

# WINTERISATION ASSESSMENT ZA'ATARI CAMP

*Presentation of Key Findings – October 2015*

# Contents

1. Background
2. Heaters
3. Primary NFI needs
4. Children's clothing
5. Shelter flooding
6. Shelter suitability
7. Shelter repairs
8. Summary and recommendations



# BACKGROUND

# Context and objectives: Winter needs in Za'atari

- 77% of Za'atari residents have been living in the camp for two years or more and have therefore experienced multiple winters in the camp. **In the winter Al Mafrag governorate reaches freezing temperatures, and heavy rainfall, cold winds, and snow can be expected.** The average temperature's during winter 2014/2015 (December-February) was 3.5°C.
- Last winter, Jordan experienced two snow storms, Huda in January and Jana in February 2015. These storms caused shelter damage, blocked roadway access in the camp, and impacted day-to-day living conditions of camp residents.
- The objective of this assessment was to gather information regarding the **functionality of heaters, primary NFI needs, and children's clothing needs** of Za'atari camp residents.
- Additionally, the assessment aimed to gauge camp residents' winter shelter needs, including the **suitability of current shelters for winter, types of repairs needed, and capacity of residents to make shelter improvements.**

# Methodology

## Sampling

- Random GPS sampling of 400 households, with selection of households proportionate to the district population.
- Sample size is generalizable at a 95% level of confidence and 5% margin of error at the camp level and is therefore representative of the entire camp population.

## Data collection

- Data collected 11-14 October 2015 by mixed gender team of experienced enumerators from REACH, UNHCR and NRC.
- Respondents were above the age of 18 and reported on the winter needs of their families, as distributions are made according to case ID information of each family.
- Discussions with 8 key informants (KIs) following data collection served to contextualize and support assessment findings with qualitative analysis.
- Additionally 4 KI interviews were conducted with informal shop owner and 2 KI interviews were conducted with formal shop owners

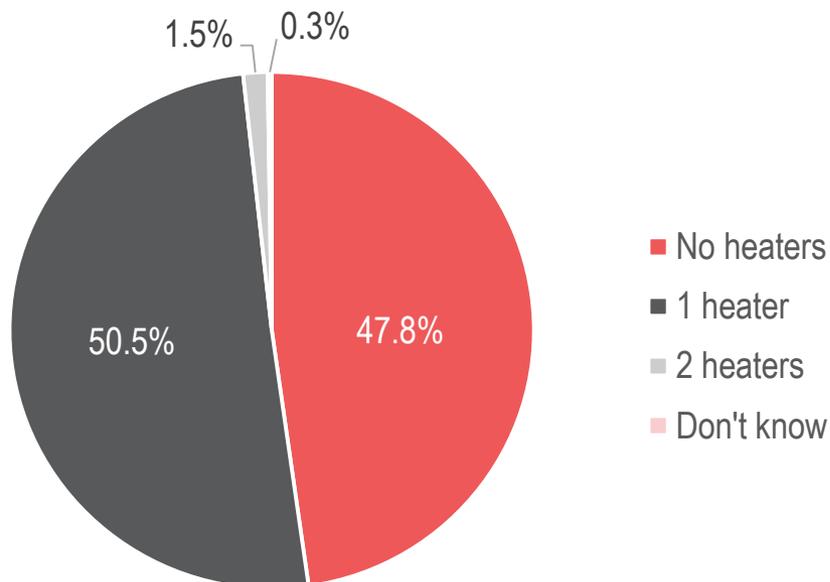


# HEATERS

# Current possession of heaters

- **47.8% of families reported that they do not currently possess any heaters, and 50.5% of families reported possessing one heater.**

Number of heaters that families report possessing

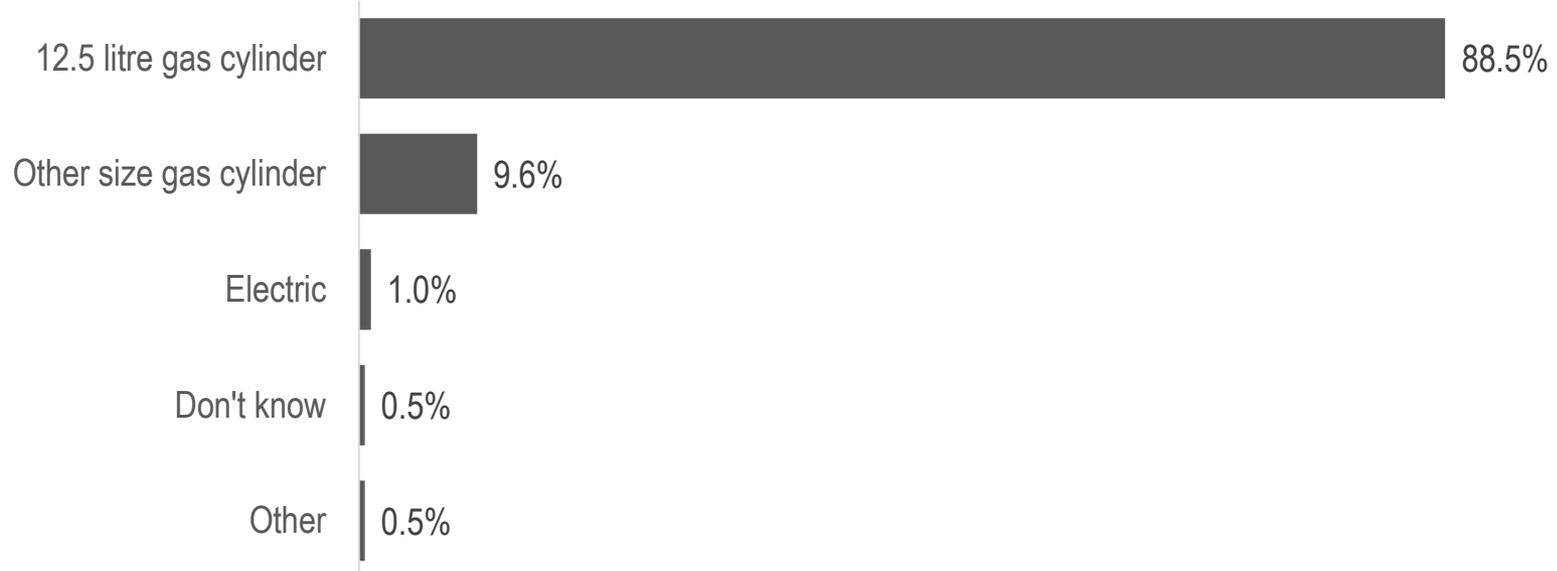


- **According to KI interviews, a number of families in the camp do not currently have heaters as they sold, traded, or threw out broken heaters following last winter. Other families have not received a heater through previous distributions, or because they were previously sharing one in a household with multiple families, but have now moved or have formed a new family/case (e.g. through marriage).**

# Type of heater possessed by families

- Of those families who currently have a heater, a **significant majority (88.5%) reported possessing a 12.5 litre gas cylinder heater**, while only 1% of families reported possessing an electric heater.
- This finding indicates that the 12.5 litre gas cylinders distributed through the gas voucher system meet the heater needs of most families in the camp.

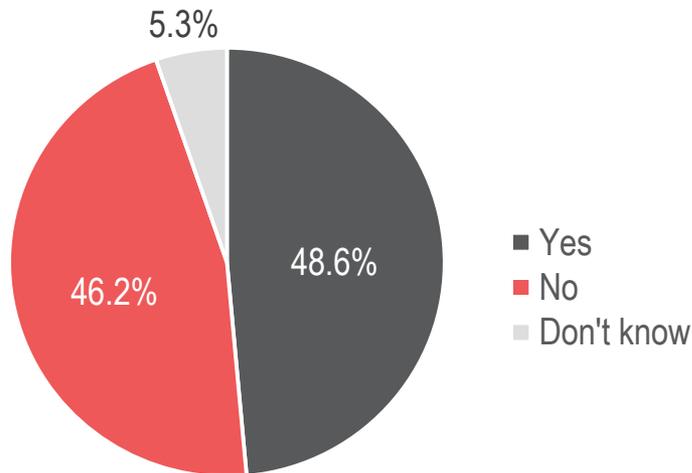
Type of heater the respondent's family reported possessing



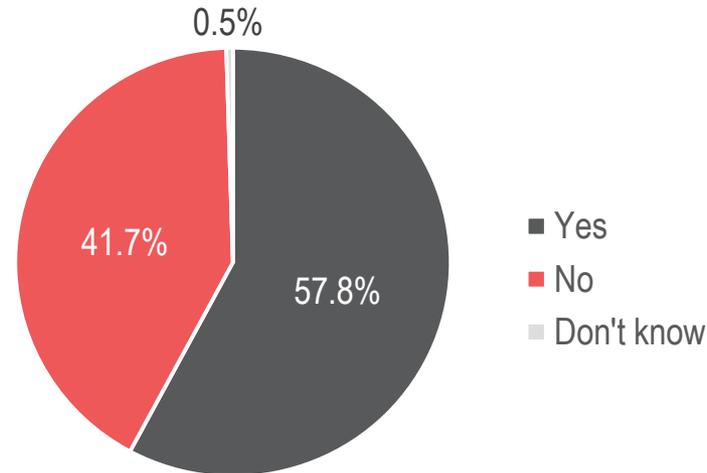
# Heater functionality and gas cylinder possession

- Of the 51.9% of families that reported possessing a heater, almost half of them (46.2%) reported that their heater was not functioning,
- 41.7% of families who reported having a gas heater reported that they do not have a gas cylinder for it.
- These findings indicate a need for heater repairs and gas cylinder distributions in the camp.

