GUIDELINES FOR COLLECTIVE SHELTER

ADAPTING SCHOOLS TO HOST INTERNALLY DISPLACED POPULATIONS IN CRISIS

2024

DESIGN FOR COMMUNITIES

ACKNOWLEDGEMENTS

This book of guidelines was developed to support organizations sheltering displaced populations during times of crisis, in light of the war affecting Lebanon and Palestine as of October 7, 2023.
Its completion would not have been possible without the insight of numerous experts committed to humanitarian efforts and architectural innovations.
Special thanks are extended to our Founding Member Karim Najjar and our Executive Director Sarah Rita Kattan, who have dedicated their time and efforts to make these tragic times more bearable for displaced populations. We would like to thank our numerous volunteers, as well as Israa Alameh and Belinda Fahed, for their contributions to the development of this book and its content.
We would like to acknowledge the valuable input of professionals in the field of social work and inclusivity; ProAbled, Share Q and Marwan Sfeir.
This publication reflects the combined dedication of individuals and teams who firmly believe in the impact of thoughtful design and planning in addressing some of society's most urgent challenges. We hope this guide will serve as a valuable tool for those working to provide safety, dignity, and stability for displaced populations in Lebanon and beyond.

PROABLED Your Inclusion Partner

MARWAN SFEIR LANDSCAPING & ARCHITECT

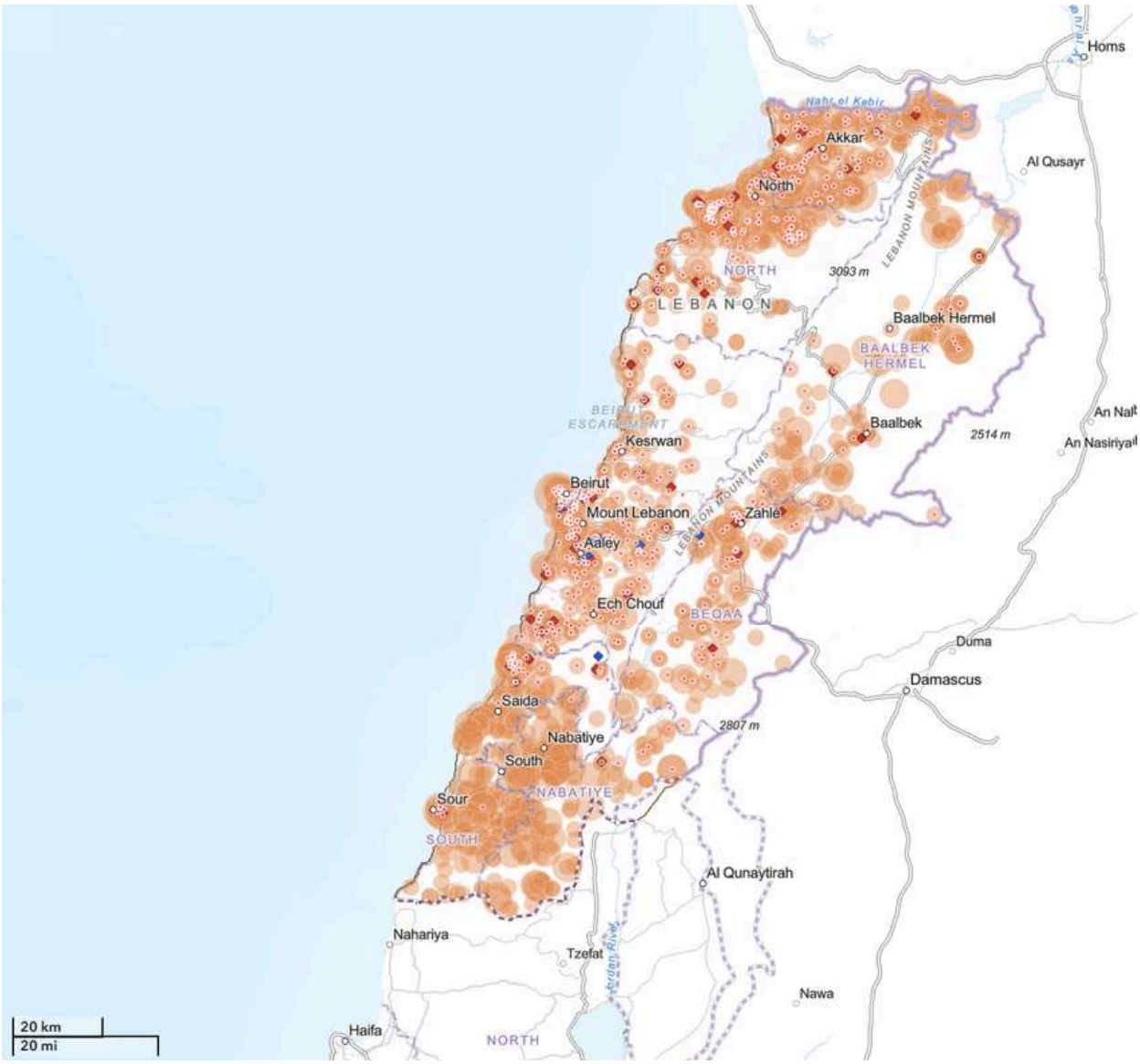
shareQ innovating for impact

Since October 7th 2023, the Middle East has been caught in a relentless cycle of violence and displacement. As the war in Gaza and Palestine intensifies, bombardments on southern Lebanon have forced entire communities to abandon their homes. At least one million displaced (UNHCR, November 13, 2024) struggle with finding safety, securing basic needs, and preserving their dignity in the face of such overwhelming uncertainty.

This widespread displacement has given rise to initiatives aimed at providing immediate shelter for those in need.

Across Lebanon, public schools are being rapidly converted into temporary shelters to house displaced populations. The map below, developed by the Beirut Urban Lab, highlights all public schools serving as shelters for the time being; this approach has become a vital lifeline for many. However, the process of transforming these spaces into functional, humane living environments remains a significant challenge.

In response, Design For Communities has developed this handbook of **Guidelines for Collective Shelter** to address the urgent need for functional and dignified shelter solutions.



Beirut Urban Lab (2024) Escalation along Lebanon's Southern Border
United Nations Refugee Agency. "What Is Happening in Lebanon?" UNHCR. November 13, 2024

INTRODUCTION

Ideally, educational institutions shouldn't be used for any function other than their intended one. Nevertheless, the harsh reality of disasters, whether natural or man-made, often renders it impossible to uphold these ideals. Limited resources, particularly in communities lacking dedicated shelter infrastructure, compel the utilization of public buildings, including schools, to provide refuge for those in need.

The temporary repurposing of schools as shelters meets multiple challenges, impacting both the educational community and the displaced populations. Disruption of normal school activities, stress on infrastructure, and limitations on access to essential resources are among main concerns.

To mitigate these challenges, **'Guidelines for Collective Shelters'** explores the complexities of adapting schools to host displaced populations in times of crisis. Drawing from conducted research and global experiences, this handbook offers practical strategies for minimizing the negative impacts and maximizing the benefits of utilizing educational institutions for shelter purposes. In navigating this multifaceted terrain with diligence and compassion, we aim to foster resilience and create safer, more inclusive environments for all those affected by emergencies and disasters.

