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# Emergency Appeal Operations Update

## Malawi: Floods

 International Federation  
of Red Cross and Red Crescent Societies

<b>Emergency appeal n° MDRMW011</b>	<b>GLIDE n° <a href="#">FL-2015-000006-MWI</a></b>
<b>Operations update n° 2, 24 February 2015</b>	<b>Timeframe covered by this update: 15 days</b>
<b>Emergency Appeal operation start date:</b> 22 January, 2015	<b>Timeframe: 9 months (End date: 21 October, 2015)</b>
<b>Appeal budget:</b> CHF 2,639,620	<b>Appeal coverage: 46%</b>
<b>Disaster Relief Emergency Fund (DREF) allocated: CHF 274,000</b>	
<b>N° of people being assisted: 42,130 people (7,660 households)</b>	
<b>Host National Society(ies) presence (n° of volunteers, staff, branches): 17 Staff and 250 volunteers</b>	
<b>Red Cross Red Crescent Movement partners actively involved in the operation:</b> Swiss Red Cross, Danish Red Cross, Netherlands Red Cross, Belgian Red Cross, Finnish Red Cross, Italian Red Cross and Icelandic Red Cross.	
<b>Other partner organizations actively involved in the operation:</b> UNICEF, UNDP, WFP, UNFPA, UNOCHA, IOM, World Vision, Goal Malawi, MSF, Shelter-box, IMC, AMRA, CARE, SC, Oxfam and Water Missions.	

### Appeal History:

- This [Emergency Appeal](#) was launched on 22 January for CHF 2,639,620 for 9 months to support Malawi Red Cross Society (MRCS) provide assistance to 42,130 people (7,660 households) affected by floods.
- Disaster Relief Emergency Fund (DREF): CHF 274,000 was initially allocated from the Federation's DREF to support the national society to start up the operations by meeting immediate needs of affected people.
- [Operation Update no. 1](#) was issued on 9 February to give progress on the operation.
- This update provides information regarding the first 30 days of the operation since the launch and announces an appeal revision in the coming days.
- IFRC, on behalf of MRCS would like to thank the Czech government, Netherlands Red Cross (from the Netherlands government), Italian government bilateral emergency fund, American Red Cross, British Red Cross, Finnish Red Cross and Swiss Red Cross for their contribution towards this Appeal.

### Summary:

Following the heavy rains experienced since January, massive flooding was reported in the Southern districts of Malawi, as a result of the rivers Shire and Ruo bursting their banks. The flooding is reported to have affected 15 districts (out of 28 districts) and included Nsanje, Chikwawa, Blantyre, Phalombe, Mulanje, Zomba, Machinga, Chiladzulu, Thyolo, Mangochi, Salima, Karonga, Balaka, Rumphu and Lilongwe. After a comprehensive situation assessment by the UNDAC team in all 15 affected districts, the numbers reported were as follows: 1.15 million people affected altogether (as at 20 February 2015), with 153 dead, 172 people reported to be missing, 645 sustained injuries, and an estimated 336,000 people displaced. Of these, Nsanje district is worst affected with about 74,000 people displaced, Chikwawa has approximately 35,000 displaced, and Phalombe has about 50,000 displaced. Majority of the displaced are living in camps for internally displaced people (IDP) with an estimated 30% living with host families at least some of the time. Of the other districts, Zomba and Blantyre were also severely affected. It is believed that numbers are still inaccurate (somewhat inflated) mainly due to double registrations and the hosting populations also registering as displaced rather than affected (by hosting the displaced). Current figures indicate that up to 230,000 people are still taking refuge – whether permanently or just at certain times – in sites, with an estimated 106,000 more in host families.

In the third week of February, two assessments were commissioned - the Post Disaster Needs Assessment (PDNA) and an assessment to support in development of Damage Tracking Matrix (DTM). The reports of the two

assessments are expected to be shared by the end of first week of March. The emergency shelter design has been completed and is being shared with the shelter cluster for possible adoption.