Percentage of respondents reporting their family has a functioning heater



Percentage of respondents reporting their family has a gas cylinder for their heater





# PRIMARY NFI NEEDS

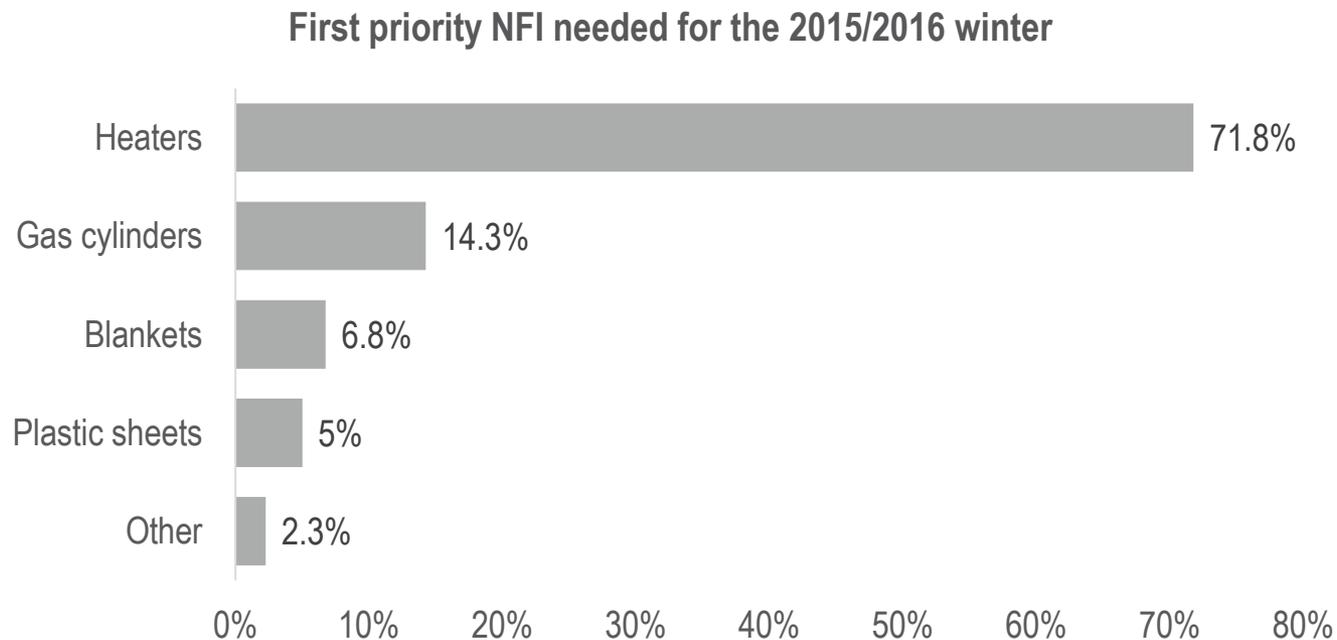
# Key findings: Primary NFI needs

Top 5 items that were cited as the 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> priority NFI needs of families in Za'atari camp

Item	% citing as a top 3 need	Most frequent reason for citing as a first priority need
Heaters	81%	Do not have any of the item (58%)
Gas cylinders	81%	Do not have enough of the item for the entire family (52.5%)
Blankets	58%	Do not have enough of the item for the entire family (73.5%)
Plastic sheeting	38%	The item is worn out or of poor quality (53.8%)
Mattresses	11%	N/A (as only 1 respondents cited this item as their primary need)

# First priority NFI need: Heaters

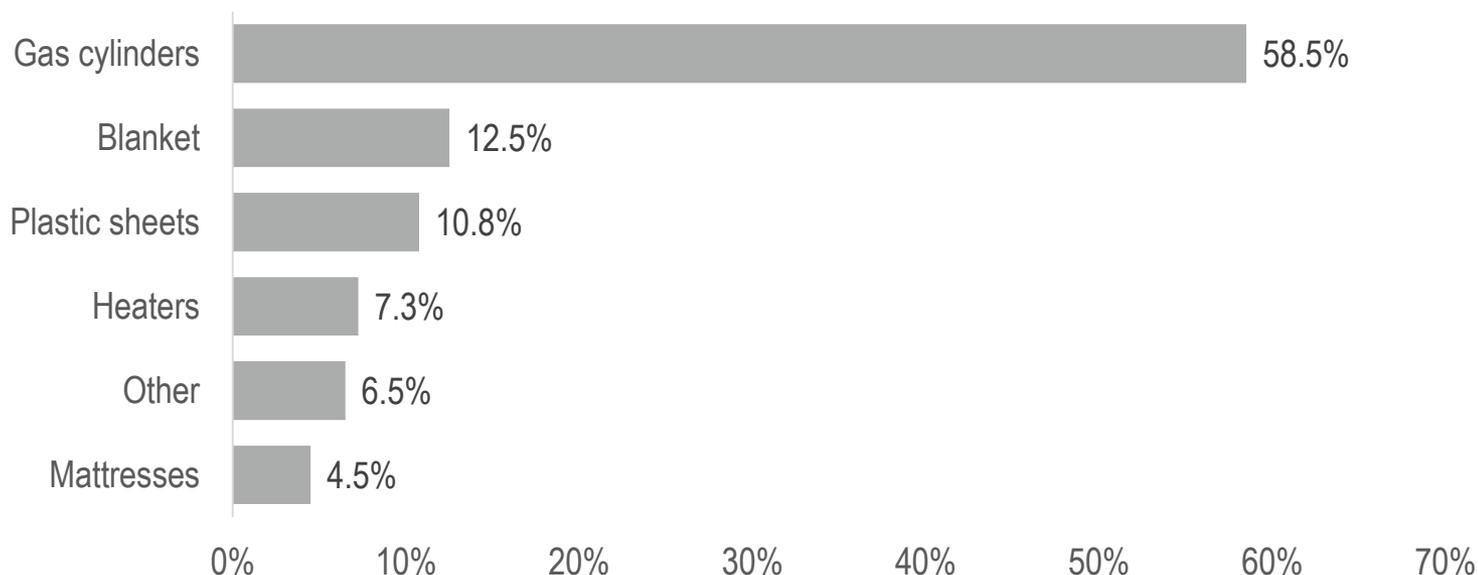
- A significant majority (71.8%) of respondents cited heaters as the top priority need for their families during winter 2015/2016.
- This result is congruent with the finding that **78.3% of families either have no heater or the heater they do possess is broken**, indicating a priority need for functional heaters.



# Second priority NFI need: Gas cylinders

- 58.5% of respondents cited gas cylinders as the second priority need for their families during the 2015/2016 winter.
- 78.4% of respondents who cited heaters as a primary need also cited gas cylinders as a secondary need, indicating a high demand for gas cylinders in the case of receiving heaters.

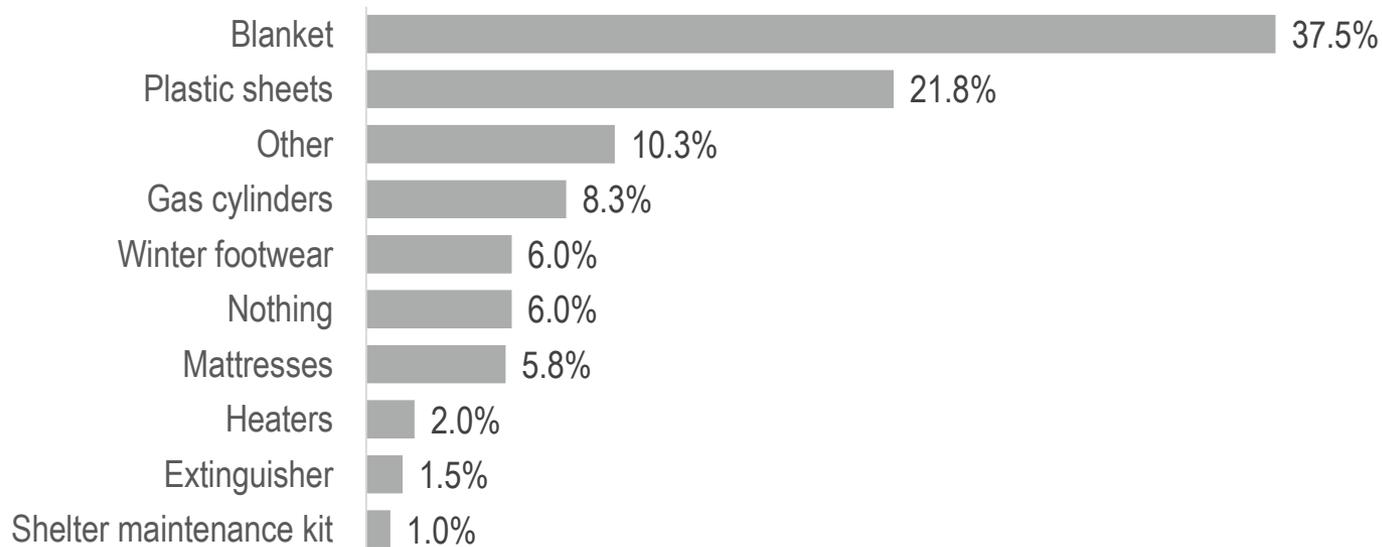
Second priority NFI needed for the 2015/2016 winter