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A- LAYOUT

To mitigate disruptions and promote resilience within both the educational institutions and the broader community, it is important to:

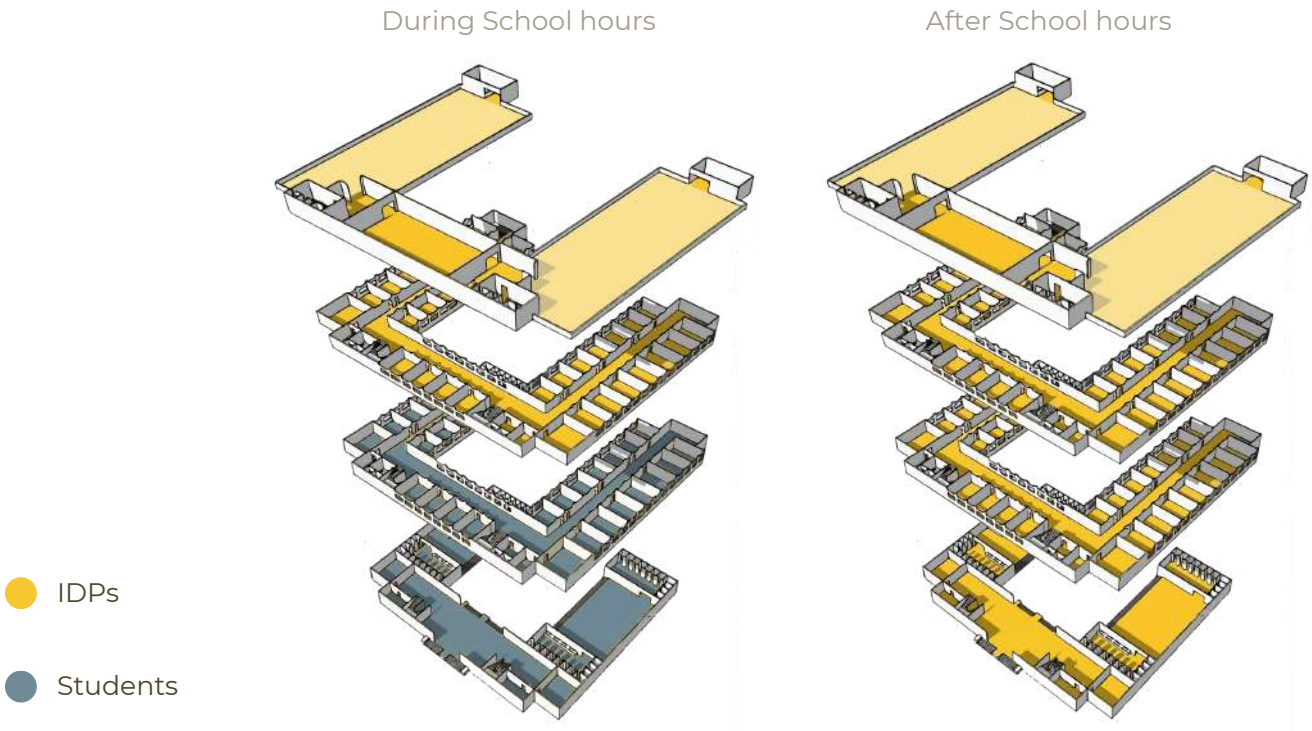
1. Prioritize **exclusive use of school buildings for shelter** purposes, minimizing coexistence with other activities to ensure safety and sanitation.

2. If coexistence is unavoidable, **ensure strict separation** between shelter areas and schooling facilities to prevent risks to the educational community, particularly children.

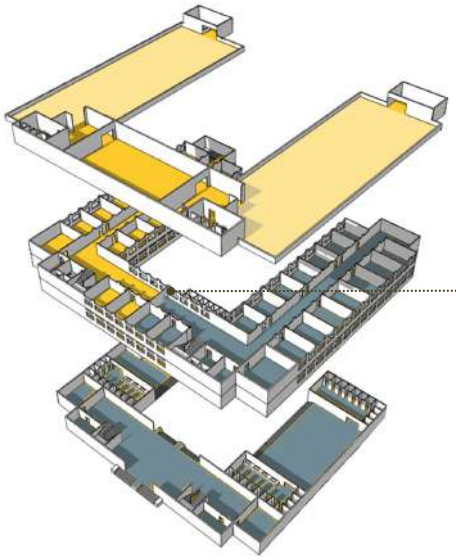
3. Implement prompt and effective risk management to **safeguard school property**, including libraries, laboratories, and recreational facilities.

4. **Set clear deadlines** for returning schools to normal function post-disaster, preventing prolonged displacement of families

5. **Involve the educational community** in shelter administration and activities aimed at enhancing the quality of life for shelter users, fostering community engagement and recovery efforts.



Title: Example of Layout in a co-existing school and shelter (division by floor)

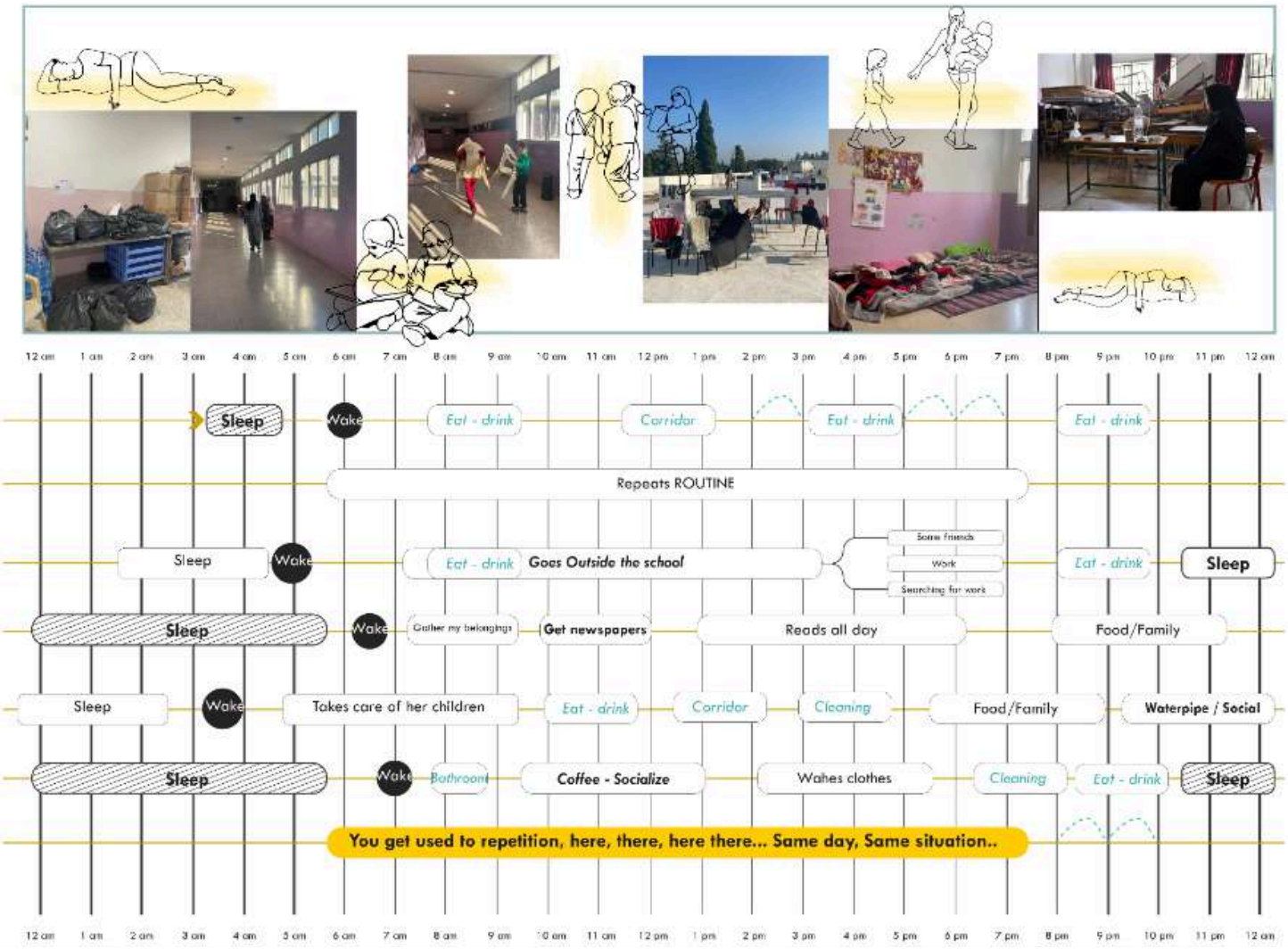


Title: Example of Layout in a co-existing school and shelter (dividing floor in half))