## The Situation

The floods that hit the southern districts of Malawi are being described as the worst to have hit the country in two generations, and are reported to have occurred at a time that they were least expected. The flood waters are reported to have risen to levels of over 4m across most of the lower Shire and Ruo valleys, and caused widespread destruction of homes, farmlands, infrastructure including roads and disrupted livelihoods of hundreds of thousands of people.

The Government of Malawi (Department of Disaster Management Affairs or DoDMA, line ministries & District Commissioners' offices) in collaboration with the Red Cross and UN agencies (UNDP, UNICEF, UNFPA, and WFP) conducted the initial rapid assessment early January, while the flood waters were still rising. The assessment aimed at identifying the immediate needs of the people affected by the floods as well as immediate extent of the damage. The assessment indicated that houses had collapsed, some completely and some partially; livestock had drowned, crops has been washed away; crop fields submerged; some parts of road networks had been washed away in some affected districts resulting in inaccessibility to health facilities, schools and other public services. It is difficult to quantify the economic losses accruing from the floods.

The initial rapid assessments were followed by a more in-depth assessment by the UNDAC teams (assessed 40 out of 104 camps) in four districts (Chikwawa, Zomba, Phalombe and Nsanje) between January and February 2015. Livelihood disruption and hectares of farmland destroyed in three districts is shown in the table below

**Table 1: A summary of livelihoods and farmlands destroyed by floods**

<i>District</i>	<i>% of livelihoods disrupted</i>	<i>District</i>	<i>Estimated Hectares destroyed</i>
Chikwawa	90	Chikwawa	4,300
Nsanje	90	Nsanje	1,500
Phalombe	70	Phalombe	8,550

Source: Adapted from the UNDAC Assessment Report

On water and sanitation, access to WASH remained low in many areas and varied from camp to camp. As most sites being used were not designed to accommodate the large number of persons occupying these areas at the time of the assessment, sanitation facilities remained largely inadequate. Access to clean water was poor in Phalombe and Nsanje. 90% of the sites visited in Phalombe did not have access to clean water, while the majority of sites in Nsanje had insufficient access to water. There was evidence and reports of open defecation at some of the sites while most sites visited did not have washing facilities

On access to health, some health facilities were reported to have been destroyed by the floods in Nsanje, making access to health services difficult. Given the poor sanitation conditions in the sites, the overcrowding of some of the sites and the stagnation of water near the sites, there is a significant risk of disease outbreak such as cholera and malaria. In all the displacement sites visited, there were pregnant and lactating women present.

## Coordination and partnerships

- The Malawi Red Cross Society is the lead agency and has the lead role for this operation, with the International Federation and several in-country Participating National Societies providing support.
- The PNS in country – notably the Danish RC, Netherlands RC, Finnish RC, Swiss RC and others, will provide technical and financial assistance to the operation, either multi-laterally through the Appeal, or bilaterally as an extension of their ongoing activities
- MRCS continues to co-chair the Shelter & Camp Management cluster with the Ministry of Lands and Housing at the national and district levels.

- MRCS has received timber for construction of emergency shelter from the International Organisation for Migration (IOM). This support is likely to continue beyond the emergency shelter (into transition shelter).
- MRCS is participating in cluster coordination for Health, Water Sanitation and Hygiene (chaired by respective technical ministries) and shelter and camp management (as co-chair).
- MRCS is working with local media houses to give visibility to its humanitarian work in the affected districts.
- The Malawi Defence Forces (MDF) have been providing logistical support to the MRCS to move the relief items to the field especially in areas with difficult terrain. The MDF has also agreed to provide logistics support towards moving the bottled water from WFP compound.

## Operational implementation

### Shelter and Relief

The MRCS planned the distribution of relief items in areas that are accessible by road as well as in areas that so far remain inaccessible (mainly in Nsanje East Bank). The inaccessible areas continue to present logistical challenges as the relief items require airlifting. During the time that the distributions had been planned for the inaccessible areas, only one of the three cargo helicopters airlifting cargo was available, and this forced the distributions to be postponed multiple times, despite the fact that two of the areas have large populations (Mchacha James has 2,148 households and Chigwamagumu has 1,210 households).