# Third priority NFI need: Blankets

- 37.5% of respondents cited blankets as the third priority need for their families during the 2015/2016 winter, whilst 21.8% cited plastic sheets as their third priority need.
- In addition, 37.5% of respondents cited plastic sheets as either a 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> priority need for the winter, which indicates that shelter repairs are an important measure for ensuring that families in the camp can withstand winter weather.

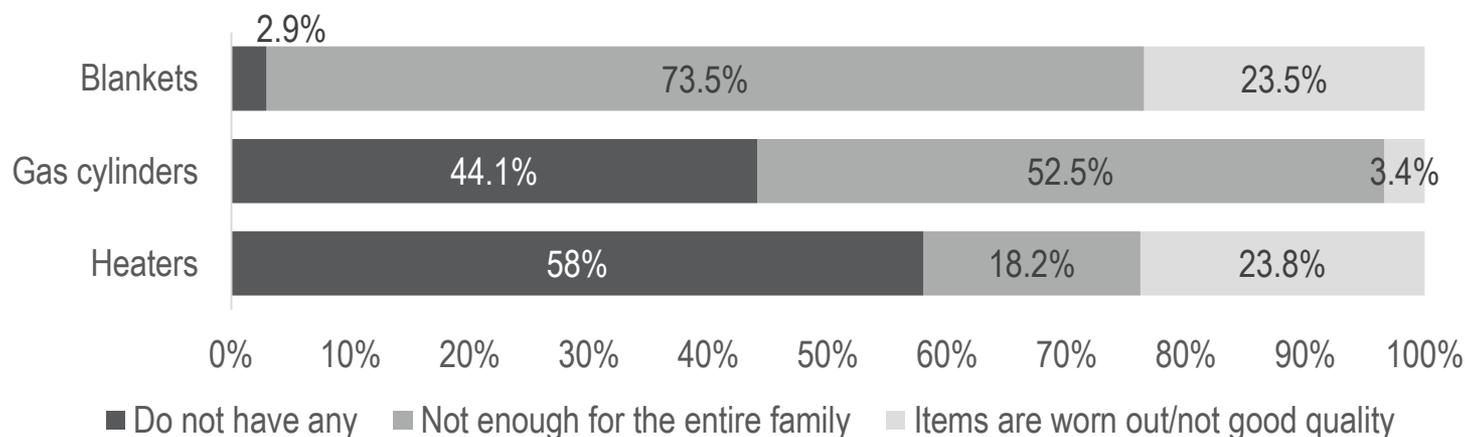
Third priority NFI needed for the 2015/2016 winter



# Reasons for primary need

- Of the 71.8% of families that cited heaters as their 1<sup>st</sup> priority need, 58% reported not having any heaters as the reason for this need.
- For gas cylinders and blankets, 52.5% and 73.5% respectively reported not having enough for the entire family as the reason for this need.
- NFI distributions for winter 2015/2016 should target increasing the quantity of these priority items. Improving quality remains a consideration, though perhaps to a lesser extent.

Reason for citing first priority item, disaggregated by three most frequently cited items



# NFIs: Informal market preparation for winters

- **KI interviews with owners of informal shops in the camp reported that they are stocking the NFIs that were frequently cited in the quantitative assessment as families' primary needs (i.e heaters, gas cylinders, winter clothes, blankets and mattresses)**
- **Additionally, the KIs highlighted that shop owners are aware of the need for more heaters in the camp, and plan to increase stocks of heaters, spare parts for heater repairs, and small stoves with heating heads.**
- **The KIs revealed that the primary barrier to stocking certain NFIs is challenges faced bringing goods into the camp due to legal restrictions. Further, it was reported that difficulties in getting winter NFIs into the camp meant that some items are stocked less or have substantially higher prices than formal shops.**
- **According to the informal shop owner KI discussions, winter distributions by humanitarian actors also serve as a barrier to stocking items, since shop owners are concerned that the prices of certain items will reduce if they are distributed as humanitarian assistance.**

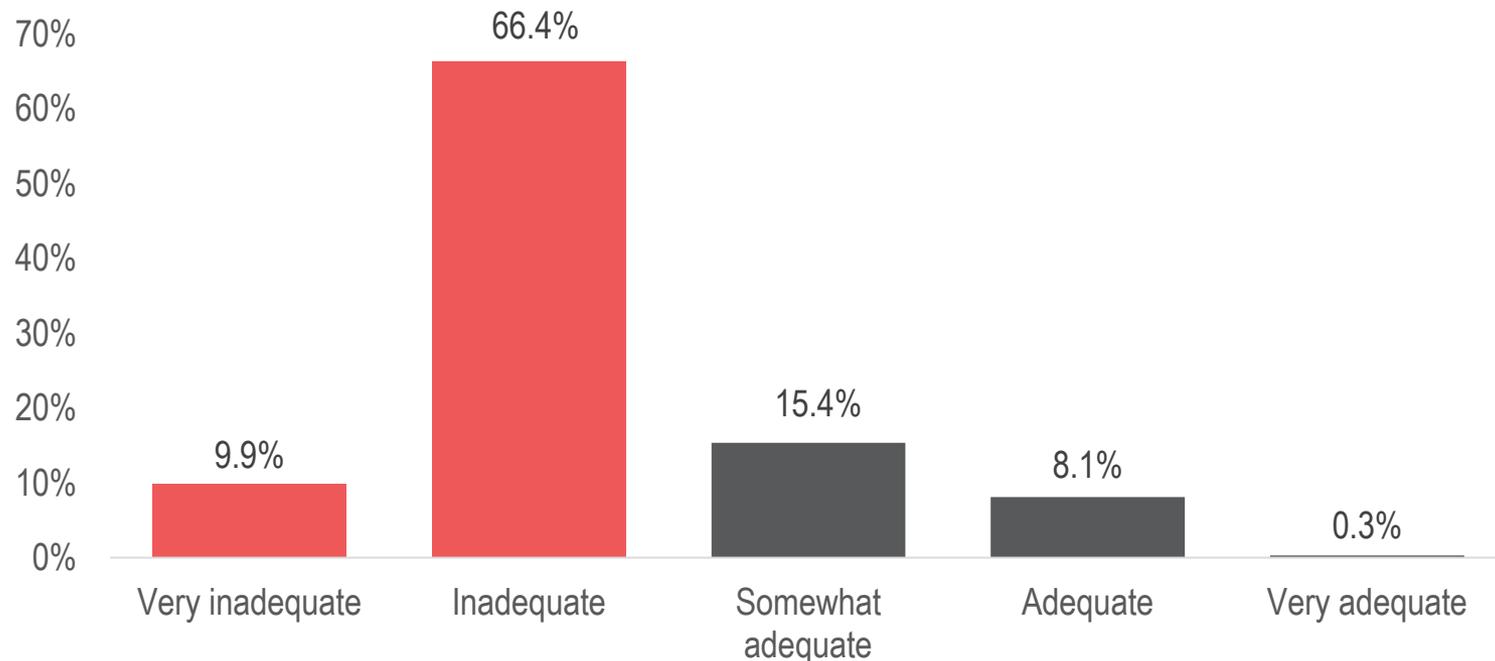


# CHILDREN'S CLOTHING

# Adequacy of children's clothing

- Of the 89.7% of respondents with children, 76.3% consider their children's clothing inadequate or very inadequate for the winter, compared with 8.4% of respondents who consider their clothing adequate or very adequate.

