourages that employers and the housing industry to choose bed layouts that best suit workers' needs. This information was provided by MOM on the 11 June, 2024, after a review of this report.

hanging their clothes on walls and bed frames. Respondents' indicated their need for personal lockers to keep their personal belonging and cupboards where they can hang and keep their washed clothes clean. Workers' improvement models elucidated this further as all models indicated the requirement for personal lockers with more than half specifying a preference of floor-to-ceiling lockers for additional space to contain their belongings aside from hanging clothes.

Design Concept 2 factors in workers' requirement for bedside amenities and storage space. It proposes a single bed with a bedside set of amenities that includes a single bed, a bedside table and light with power sockets, bedside fan, a floor-to-ceiling locker that exploits the space above a person height locker to provide additional additional storage space, and a curtain to draw around the bedspace to provide privacy.

Communal Facilities: Kitchen, Dining, Study and Reading Rooms

Another area with disparities in standards is the conceptualization of communal facilities. MOM's improved standards allow for large kitchens segmented for a maximum of 120 residents, with a ratio of 1 cooking stove and 1 dining seat to 6 residents. However, migrant respondents prefer smaller ensuite kitchens with 2 stoves, 2 kitchen sinks, and at least a refrigerator shared between just 6 residents, with sufficient dining seats for each person. Migrant respondents emphasized their preference for cooking their own meals instead of depending on the poor quality of catered food but complained that not all dormitories have kitchens or there are not enough cooking facilities. Workers overwhelmingly depicted 2 stoves in the construction of their improvement models and also included at least a refrigerator. Respondents' shared during interviews that a refrigerator would be useful to keep food away from bugs and pests, in addition to storage of perishable groceries to better facilitate daily cooking.

A communal study room is also lacking in new improvement standards. Migrant respondents expressed the need for a quiet reading room for studying and doing assignments when they are undergoing courses, as their rooms can be noisy and distracting. The majority of the migrants' models also reflected this by including study tables in study rooms or communal tables with adequate seating for all 6 residents.

In Design Concept 2, our interior designer paid more attention to these needs and incorporated them. Design Concept 2 presents a communal living space, communal dining area, and instead of 2 kitchen sinks, it was more feasible for 1 kitchen sink accompanying 2 kitchen stoves.

Toilets

Overwhelmingly, workers across different dormitories shared that the availability and conditions of toilets were one of the biggest issues they faced. Toilet facilities such as showers, toilet bowls, and sinks were either inadequate, not functioning properly, or unhygienic. The overuse of toilets leads to long waiting times for dirty and smelly toilets,

especially before and after the work day. It also makes it difficult to maintain the cleanliness of toilets.

In light of the spread of COVID-19 through use of common toilet, MOM has required the installation of ensuite toilets as a new improved standard. The ministry also reduced the ratio to 6 workers to 1 toilet, shower, and sink. Moreover, MOM informed us that residents who have issues with the upkeep of facilities can discuss this with their employer, dorm operator or ACE officers who visit their dorms. MOM will work with operators with operators to ensure they discharge their FEDA obligations properly.[34] This is a remarkable improvement from the previous ratio of 15 residents to 1 set of toilet facilities and having no requirement for ensuite toilets.

Similarly, our respondents felt that there was more ownership in having ensuite toilets as cleanliness would be easier to maintain. However, our respondents articulated that it is more reasonable for facilities to be doubled, to 2 toilets, showers, and sinks per 6 workers. To support this, almost all workers' models constructed 2 toilets for a room of 6. When workers presented their models, they explained that this ensures an alternative set of toilet facilities is available in cases where showers malfunction, or sinks or toilets are choked or breakdown.

Workers recommend a ratio of 2 sets of cooking facilities, 2 sets of toilets, and 2 showers for every 6 residents for optimum living conditions as this allows 2 residents to perform each activity at a time, whether it be cooking, toileting, or showering, and take turns to complete their daily routines in an efficient manner. Respondents shared that a smaller resident-to-facilities ratio would also enable them to better maintain cleanliness in the kitchen and toilets. These ratios are reflected in the final design iteration of Design Concept 2.

Overall, MOM's efforts to recognize and address previously lacking areas are indeed commendable. Nonetheless, a comparison between migrant respondents' solutioning and MOM's improved standards revealed enhancements that are crucial for improving the living conditions of migrant workers. There have been significant improvements to workers' digital access, better attention to their basic needs and mental health, namely through improvements in access to electricity, Wi-Fi access, portable water, and increasing outdoor recreation areas. However, other aspects require further attention.

Attempts at improving living space allocation, ventilation standards, and laundry facilities, while applaudable, can afford better specificity to ensure workers' well-being and needs are better addressed. Furthermore, room occupancy numbers, bed types, privacy, and amenity-to-residents ratios deviate significantly from workers' expectations. Standards can better take into account migrant workers' personal welfare, daily routines of residents, and a continuing dialogue with migrant workers in improving dormitory standards. This contributes to a more equitable, dignified, and inclusive living environment for migrant workers in Singapore.

[34] This information was provided by MOM on the 11 June, 2024, after a review of this report.

Conclusion

Migrant worker dormitories are vital infrastructures. As accommodation quarters, they house thousands of migrant workers who build and maintain Singapore's economy and infrastructure. Migrant worker dormitories are also the initial spaces of encounter for the migrant in his new reality. Arriving in Singapore, the worker first learns of his living conditions in the dormitory. However, the everyday life in migrant dormitories is hidden from view.