To organize the school's layout, the separation of students and IDPs (Internally Displaced Persons) can be done by floor-by-floor division or, alternatively, separating the same floor in half with the use of partitions, as seen in the example above. During school hours, the temporary separators create distinct areas within the shared building. In the afternoon, when school ends, spaces like corridors and recess area become accessible to IDPs, providing opportunities for socializing and community building.

A large number of schools in South Lebanon already have a divided schedule, separating Lebanese and Syrian students. In such schools, IDPs have a restricted time to access to the school's facilities, as seen in the example below:

In this case study, IDPs are only allowed in the playground after X hour, which is not ideal, but fair considering that a strict separation has to remain between shelter areas and school facilities.



Following on-site observations, this diagram portrays the behaviors of different individuals and age groups throughout the day, as they adapt to a new routine following their displacement. From early morning routines to nighttime activities, IDPs engage with their temporary home and establish familiarity.

1- Sleeping Arrangements

1.1 Repartition

Despite the diversity in shelter types, ensuring adequate sleeping arrangements remains an obstacle. Priority is given to keeping families together, while there may be a need to separate sleeping areas by gender to ensure privacy and safety. The division of sleeping spaces in shelters should prioritize the safety, dignity, and well-being of all occupants. Therefore, it's important to take into account the demographics and cultural norms of the displaced population, in order to determine the sleeping arrangements that works best for all.

Family-Based

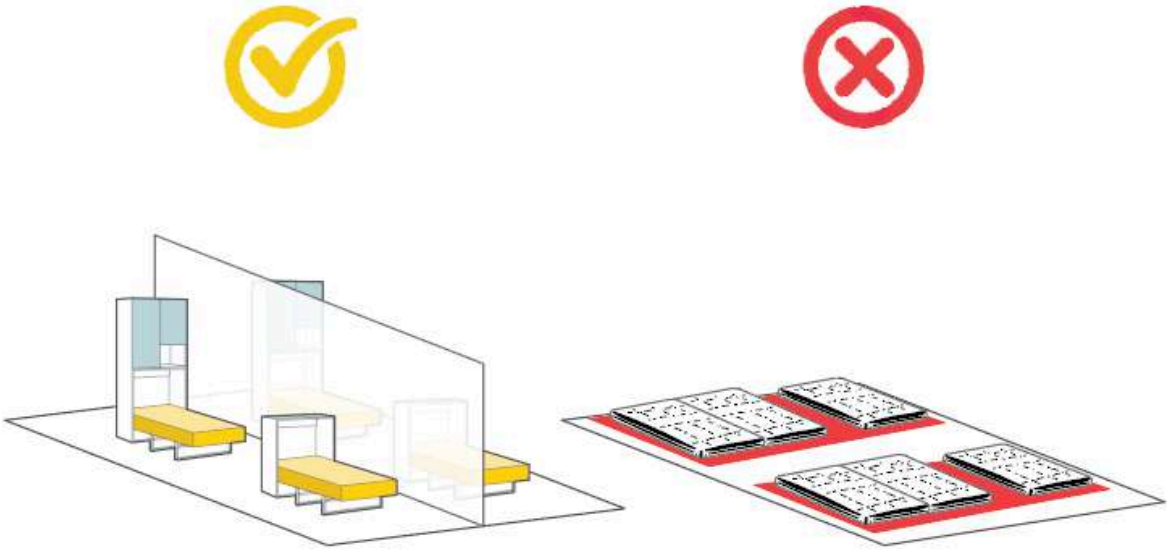
Ideally, shelters would provide 1 classroom per family, as families generally prefer sticking together. However, this option isn't always possible, considering number of IDPs and their demographics; as it lacks consideration towards single individuals.

Gender-Based

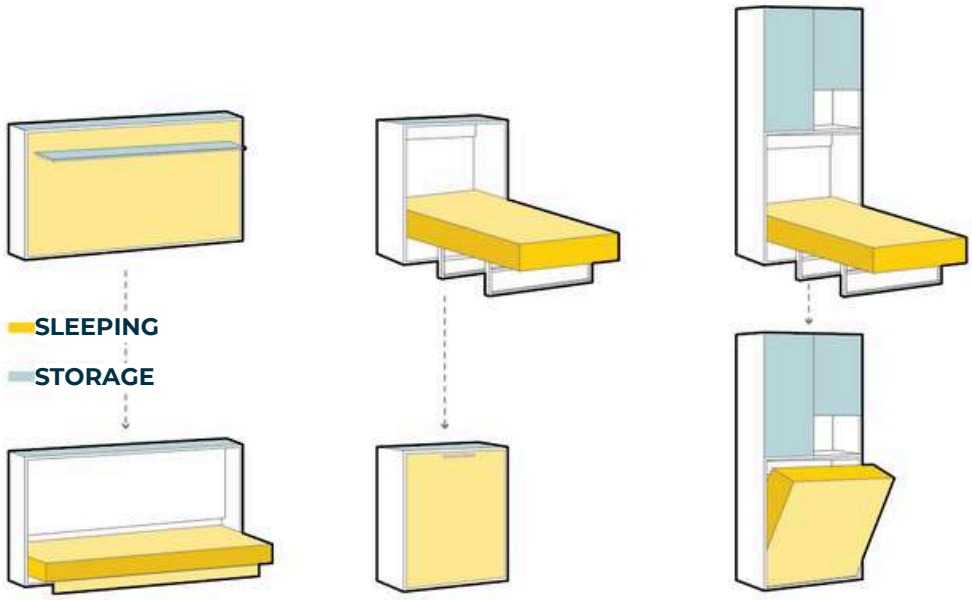
For larger numbers of IDPs, it is perhaps more suitable to separate men from women and children as it can provide a sense of security and privacy for vulnerable individuals.

1.2 Units

In these difficult times, adequate rest is essential to IDPs' well-being.
To improve sleep quality, it is necessary to elevate mattresses off the ground in order to maintain standard hygiene and comfort.