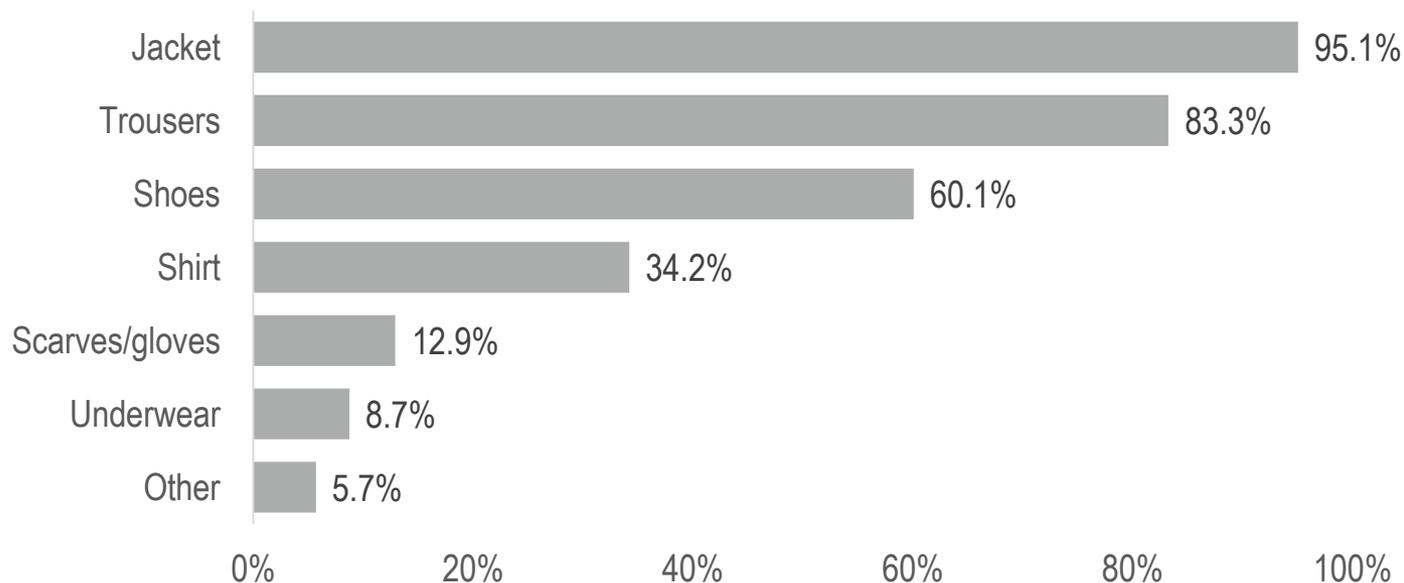
Adequacy of respondents' children's clothing for the 2015/2016 winter



# Primary children's clothing needs

- Of the 76.3% of respondents who consider their children's clothing inadequate or very inadequate for winter, 95.1% of respondents ranked jackets as either a 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> priority children's clothing need for the 2015/2016 winter.
- 83.3% and 60.1% of respondents ranked trousers and shoes, respectively, as either a 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> priority children's clothing item.

Percentage of children's clothing items ranked as a first, second, or third priority need





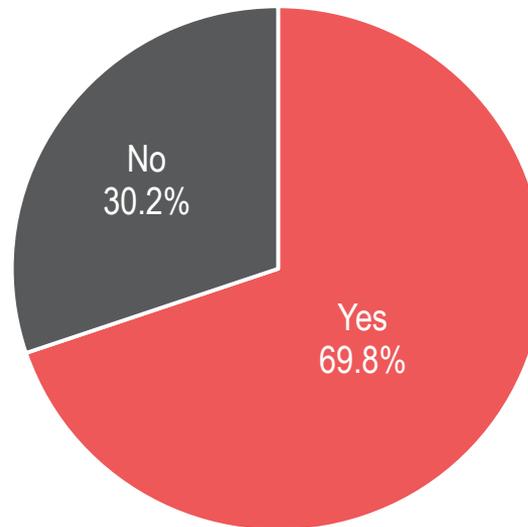
# SHELTER FLOODING



# 2014/2015 winter flooding

- **69.8% of respondents reported that their family's shelter experienced flooding** during winter 2014/2015, while 30.2% did not experience flooding.
- It is important to note that there was likely great variation in the extent of flooding experienced, with heavily leaking rooves being considered as flooding in addition to inundation through the doors or base of the structure.

Percentage of respondents who reported experiencing shelter flooding in winter 2014/2015





- Storm Damage**
- Blocked Access Point
  - Blocked Road
  - Damaged Shelter
  - Flooded Areas
  - Muddy Areas
  - Flooded Camp Facilities
- Camp Facilities**
- Camp Facilities
  - District Boundaries
  - Kitchens
  - WASH Centres
  - Mosques

Winter storm Huda has affected much of the Middle East from 7-9 January, including Jordan's Al Za'atari Refugee Camp. Many areas in the camp are flooded or inaccessible due to standing water or mud. There are many instances of flooded shelters, as well as shelters damaged due to high winds. Several roads are flooded or too muddy to be used for water delivery and other activities. Data collection is being conducted by camp agencies including UNHCR, UNICEF, ACTED, IRD, NRC and JEN. REACH is providing mapping support. Data reflected in this map is as of the day cited, with updated information collected daily.



Data Source: REACH, UNHCR, UNICEF, ACTED, JEN, NRC, IRD  
 Satellite Acquisition Date: 11/11/2014 by DigitalGlobe  
 Provided by: UNOSAT  
 Projection: WGS 1984 UTM Zone 37N  
 File: REACH\_JOR\_Map\_Zaatari\_StormAffectedAreasFriday\_9Jan2015\_A3  
 Contact: reach.mena@impact-initiatives.org

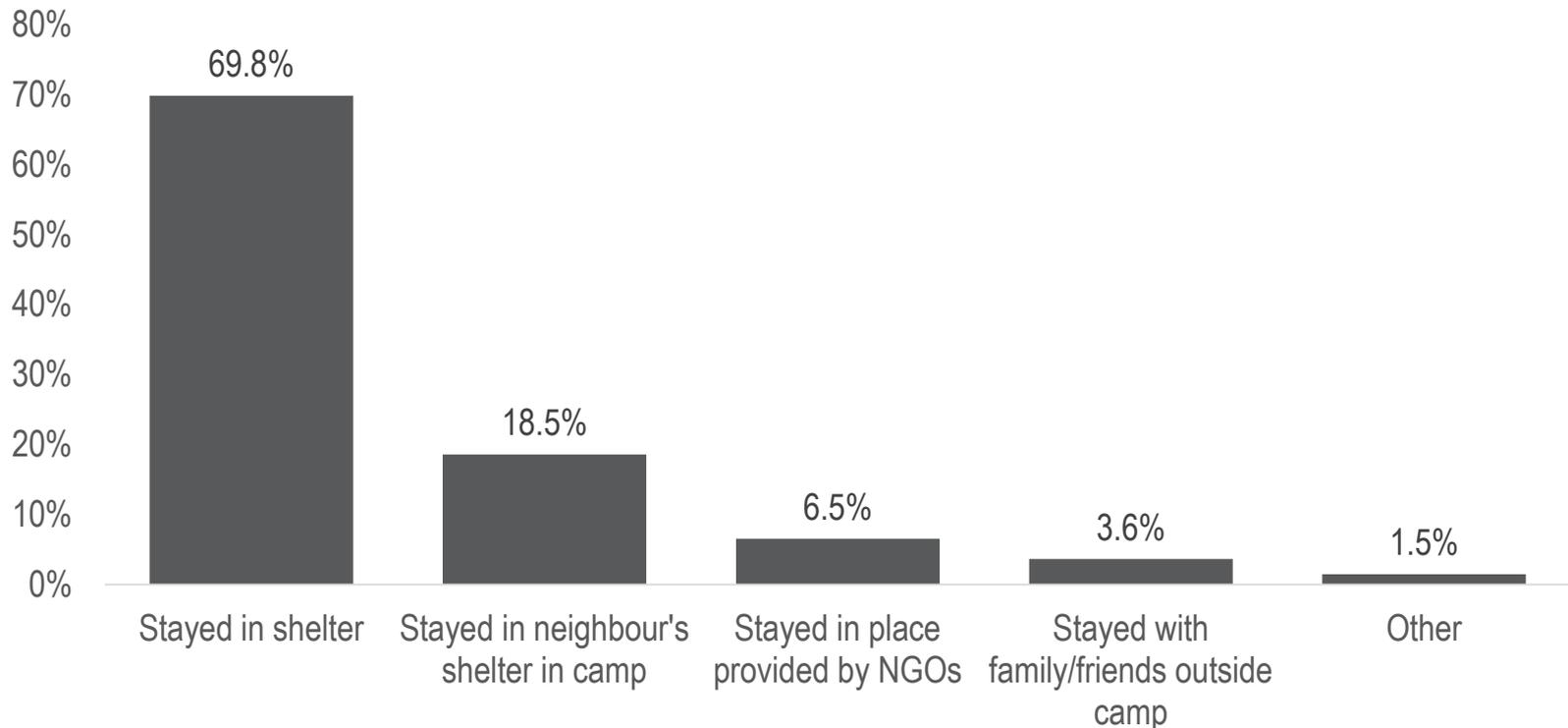


Scale 1:4400  
 0 87.5 175 350 525 Meters

# Shelter used during flooding

- Of those respondents who experienced flooding in their shelter during winter 2014/2015, 69.8% reported staying in their shelters, whilst 18.5% of respondents reported relocating to a neighbour's shelter in the camp rather than staying in their own.