This research sought to surface some of these experiences. Starting with the physical spaces of the dormitory, migrant workers brought us through long standing issues affecting their quality of life for years. Overcrowded rooms, poor ventilation, and dirty and insufficient toilets continue to plague many workers' accommodation quarters. While COVID-19 saw some improvements to density and cleanliness, standards can be better improved. Our discussions with workers also provided the opportunity to know more about other aspects of dormitory living. From storage spaces, laundry, and electrical powerpoints, dormitory residents pointed to the more banal routines and practices that carried significance and affected their living arrangements. Respondents as well brought attention to issues that are hidden or masked by dormitory rules. For instance, personal fans were a complex issue for some residents. The rules made it troublesome for workers to bring in personal fans to help with the heat and ventilation of the room, affecting their comfort and rest. Moreover, exorbitant costs are deducted or charged to some workers for utilities. These housing deductions and charges are unstandardized and exacerbates the financial burden on residents due to increased living expenses.

Because of the pandemic, migrants were also subjected to new rules governing their movements in and out of the dormitory. While the restrictions were intended to help residents tide through the outbreak and keep them safe, workers responded that they felt unsafe instead. In PBDs, there was a significant increase in security and surveillance. The added social control over residents was a clear sign of distrust over workers, with the implication that residents are trouble. The enforcement was also demeaning and degrading and residents thought it excessive. The implementation of exit passes to visit recreation centres was also ineffective in helping migrants with their confinement. The few hours outside to the recreation centre was spent travelling and waiting in line. Furthermore, even with the issuance of an exit pass, certain employers and dormitory operators refused to allow residents out, fearing a potential virus outbreak in the dormitory. Concerningly, life was also made difficult for some workers who complained or reported dormitory issues. Management and security officers targeted these workers deemed as "trouble-makers." Having witnessed or experienced forms of punishment for reporting problems, these residents refrained from making further appeals and their voices silenced or erased.

Effectively confined within the dormitory compound, migrant dormitory residents likened the experience to incarceration. Imprisoned in unfavourable living conditions and arrangements, the dormitory space became intolerable and overwhelming. Workers' mental and emotional health took a toll as they waited and yearned to go out. As dormitory residents remained restrained to their rooms while the rest of the population enjoyed a return of some normality, they became more cognisant of their Othering in the host country. They felt the differentiated mobility measures were unfair, prejudicial, and dehumanising. Many questioned the policies and were hurt and frustrated by the segregation. In response, some with the means to, chose to return to wait out the situation. Some, who could not tolerate the situation anymore, repatriated with heavy debts. The majority who remained were left to wait out the crisis. By April 2022, some mobility restrictions have been eased, allowing for a selected number of workers to "visit the community" each week. However, this language is telling: their space is the dormitory and the city is only a site of "visit."

The path forward announced by the authorities is to build improved dormitories and subject all dormitory types under a single law. While better designed spaces and regulations are necessary and welcomed, our research and review point to gaps between the authorities' suggestions and dormitory residents' recommendations. By way of a participatory research with migrant residents on dormitory room design, workers pointed out details that are at odds or not considered in the authorities' plans. For example, authorities' suggestion of an occupancy cap of 12 residents in a room diverges from residents' recommendations of an occupancy cap of 6 residents:migrant residents are concerned that a cap of 12 persons will still lead to overcrowding and the continuance of sleeping on double-decker beds.

Other latent but significant issues are also raised when migrant residents are involved in dormitory design consultations. For instance, residents brought forward the lack of privacy in dormitory rooms. One of our participants proposed an ingenious fix to provide personal private space within shared rooms: 'hospital-style curtains' to draw around the bed. This and other such details are only made known through a direct participatory involvement of migrant workers in the solutioning process. Because the dormitory is lived in by migrants, workers can and should be involved in determining further improvements to their living spaces. Through a correspondence with migrants as the main stakeholders in the dormitory, such details and specifics that may otherwise be missed are surfaced.

While this report and its solutioning mainly focused on the immediate living space in the dormitories, during the course of our research, other areas of concern were raised, such as challenges to the cleanliness of dormitory rooms and toilets, as well as dormitory security features, that kept accommodations from being more livable, dignified, and inclusive spaces. Surveillance, movement restrictions, and the heavy presence of security personnel during COVID-19 are aspects that the research did not dwell explicitly on when it came to participatory dormitory design consultations. Such forms of policing may have subsided with Singapore's transition to living with COVID-19 but, nonetheless, reflect certain dominant perspectives on who or what a migrant worker is.

As such, improvements to dormitory residents' communicative infrastructures are urgent and must be considered in future dormitory building plans. The dormitory is layered with relations between migrants, their physical space, managers, enforcement officials, employers, authorities, regulations, and policies. But the migrant, who lives in and uses the space, is largely silenced. Punitive approaches to grievances raised, and the absence of safe feedback channels and worker collectivisation perpetuates inequalities and mistreatment in the dorms. Without access to non-repercussionary feedback channels, workers' voices from the dormitory remain unheard. And if this remains unaddressed, migrant dormitory residents will continue to live in hostile spaces even with upgraded facilities.

In all, it is hoped that this report, along with its recommendations, can provide a further step forward to improving the living conditions of migrants housed in dormitories. While governmental authorities continue to work on improving living quarters for migrants, this report intervenes to provide migrants' perspective to aid in this process. As Singapore continues to advance its positioning as a global city and hub for all workers, we hope that migrant accommodations do not remain on the border of these plans, but rather, are incorporated into the nation's global standards.

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