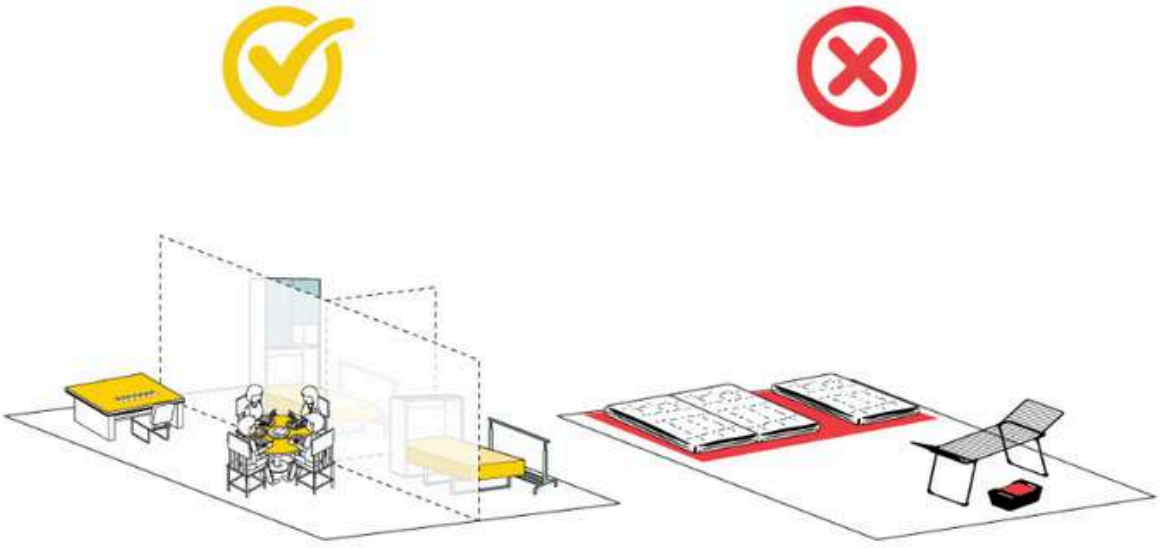


Furthermore, incorporating storage spaces such as under-bed compartments and/or cupboards helps IDPs organize their belongings, maintaining a sense of order despite communal living.



The options above provide examples of convenient foldable beds. When not in use they can be stored in their compact package to maximize space efficiency without compromising comfort.

Additionally, it is important to distinguish sleeping spaces from other uses to avoid clutter.



DO Layout the functions according to the need: eating, sleeping, studying, storing, changing clothes

DON'T Mix up the use of the space inefficiently in layout

2- Kitchen Adaptations

2.1 Food Truck Style

- **Size** of a household kitchen, or slightly bigger
- **Includes:** Cooking Equipment (grills, deep fryers. stovetops, ovens microwaves...), Preparation surfaces, Refrigerator and Freezer, Storage spaces, Sink and Water supply

Pros

- Can move from one school to the other and provide in the same day
- Serves many people
- Fast use

Cons

- Has to stay outdoor and path of food to indoor areas needs to be studied
- Requires an allocated Parking space

between **50k** and **100k** for used trucks

2.2 Modular Field Kitchen (MFK)

- **Size:** a kit consists of 4 crates, taking up a total space of around 3 x 3 m
- **Includes:** Cooking Equipment (Burner Units, Oven assemblies, Burner racks under the oven assemblies, Griddle assembly, Steam table...), Preparation surfaces, Storage spaces, 5 Gallon Scepter Water Cans and Fuel Cans, Gasoline Burning Lanterns for night operations

Pros

- Can serve 3 hot meals a day for 250 troops on a sustaining basis
- Can be used in basic, hot and cold climate conditions
- Can be shipped anywhere to any location
- Sets up and breaks down on site in the span of 60 minutes, with the hand of four men
- M2 burner units used for heat source powered by gasoline
- Capable of day and night operation
- Includes insulated containers for beverages

Discounted price is around **5k**

prestigefoodtrucks.com
https://colemans.com/u-s-g-i-modular-field-kitchen
https://xmhifa.en.made-in-china.com/product/oKWEURYObakS/China-Military-Mobile-Field-Kitchen-Trailer-Xc-150-Field-Kitchen-Trailer-Xc-150.html

- Each crate weights about 390 kg
- Transportation can be inconvenient

Cons

2.3 *Military Mobile Field Kitchen Trailer*

- **Size:** Dimensions (L x W x H): 4200mm x 2400mm x 2400mm

- **Includes:** Chassis, Tent, Cooking Equipment (Oven assemblies, Cooking stove, Chimney, Food processing equipment...), Multi-purpose working table, Kitchen utensils and other tools

Pros

- Can finish food processing for 150 persons by four operators an hour
- Can use diesel, gasoline, coal and wool as fuel
- Resists harsh weather conditions, whether Sunny, overcast, rainy, or snowy; in temperature ranging from -30°C to 42°C, and under force 7 wind

Cons

- High price
- Limited number of people can operate at the same time

Commercial price is around **20k**

The price of water and gas refill should be taken into consideration

https://xmhifa.en.made-in-china.com/product/oKWEURYObakS/China-Military-Mobile-Field-Kitchen-Trailer-Xc-150-Field-Kitchen-Trailer-Xc-150.html

3- Communal Spaces

Key design factors that promote resident gathering spaces include:

1 **Functional Zoning**

Allocating communal spaces for certain functions is necessary for a healthy environment within the shelter. Essentially, it prevents IDPs from using their rooms for everything, which could lead to clutter and limit social interaction.

Designating spaces for activities like eating, socializing and studying promotes organization, and provides opportunities for residents to connect, share experiences and have a sense of community.

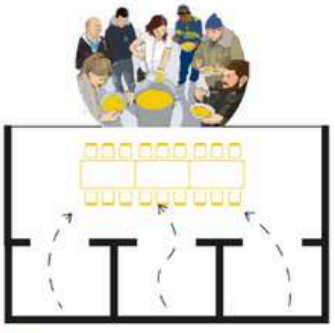
2 **Aesthetics**

Factors such as cleanliness, acoustics, lighting quality, personalization, and overall hominess of a space can impact residents' sensory and mental perceptions of community spaces .

3 **Spatial Layout**

Visibility and ease of access, adjacencies, access to daylight and views, furniture types and layout, and aesthetics all play a role in the success of resident gathering spaces .

3.1 *Eating Space*



DO have a collective dining room where all IDPs can gather around

DON'T use a private classroom for eating aspects and eliminate the social life

McLane, Y., & Pable, J. (2020). Architectural Design Characteristics, Uses, and Perceptions of Community Spaces in Permanent Supportive Housing. Journal of Interior Design, 45(1), 33-52. https://doi.org/10.1111/joid.12165

LAYOUT SUGGESTIONS

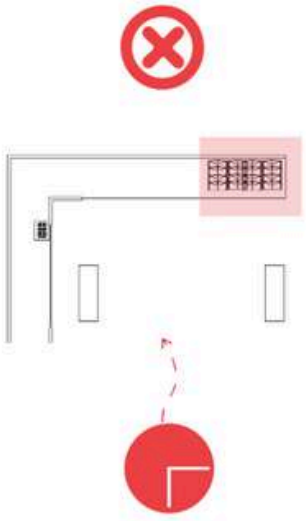
Central dining area, in the form of rows or clusters, promoting interaction
Adjacent food service area, close to the entrance for people to pick up their food as they enter
A designated children's area, equipped with proportional child's size tables and chairs, plus high tables accounting for infants. In addition to functionality, this also allows people from similar age groups to socialize.

That being said, for a welcoming and functional eating space, it's important to consider **flexible seating arrangements** in a way that permits easy reconfiguration to the IDPs' liking. For that, the use of lightweight, stackable chairs and foldable tables can accommodate different group sizes and promote interaction. Moreover, ensuring that the seating options are **comfortable** would encourage users to stay longer and socialize while relaxing on chairs with padded seats and backs for example.