Shelter used during flooding in 2014/2015 winter



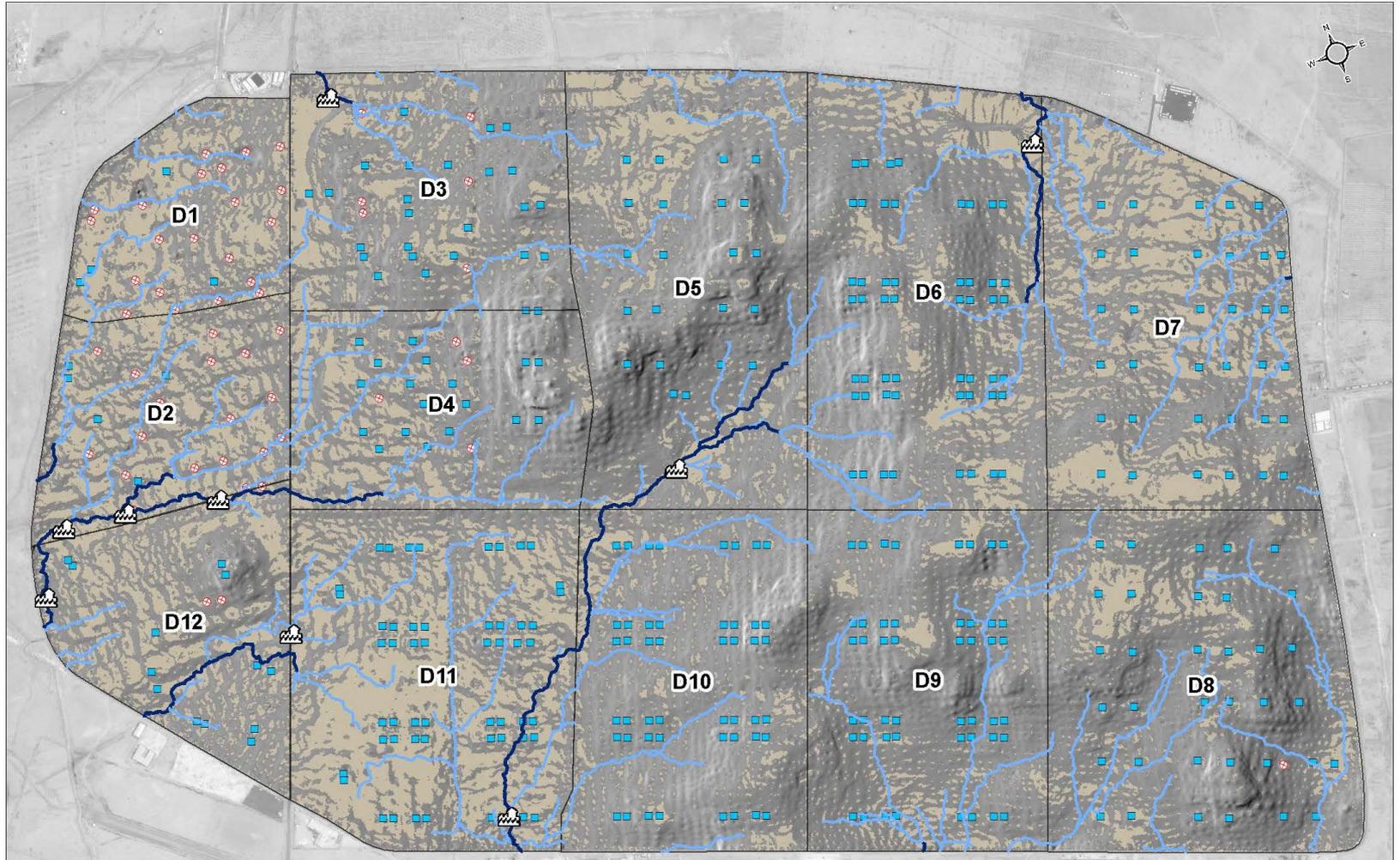


**Legened**

- Medium flow
- High flow
- Flooded area in Jan. 2015
- Flat areas (< 0.5% slope)
- District Boundaries

**WASH Center**

- Active
- Completely damaged



Data Sources:  
Camp facilities – UNHCR  
Elevation – UNHCR  
Satellite Acquisition Date:  
29/04/2015 by DigitalGlobe  
Provided by UNOSAT  
Projection: WGS 1984 UTM Zone 37N  
File: JOR\_Map\_Zaatari\_OCM\_FloodRisk\_Oct2015\_A3

Note: Data, designations and boundaries contained on this map are not warranted to be error-free and do not imply acceptance by partners, associates or donors mentioned on this map.



Areas prone to flood risk have been estimated based on elevation and water flow direction, in addition to observations from previous winter flooding. In case of heavy rain or snow, these lines represent the channels through which water runoff will predominantly flow and collect water. The darker blue lines represent channels of higher flow accumulation, and thus areas prone to flooding. Elevation point data with an accuracy of 2.5 meters was interpolated to create the DEM (Digital Elevation Model). The water flow channels as shown on the map were created based on the DEM using hydrological analysis techniques. The location of wash centres are shown in the map for reference. Damaged wash centres have a hole in the ground where the wash centre used to be present. During rainfall events, water collects in these holes.

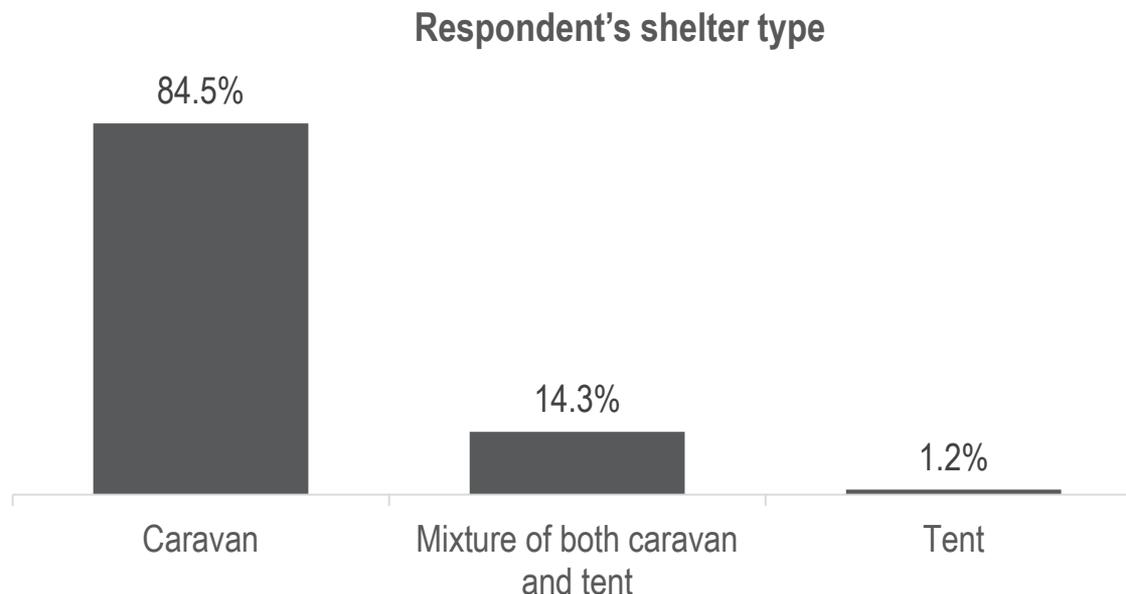
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# SHELTER SUITABILITY

# Type of shelter in the camp

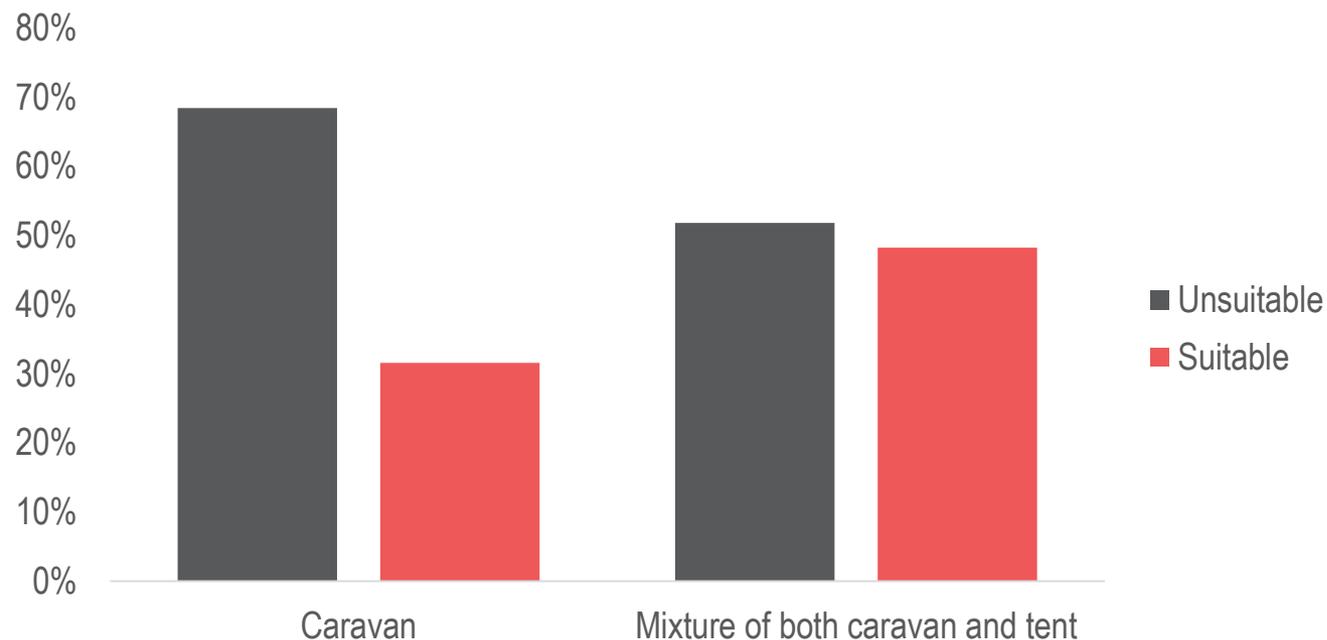
- **84.5% of camp residents presently reside in a caravan, 14.3% reside in a combined caravan and tent shelter, and 1.2% reside in a tent.**
- As the REACH-UNICEF Population Count (February 2015) found that 80% of Za'atari residents lived in caravans, 11% lived in a combined caravan and tent shelter, and 10% lived in tents. This finding shows an increase over time in the allocation of caravans to families in the camp.



# Suitability of current shelter

- **Across all shelter types, 66.5% of families reported that their shelter is unsuitable** for the 2015/2016 winter, compared with 33.5% of families who find their shelter suitable.
- 68.4% of families living in caravans reported they do not consider them suitable for winter 2015/2016, compared with 51.8% of families living in a combined caravan and tent shelter.

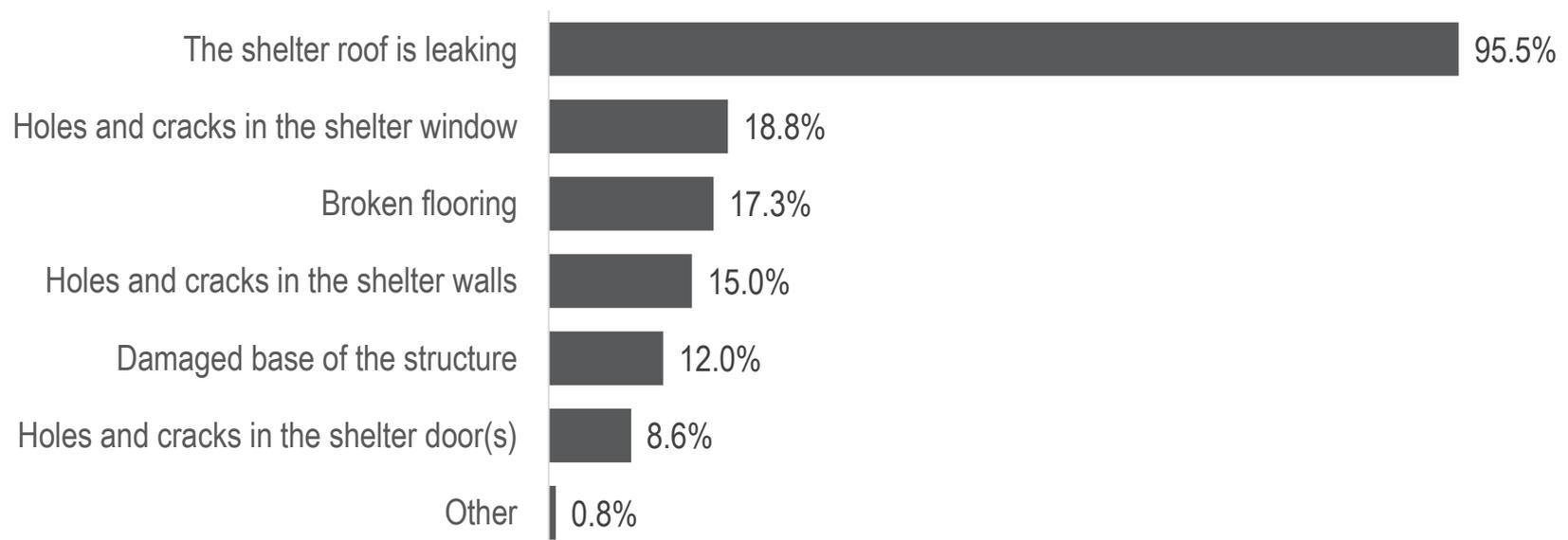
Suitability of shelter for 2015/2016 winter, by type of shelter



# Reasons for unsuitability of shelter

- **Of the 66.5% of families who reported that their shelters are unsuitable for the winter, 95.5% cited the shelter roof leaking as a reason for why.**
- 72% of families who reported their shelters are unsuitable because the shelter roof is leaking lived in the camp during winter 2014/2015, indicating that this issue has been previously experienced by a significant portion of families and is not just an anticipated concern.

Reasons for the unsuitability of shelter for 2015/2016 winter



# Electricity connection

- **99% of respondents reported that their family's shelter is connected to electricity through an electricity circuit.**
- KI discussions clarified that a significant majority of households are physically connected to an electricity circuit through wiring, and these connections typically work when the electricity is active in the camp. **Some residents are therefore able to run electric heaters from the electricity supply in the camp,** however, it is important to note that electric heaters have a high electricity consumption and there is limited electricity in the camp, so families cannot rely on electric heaters for regular heating.
- **In the 2014 UNHCR-REACH winterization assessment, KIs indicated that electrical wires are a common safety concern. This remains to be the case one year on, highlighting a need to urgently address the issue.** The dangers posed by electrical wires may be exacerbated by high levels of informal electricity connection in wet winter weather, indicating that initiatives that check the safety of private electricity connections in the camp will decrease the risk of electric shocks and fires resulting from uncovered wires.

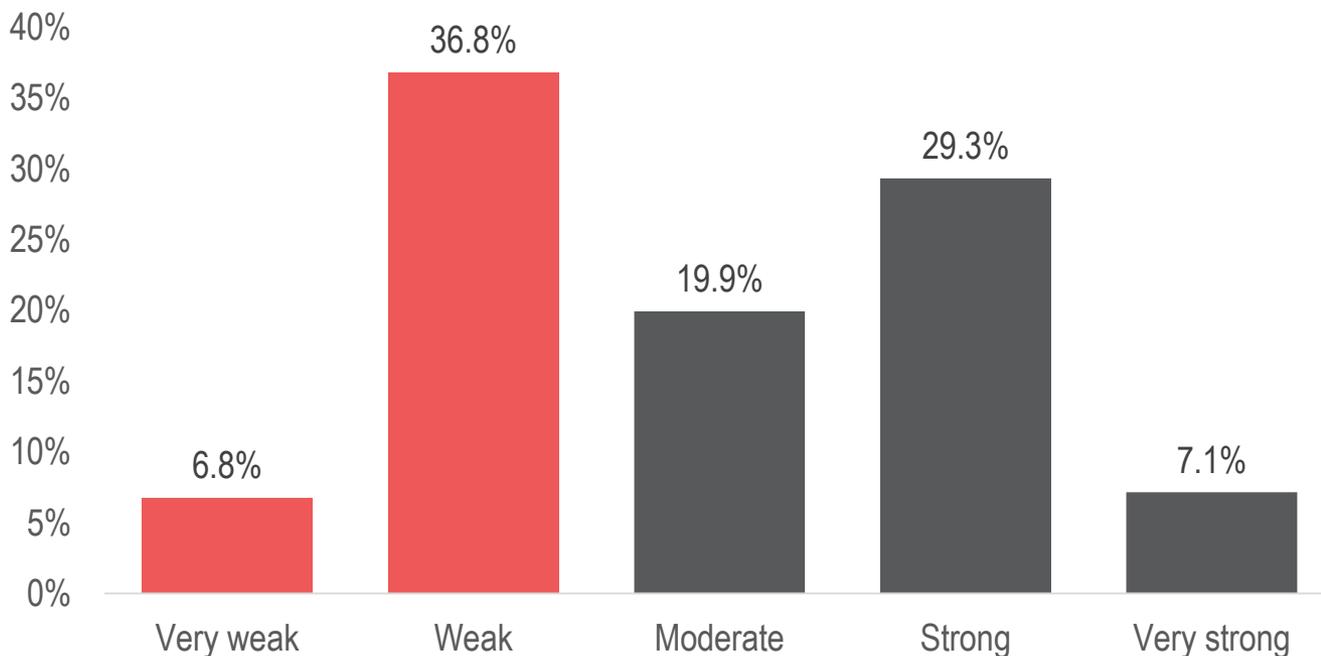


# SHELTER REPAIRS

# Capacity to make shelter repairs

- **Of the families who reported their shelter is unsuitable for winter, 43.6% rated their capacity to make winterisation repairs as very weak or weak, compared with 36.4% of respondents rating this capacity as strong or very strong.**