3.2 *Playing Space*

Play is essential for a child's healthy development. In times of precarity, play can give displaced children a sense of normalcy as it is an inherent part of traditions and community. It is healing and restorative in nature, and can be a child's way of coping with hardship.
As previously mentioned, the current spaces that are most used for play and socializing are corridors and courtyards. As such, these spaces should be optimized for increased interaction and facilitated play

DO Layout the corridor and playgrounds as social spaces with more public furniture and reuse the classes' desks. Have a public kitchen where all can access and cook together



DON'T Gather all desks in one corner of the corridor. Block the access of children to access the playground

Hyder, T. (2005) War, Conflict and Play. Maidenhead: Open University Press

LAYOUT SUGGESTIONS

Placing seating furniture in corridors would enhance their social aspect, as corridors are already spaces commonly used by IDPs. The placement of light, movable chairs and small tables on both sides would allow socialization while maintaining an essential smooth circulation.
Distinct Functional Zoning (e.g., television watching zone, quiet activity zone, game zone...) can create a sense of privacy and encourage residents to use the spaces more.
Allocating a Multi-purpose room offers the option for IDPs to hold different activities based on their interests.
During school hours, when IDPs have limited access to the school's spaces, the **school rooftop** can be considered for socializing, preferably restricted to adults,, as long as safety measures allow it.
Having a Flexible layout further helps IDPs adapt a space to the activities of their choice
Provision of entertainment tools such as board games, card games, puzzles and tools for arts and crafts is essential for children's problem solving skills. This also offers them the option to choose the game of their interest while interacting with other children and developing social skills through constructive and observational play.

PLAYSCAPES

PLAY → flexible thinking development → problem solving skills
→ brain development

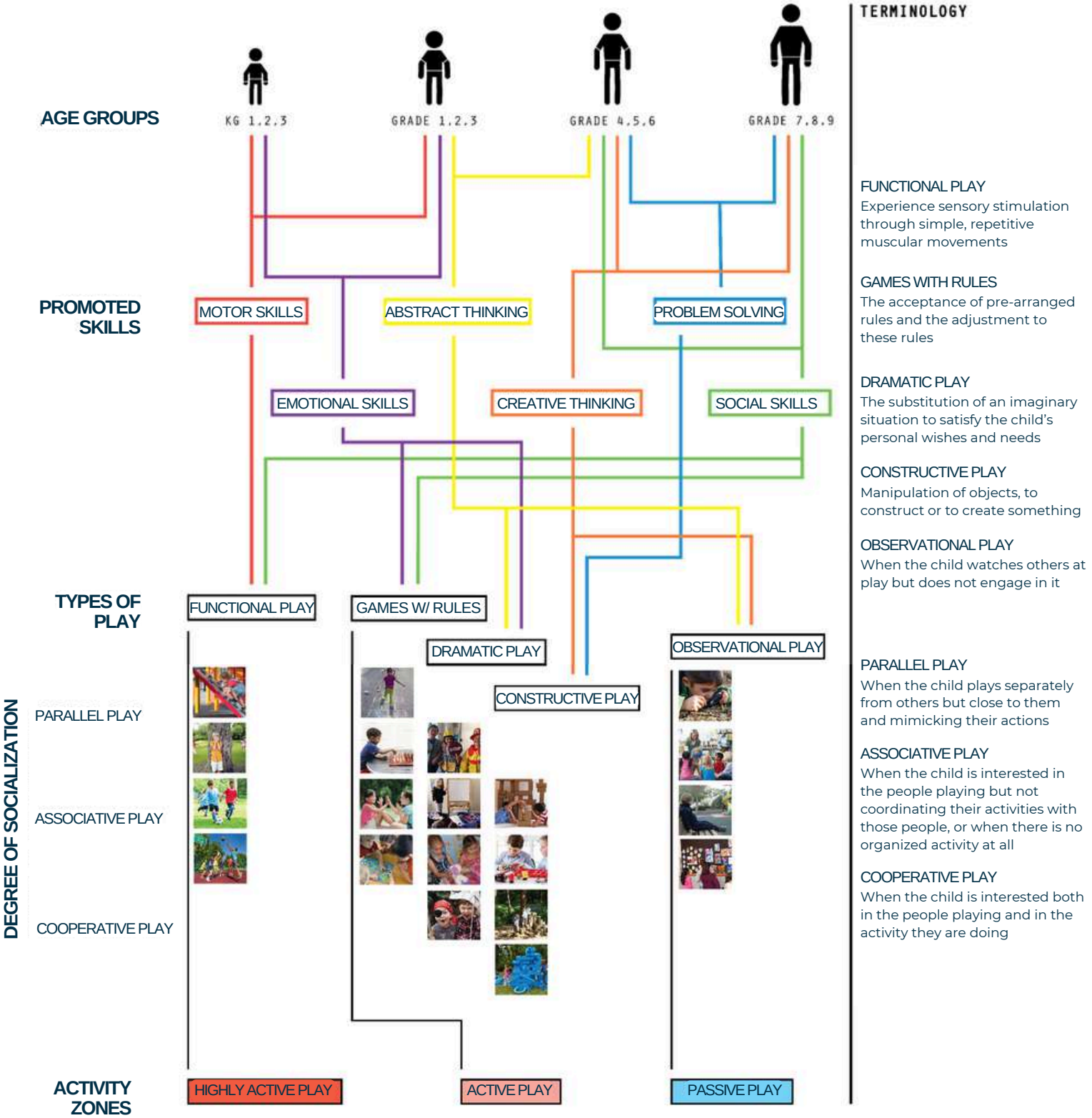
OUTDOOR PLAY → therapy → stress relief

CONSTRUCTED PLAYSCAPES → security and predictability

GREENED PLAYSCAPES → cooperative play, opposed to competitive play → social involvement of children
→ diverse types of play → allows children to choose different play types based on their personal preferences

Alwan, N. (2016) Placemaking Scenarios for Children in Refugee Camps. University at Buffalo, State University of New York
White, R. E. (2012) The power of play: A Research Summary on Play and Learning. Minnesota Children's Museum

TYPES OF PLAY FOR DIFFERENT AGE GROUPS



3.3 *Studying Space*

The optimal layout of a studying space varies with its intended use, some possible layouts include:

Parameter *Double-U* *Radial*

Grid-like *Linear* *Clustered*

- Currently, IDPs are following their studies through online learning. For that, a **clustered layout** is most appropriate to preserve their focus.
- Depending on the number of children in the shelter, there might be a need for several study spaces, in which case it is important to have a **variety of workspaces**, including quiet rooms for focused individual study and collaborative rooms for study groups.
- In both rooms, **movable furniture** would help make flexible seating arrangements depending on needs. This includes partitions, group tables, and couches for comfort.
- Furthermore, **technology integration** needed for online learning include headpieces to avoid disturbance, Internet connection, sufficient plugs to charge technological devices, comfortable seating, and regular school tools such as books and pens.
- In such spaces, it would be useful to include **storage spaces** for shared study materials
- Another important factor to consider in communal studying spaces is **acoustics.** Noise can be minimized with partitions, acoustic panels and carpets.

Fisher, Kenn. (2005) Research into identifying effective learning environments. Paris: OECD/PEB
JISC (2006) Designing Spaces for Effective Learning. HEFCE.

4- Accessibility

Accessibility for People with Disabilities is essential to make shelters inclusive and safe for everyone.
As accessibility is a qualitative assessment, adaptation varies from a school to another, depending on each one's conditions.
That being said, there are 3 main disabilities that need to be accommodated in the physical layout of schools:
Deafness, Blindness and Mobility Impairment.

Sensory and Mobility challenges require adaptation in multiple aspects of daily life such as **communication**, **mobility** and **self-care tasks**.