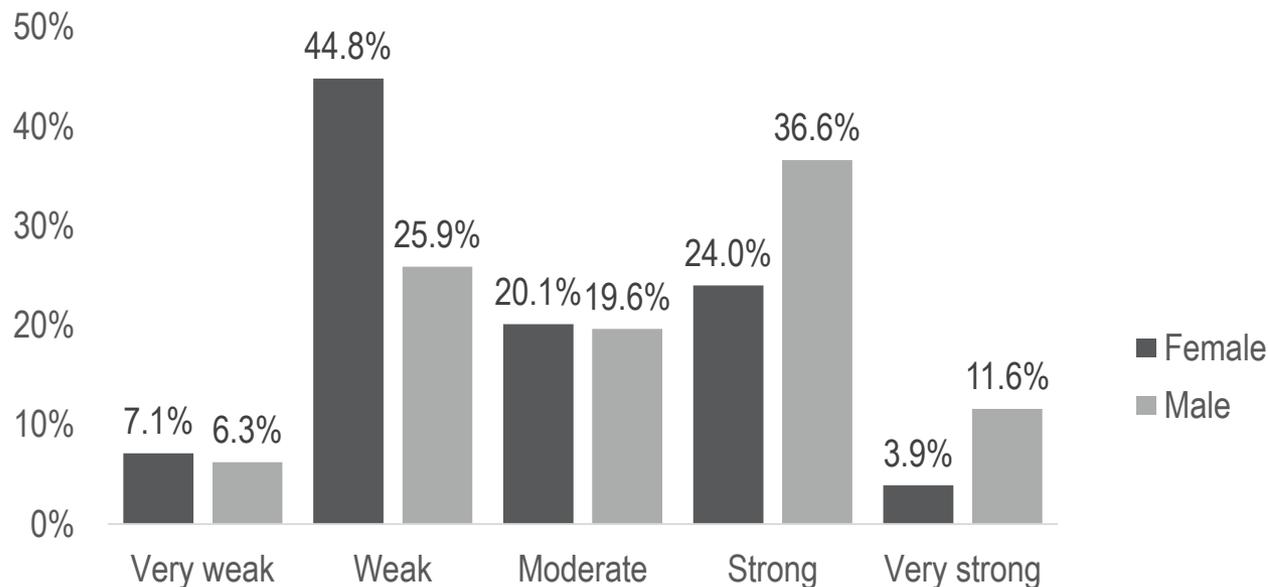
Families' perceived ability to make shelter repairs



# Capacity to make shelter repairs, by sex

- Of the families who reported their shelter is unsuitable for winter, **51.9% of female respondents rated their families' capacity to make repairs as weak or very weak**, compared with 32.1% of male respondents.

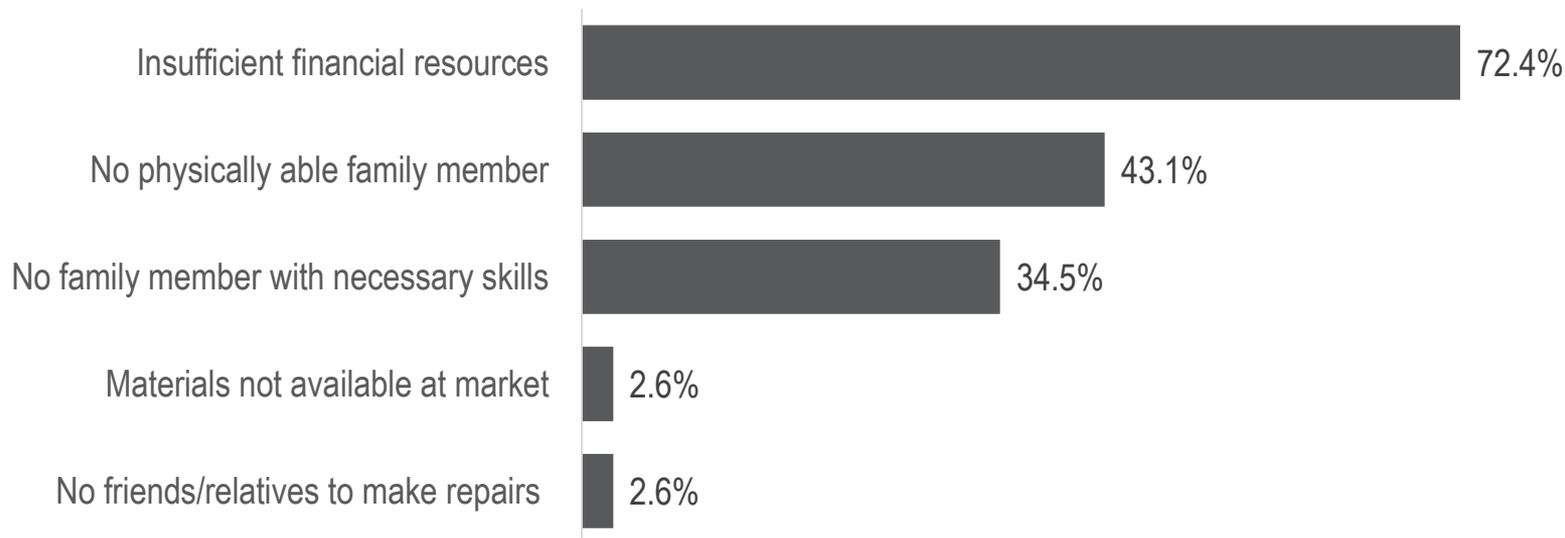
Families' perceived ability to make shelter repairs, disaggregated by respondents' sex



# Reasons for not making repairs

- Of those families who reported that their capacity to make shelter repairs is weak or very weak, **72.4% cited a lack of financial resources to purchase necessary materials** as a reason for not being able to make the needed repairs.
- 43.1% of families reported not having a physically able family member to undertake shelter repairs. KI discussions clarified that those considered physically unable to perform repairs include elderly family members, males injured in the conflict, children, or women.

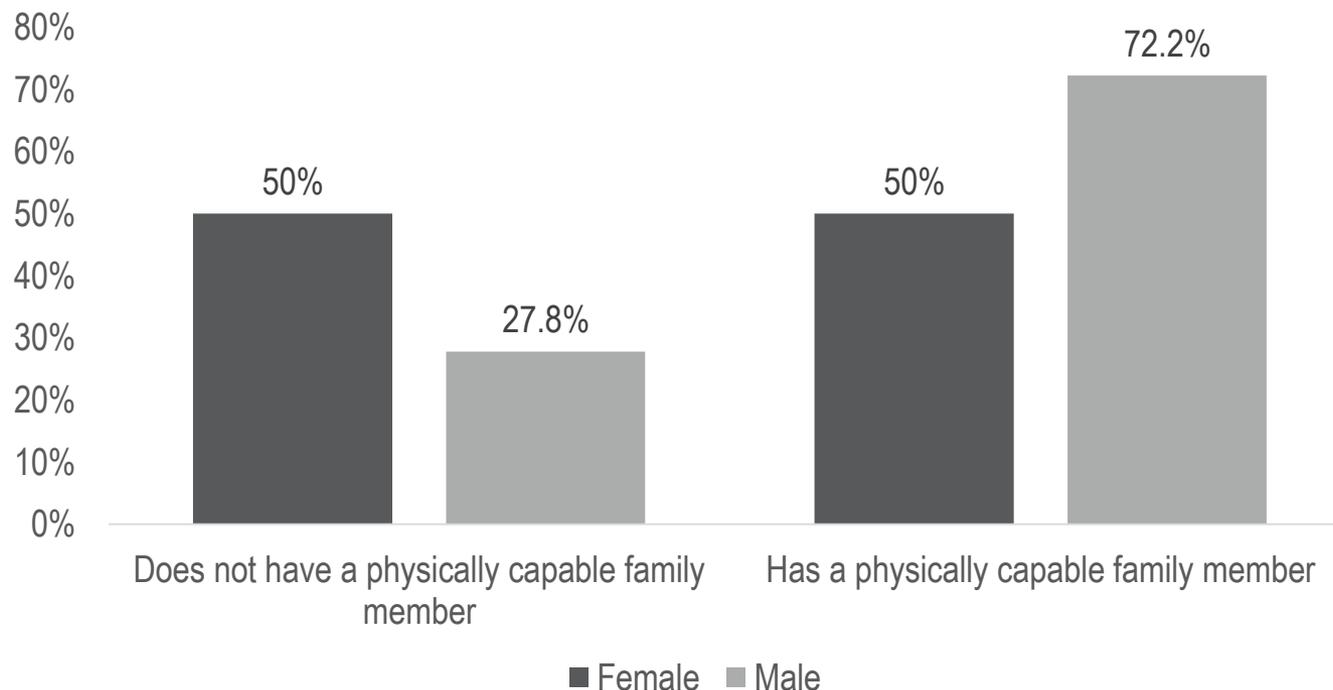
Reasons for not being able to make shelter repairs



# No physically capable family member, by sex

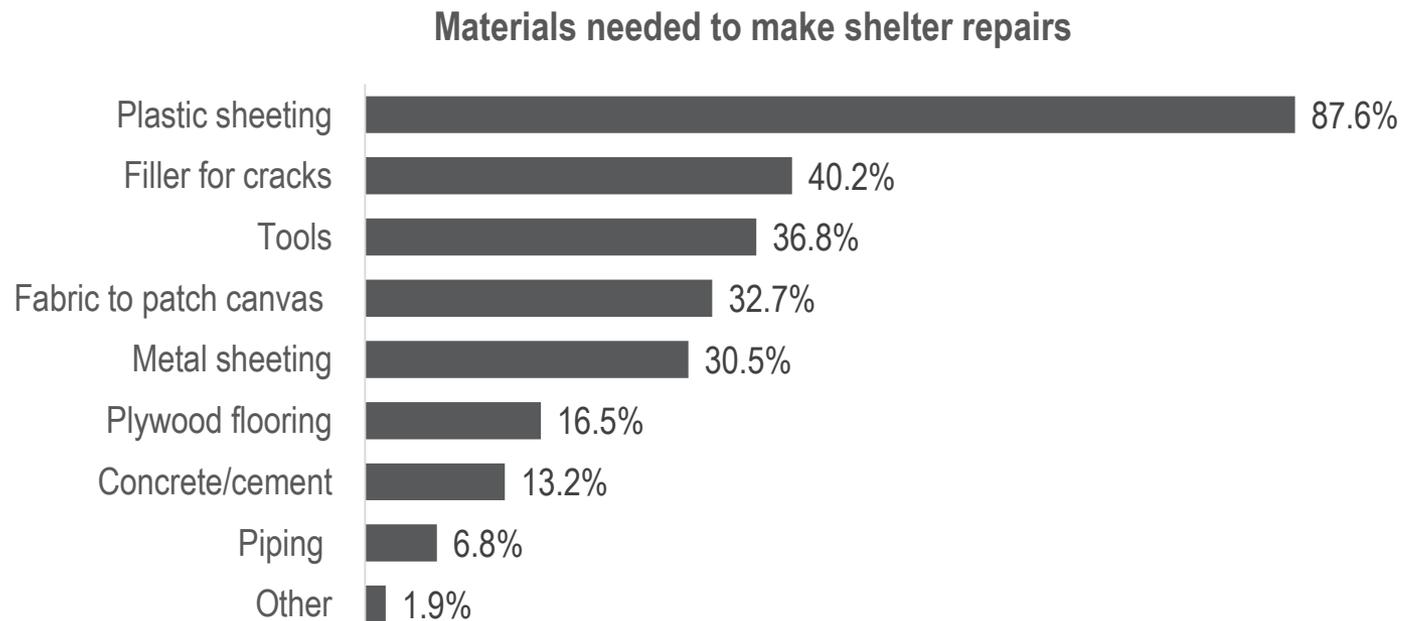
- **50% of female respondents cited no physically able family member** as a reason for having weak or very weak capacity to make shelter repairs, compared to only 27.8% of male respondents.

Respondents citing no physically able family member as a reason for having weak or very weak capacity to make shelter repairs, by sex



# Materials needed to make repairs

- Of those families who reported that their shelters are unsuitable for winter, **87.6% cited plastic sheeting as an item needed** to make shelter repairs themselves. 40.2% reported filler for cracks and 36.8% reported tools as needed items.
- These findings are in line with those citing that a majority of families found their shelters unsuitable due to a leaking roof, as plastic sheeting is typically used to prevent water from entering the shelter through roof leakage.



# Shelter materials: Informal market preparation for winters

- KIs reported the following items are **currently in stock** in their shops:
  - Electricity wires, wire covers, and switches
  - Plastic sheets, caravan panels, and metal sheets
  - Screws, drilling tools, and other maintenance tools
  - Foam and silicon
  - Pipes and hoses
- The majority of KIs noted that the stocks **of all of the above items will be increased** during the winter months. KIs highlighted plastic sheets as the most common item that camp residents request more of during the winter.
- Like with other NFIs, KIs noted that the primary barrier to stocking shelter repair materials is the **challenges faced bringing goods into the camp due to legal restrictions.**

A young boy with short dark hair is smiling and standing in front of a white tent. He is wearing a black and white striped turtleneck with "The LONG RIDER" printed on it, dark pants, and blue sneakers. The tent is set up on a dirt ground next to a building with corrugated metal walls. A red banner is overlaid on the image with the text "SUMMARY AND RECOMMENDATIONS".

# SUMMARY AND RECOMMENDATIONS

# Summary and recommendations (1)

## Heaters

- 47.8% of families do not possess a heater. Of the 51.9% in possession of a heater:
  - 46.2% report that the heater is not functional
  - 41.7% of respondents with gas heaters (98.1%) do not have a gas cylinder to fill it
- **Recommendation:** Initiatives that assist families with mending their heater, either through the provision of a heater repair kit or through programs that repair heaters, should be instigated.
- **Recommendation:** To discourage families from trading or selling heaters during the spring/ summer period, community mobilization programs that inform families that heaters will not be replaced through distributions in 2016/2017 should be initiated, following winter 2015/2016,

# Summary and recommendations (2)

## Primary needs

- The top 3 NFI needs identified by respondents are heaters (first priority, 71.8%), gas cylinders (second priority, 58.5%), and blankets (third priority, 37.5%).
- 58% and 44.1% of respondents cited not having any as the reason for needing heaters and gas cylinders, respectively. 73.5% cited not having enough for the entire family as the reason for needing blankets.
- **Recommendation:** Gas vouchers should be distributed in tandem with additional heaters to ensure that all families have a gas cylinder for their heater during winter 2015/2016.
- **Recommendation:** Cash and in-kind distributions should consider the need for additional blankets across the camp, by providing families with blankets or resources to buy them.

# Summary and recommendations (3)

## Children's clothing

- 76.3% found their children's clothing inadequate or very inadequate for winter.
- Primary clothing needs are jackets (95.1%), trousers (83.3%), and shoes (60.1%).
- **Recommendation:** To better understand vulnerable demographics in the camp with respect to winter clothing and the outstanding winter clothing needs of children, potential shortages in the planned children's clothing assistance should be identified prior to the onset of winter. In particular, although UNICEF will be distributing 20JD of vouchers to each child in the camp, for adolescents this may not be sufficient to cover all winter clothing needs, due to the higher prices of adolescent clothing.
- Additionally, clothing assistance should be distributed in accordance with Sphere minimum standards, i.e. ensuring children possess at least two full sets of clothing in the correct size that are appropriate to the culture, season, and climate.

# Summary and recommendations (4)

## Shelter suitability

- 68.4% living in caravans do not consider them suitable for winter 2015/2016, compared with 51.8% living in a combined caravan and tent shelter.
- 95.5% of families who consider their shelter unsuitable for winter cited a leaking roof to be a reason for why.
- **Recommendation:** Initiatives that aim to strengthen the resilience of shelters should be incorporated into the winter 2015/2016 humanitarian response in Za'atari camp, with particular attention to preventing rain and snow leakage from the roof.

# Summary and recommendations (5)

## Shelter repairs

- 43.6% rated their family's ability to make winterisation repairs to their shelter as very weak or weak, compared with 36.4% rating this ability as strong or very strong.
- 72.4% reported not having the financial means to purchase materials as a reason for being unable to repair their family's shelter, whilst 43.1% reported that they did not have a physically able family member and 34.5% did not have family member with the necessary skills to make repairs
- **Recommendation:** Shelter maintenance assistance should prioritise the provision of either in-kind distributions of plastic sheeting, screws, and screwdrivers, or cash assistance of an adequate quantity to purchase these materials, and ensure the availability of such items in the markets in the camp
- **Recommendation:** A support scheme should be initiated, which provides families who would like to make repairs to their shelter but do not have a relative available that is either physically able to make repairs or has the needed skills to make repairs, with persons to help repair their shelter. Such assistance could come from groups of youth volunteers in the camp

# Thank you

**For further information regarding the winterisation assessment in Za'atari Camp,  
please contact:**

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