INCLUSIVE DESIGN

4.1 *Blindness*

People with partial or total blindness rely primarily on memory, hearing, and sense of touch. Thus, shelter should provide clear orientation, safety markers, and accessible navigation.

Room Proximity: Providing a room close to amenities such as bathrooms and communal spaces would make it easier for people to navigate safely.
Clear Walkways and Reduced Clutter: hallways and rooms should be free of obstacles. Furniture should steer clear of high-traffic areas, like corridors, to avoid hazards.
Labels and Signage: Braille Labels or Raised-Text signage at key points like doors, restrooms, and emergency exits would provide some necessary autonomy.

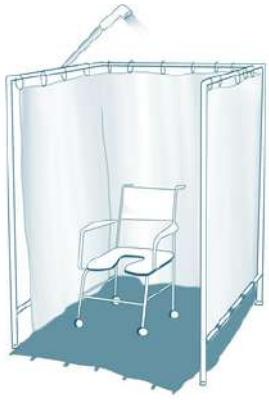
4.2 *Deafness*

People with partial or total hearing loss rely primarily on their vision. Thus, shelters should incorporate visual cues and communication aids:

Clear Signage: Use clear text (large, legible fonts with high contrast. ex: red on white text), and symbol-based signage for key areas. Label emergency routes, exits, restrooms, and essential facilities.
Written Communication: Display important information on boards or posters. For a faster and more practical use, employ text messaging for essential updates and announcements.

4.3 *Mobility Impairment*

Room Location: Someone with limited mobility should be accommodated on the Ground Floor, with proximate access to all essential amenities. When stairs or stepped levels are inevitable, make sure to install **ramps** for accessibility.
Wide doors and pathways: Ensure clear widths meet minimum requirements, with doorways being at least 85 cm wide, and walkways being clear of any clutter or furniture.
Elevated bedframes: Beds should be 45 to 55 cm high to facilitate transition from wheelchair.
Table Surfaces: Ensure that tables and work surfaces have open, unobstructed space beneath to allow wheelchair users to comfortably position their legs under the table, enabling them to get close and use the surface with ease.
Restroom and Shower Facilities: Ideally, restrooms should be equipped with grab bars, lowered sinks, and wider stalls. As for showers, they should have non-slip floors and handheld showerheads.
If these conditions cannot be met within the infrastructure of the school, consider the installation of a wider shower curtain system connected to a handheld shower head (as seen in the 6.2 Shower section of Sanitation Needs).



4.4 *A Place for All Ages*

Beyond accessibility, inclusive design should take into account the experiences of people of all age groups

Children

Provide safe, accessible play areas with inclusive entertainment equipment. Allowing children to play and interact together promotes exploration and social development.

Teenagers

Incorporate spaces like sports courts and community gardens to encourage active participation and social connection.

Adults

Design flexible areas that support varied uses, from community gatherings to fitness activities, with spaces for relaxation and socialization to strengthen community ties.

Seniors

Ensure comfortable seating, shaded areas, and easily accessible amenities. Develop programs that engage seniors and reduce social isolation

B- Infrastructure

5- Water Needs

5.1 *Drinking Purposes*

A healthy adult needs a daily intake of around 35 ml of water per kilogram of body weight at least; according to the general guidelines from scientific organizations.

Equivalent to:
1.7 L required for a person weighing **50 kg**
2.1 L required for a person weighing **60 kg**
2.4 L required for a person weighing **70 kg**
2.8 L required for a person weighing **80 kg**

Averaging in 2-3 liters per person daily.

5.2 *Hygienic Purposes*

Under ideal circumstances, the average person uses 101.5 gallons of water per day (about 461 L)
To calculate only basic necessities:

- Flushing: 1.5 gallons per flush x 6 flushes per day = **9** gallons
- Showering: 10 minute showers x 2 gallons a minute = 10- 20 gallons = avg **15** gallons
- Washing clothes: A washing machine (varies depending on the machine) utilizes 15 gallons a load (assuming a person uses a washing machine 1-3 times a week)
  = 15 to 45 gallons a week = 2 to 6.5 a day
  = avg **4.25** gallons per person per day
- Hygiene: (washing face, brushing teeth, etc.) = **2.5** gallons
- Washing dishes manually: **7** gallons

Total: 37.75 gallons = 142.8 L per person (covering only necessities)

In addition to water needs, we need to take into account the **Water Storage capacity** of the schools, which tended to be an issue in the schools observed in South Lebanon.
For example, School X contained 6 tanks with a capacity of 2000 L each. A total of 12,000 L that would last them 1-2 days.
In response, the NGO involved provided an additional tank. However, it is important to also consider systems in which we can reduce water import.
Such as:
Water Recycling
Water Collection systems

Xia, C., Wang, W., Guo, X., & Li, Y. (2019). Research on Construction Technology of Emergency Toilets in Japanese Refuge Sites under the Background of Aging. Risk Analysis and Risk Management in Western China (WRARM 2019) (pp. 102-106). Atlantis Press.

To save on water expenses, we can implement rainwater collection systems. However, the water collected from this system is to be used solely for flushing toilets.

DO Water collecting & Recycling

DON'T Waste & buy Water

6- Sanitation Needs

6.1 *Toilet*

Water fixtures needed for:

100 male users
- → 2 toilets (for every 100 additional users, 1 toilet is added)
- → 5 urinals (for every 80 additional users, 1 urinal is added)
- → 1 washbasin for each toilet
  1 washbasin for every 5 urinals
- → 10 showers

100 female users
- → 15 toilets (for every 100 additional users, 2 toilets are added)
- → 1 washbasin for each toilet
- → 10 showers

Note: it's important to make sure bathrooms are accessible for individuals with limited mobility. In some cases, this requires the addition of a short ramp for wheelchair users.

Shackelford, B. B., Cronk, R., Behnke, N., Cooper,(2020). Environmental health in forced displacement: a systematic scoping review of the emergency phase. Science of the Total Environment, 714, 136553.

6.2 Shower

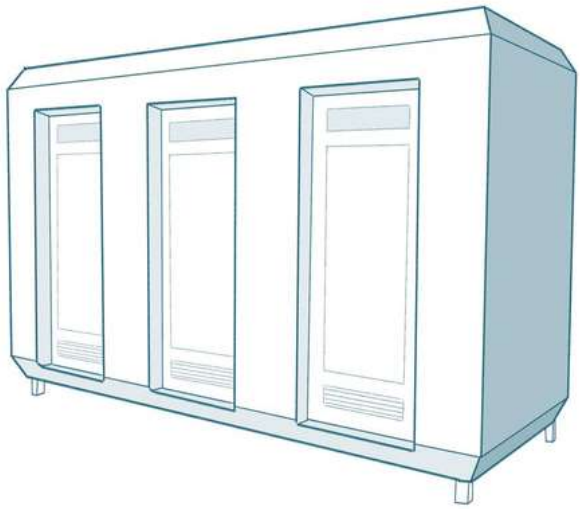
Existing Issues in schools observed:

- Not enough showers and toilets
- Bathrooms are not equipped for showering

Proposed Options

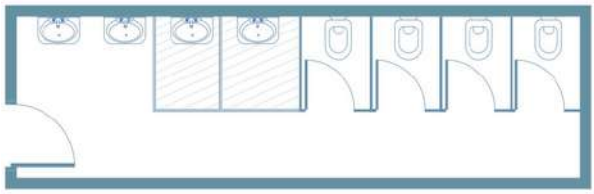
- Portable Shower and Toilet Units (similar to those used in festivals/camping)

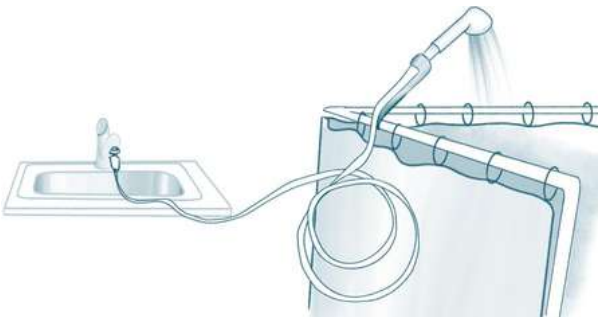
Portable Shower Units can be very advantageous as they can be easily transported and require no set-up aside from linking to existing water systems. They also present an advantage when bathrooms are too small to be including shower adaptations. However, they likely won't fit into indoor spaces and would need to be placed outdoor which can be tricky for accessibility during rainy weather and changing in and out of clothes in dry rooms.
In case of implementation, it is essential t to make sure IDPs have a covered walkway shielding them from the rain, and a drainage mat to step on, avoiding slippery or muddy surfaces. It is also important to have adjacent changing rooms, which can either be portable units or an allocated room indoor.

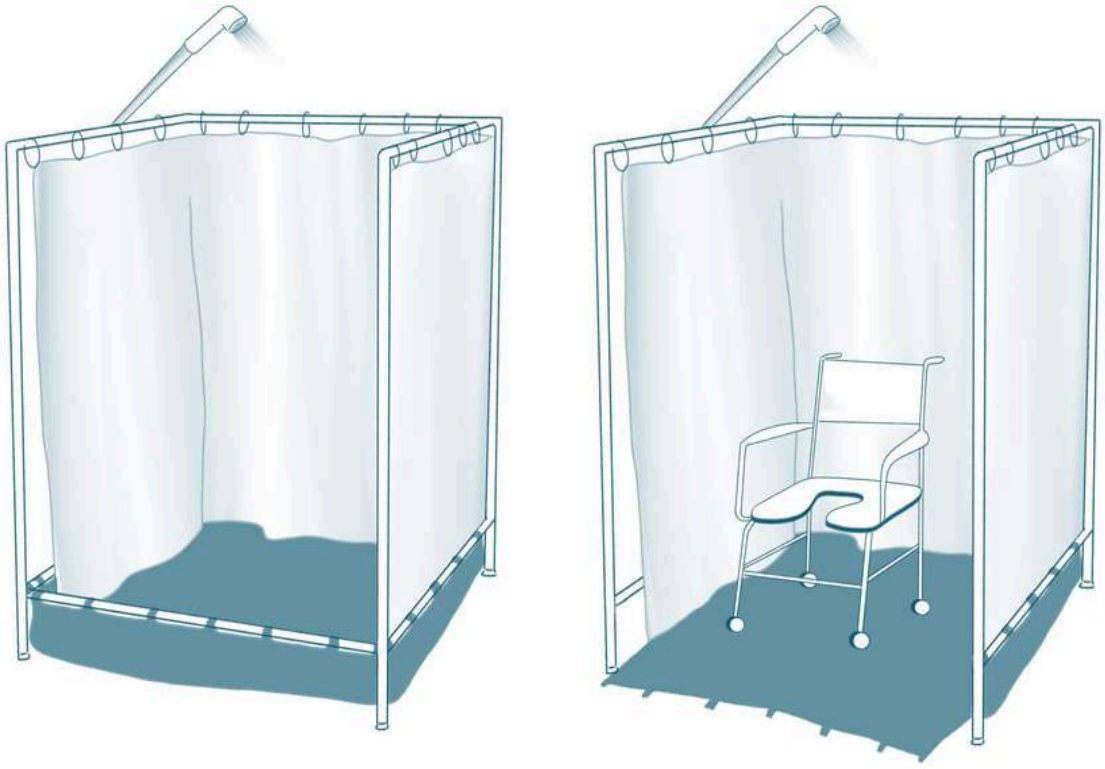


- Handheld ShowerHeads

This option consists of connecting a handheld showerhead to bathroom sinks , allowing users to bathe while standing or sitting. This works perfectly in singular bathrooms as it wouldn't require adjustments for separators and drainage; the clipped showerhead would suffice.
It can be also implemented in larger public bathrooms, if space allows it. Although it would require the installation of separators around the sink, and a drainage system on the ground.
In order for this makeshift shower area to be private and hygienic, there should be an installation of shower curtains or partitions to separate showering spaces from other bathroom functions.







The shower area prevents water leakage by having curtains all around, they can be connected to the ground surface element. Its borders are slightly elevated from the ground to gather the wastewater which will be emptied by a pump.
This option is particularly advantageous for users with limited mobility as its dimensions are adjusted to their needs. One curtain can be removed for a better access by a caretaker. For the wheelchair to enter the space, one of the borders of the lower frame can be removed, then placed again once the user is inside, to gather the wastewater.

6.3 *Laundry*

Existing Issues in schools observed:

- Manual washing leading to health issues for some women
- Limited timing access to the washing machines (if existing)
- Limited space for big washing machines
- Unsafe hanging of wet clothes over electric wires on the rooftop, on the windows, and inside the classrooms

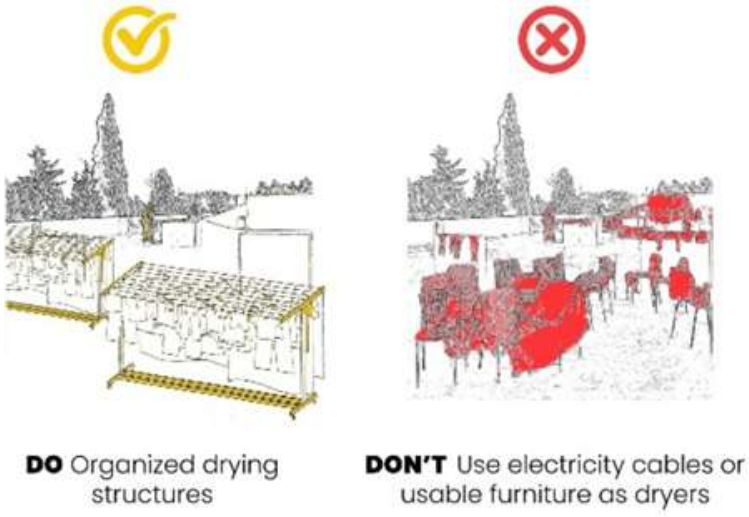
Proposed Options

- Manual advanced washing systems (Manual Washing machines take up less space but more time)
- Rooftop portable and separate safe structures to hang the clothes

https://shop.fawssit.com/

Standard washing machine sizes and how many people they can serve:

5 - 6 Kg	→	2 people and 4 loads per week
7kg	→	3 people and 4-6 loads per week
8 kg	→	4 people and more than 6 loads per week
9 - 12 Kg (not very commonly used)	→	11 people, takes up more time and water



To dry the laundry, it is essential to apply safe practices: ideally locating them in an open air area (ex: the roof), away from electricity cables

6.4 *Sanitation Kits*

Each IDP should own a sanitation kit that would comprise:

- Toothbrush
- Toothpaste
- Bar of soap
- Shampoo
- Conditioner
- Body lotion
- Shave gel
- Deodorant
- Comb
- Razor
- Facecloth
- Bandages
- Hand sanitizer
- Tissues
- Nail clippers
- Hair ties
- Feminine hygiene products

7- Heating/ Cooling

7.1 Space & Water Heating

Existing Issues in schools observed:

To get by, schools sheltering IDPs in South Lebanon are relying on:
Electric Heating systems for Water Heating
Electric Space Heater (+blankets) for Space Heating
Fans for Cooling
However, they struggle with:

- Lack of alternative heating systems
- Limited fuel supply to IDPs
- Minimal provision of electric heating resources by third-parties organizations (NGOs)
- Restricted operating time for water heaters

Proposed Options

- Solar Panels

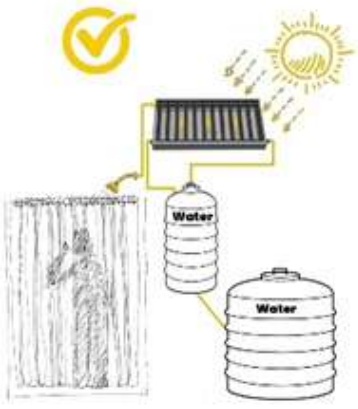
Solar panels, also known as photovoltaic (PV) panels, convert sunlight directly into electricity. They can be used to **power electric heating systems** for water and space heating (electric water heaters and electric space heaters).

DO Use Solar panels for electricity & Heating

DON'T Use generator and fuel for electricity & heating

- Solar Thermal Conversion

Solar thermal conversion consists of using solar collectors to **capture the heat from sunlight** and transfer it to a fluid, such as water or air. This heated fluid is then stored in a tank or reservoir for later use. It can then be used for water heating through a solar water heating system or for space heating through a solar air heating system.



DO Solar Thermal Conversion to heat water

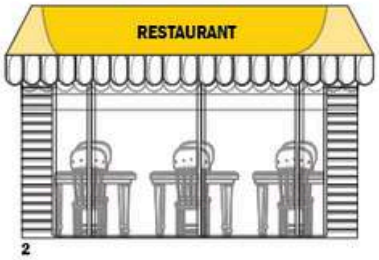
DON'T Use electricity to heat water

8- Food

8.1 Food preparation and distribution

01
SOURCES

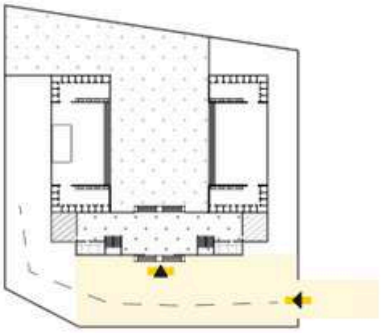
1



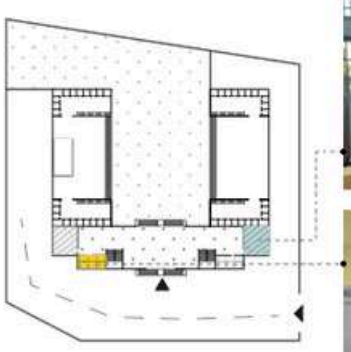
2

3 Public kitchen in the NGO's center

02
ARRIVAL AT SCHOOL

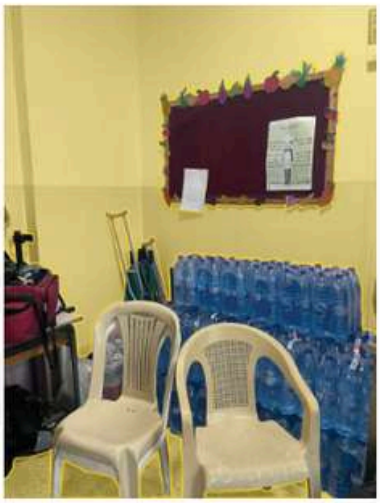


03
KITCHEN & DISTRIBUTION



The School Kitchen is used for reception, storage and distribution of the meals to the IDPs

- Used by only 10 women everyday
- Accessible for 15 min per day



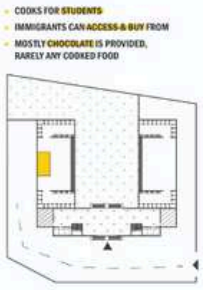
04
MEALS DISTRIBUTION

This process happens
3 times a day

Existing Issues in schools observed:

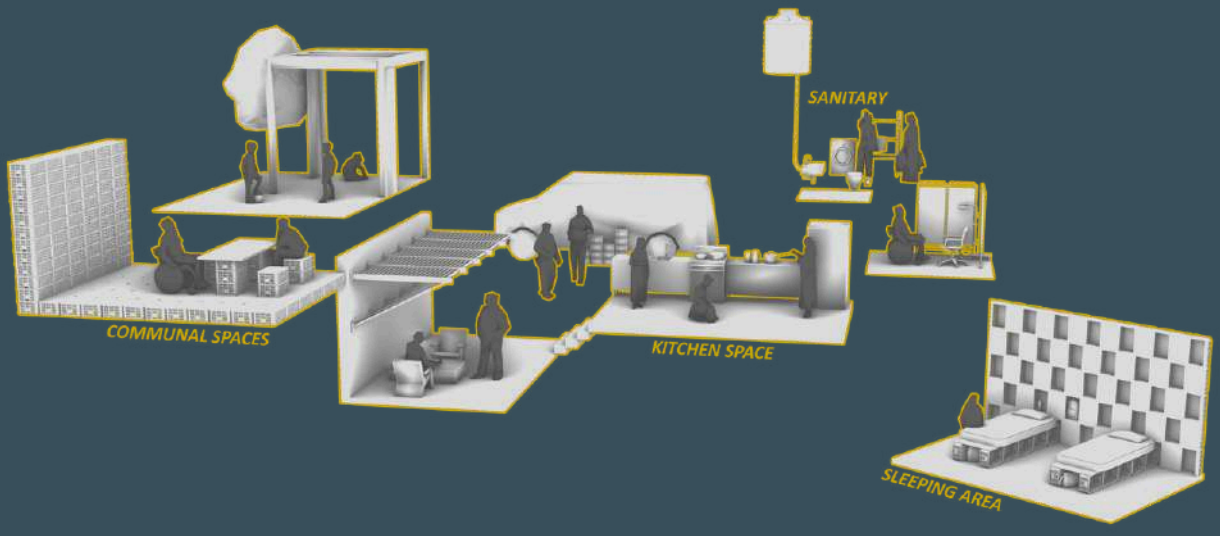
Currently, the schools are relying on NGOs, who are regularly providing 3 meals per day, from truck to kitchen. The food is ready-to-eat and doesn't require any further preparation or heating. While this system ensures stability and basic nourishment, it fails to consider the IDPs' individual preferences, leading to dissatisfaction and discomfort. Furthermore, this reliance on daily meal-provisions may result in a sense of dependency, as the lack of involvement in meal selection and preparation could undermine the dignity of IDPs.
In the schools observed in our research, even when the school had an existing kitchen, the IDPs' access was very restricted (about 15 min at every meal). This led to some unsafe and/or unsanitary practices, such as placing cooking gas cylinders in corridors/ bathrooms, and storing food they individually bought in their rooms.

Mini Market



Proposed Options

Feedback mechanisms: solicit input from IDPs regarding their preferences, concerns, and suggestions for improving the meal distribution system
Customization: tailor meal options that cater to different dietary requirements
Optimized accessibility to kitchen facilities: either provide additional kitchen spaces or establish a system of time slots where people can access the school kitchen for an adequate time.
Optimized involvement: Engage IDPs in decision-making processes related to food distribution and involve them in community kitchens or cooperative cooking initiatives to enhance autonomy and foster a sense of belonging.
Allocation of storage spaces for individuals who wish to store personal food items



DESIGN FOR COMMUNITIES