Besides the accessibility challenges in the cut off areas, the poor conditions of roads in the rural areas poses a challenge as trucks carrying relief items get stuck for hours, sometimes delaying the distribution activities and forcing distribution teams to stay overnight in the field. The MRCS has continued to get logistical support from the Malawi Defence Forces, although the carrying capacity of their trucks is limited to four (4) Metric Tonnes. In addition, discrepancies between the distribution lists that MRCS is using to plan the distributions, and the lists in the camps (with camp leaders), requires harmonisation. Therefore, a verification exercise has to be conducted prior to the distribution.

**Table 2: A Summary of Relief Distribution in IDP Camp 5 to 24 February 2015**

Blantyre Camps							
SITE/CAMP	Number of HH	Tarpaulin	Shelter tool kit	Mosquito net x 2	Blankets	Kitchen sets	Jerry cans
Bangwe CCAP	49	98	25	98	98	49	49
Bangwe Mosque	27	54	14	54	54	27	27
Mbayani school	62	124	31	124	124	62	62
Makhetha	9	18	5	18	18	9	9
Mitsidi	90	180	45	180	180	90	90
Namisu	235	470	118	470	470	135	235
Mudi	212	424	106	424	424	115	212
Chimwankhunda	56	112	28	112	112	56	56
Mzamba	196	392	98	392	392	196	196
<b>Total</b>	<b>936</b>	<b>1872</b>	<b>470</b>	<b>1872</b>	<b>1872</b>	<b>739</b>	<b>936</b>
Distributions in Chikwawa							
SITE/CAMP	Number of HH	Tarpaulin	Shelter tool kit	Mosquito net	Blankets hh	Kitchen sets	Jerry cans
Bodza	140	280	70	280	280	140	140
Livunzu	160	320	80	320	320	160	160
Savala	511	1022	256	1022	1022	511	511
<b>Total</b>	<b>811</b>	<b>1622</b>	<b>406</b>	<b>1622</b>	<b>1622</b>	<b>811</b>	<b>811</b>

Distributions in Phalombe							
SITE/CAMP	Number of HH	Tarpaulin	Shelter tool kit	Mosquito net	Blankets	Kitchen sets	Jerry cans
Chazinga	151	302	76	302	302	151	151
Mpambachulu	20	40	10	40	40	20	20
<b>Total</b>	<b>171</b>	<b>342</b>	<b>86</b>	<b>342</b>	<b>342</b>	<b>171</b>	<b>171</b>
Distributions in Nsanje							
SITE/CAMP	Number of HH	Tarpaulin	Shelter tool kit	Mosquito net	Blankets	Kitchen sets	Jerry cans
Makhanga (inaccessible and required airlifting of supplies)	309	618	309	618	618	309	618
Magoti	490	980	490	980	980	490	980
<b>Total</b>	<b>799</b>	<b>1598</b>	<b>799</b>	<b>1598</b>	<b>1598</b>	<b>799</b>	<b>1,598</b>

Source: MRCS

The MRCS is responsible for the provision of shelter in some the camps in the districts of Blantyre, Phalombe, Chikwawa and Nsanje. As part of the preparation to the shelter operation, MRCS planned to conduct a number of activities which include:-

#### Developing a suitable shelter design

The development was supported by a FACT shelter delegate and began with reviewing of different shelter designs which have been tried elsewhere during this type of response. The first design was then developed which formed the basis of discussions on possible improvement to meet the Malawi standard. The design was shared with MRCS staff and key stakeholders at different levels for approval. The shelter design has since been shared with the shelter cluster for adoption by other shelter agencies. The design is annexed to this update.

#### Identify volunteers to be trained in temporary shelter construction

Upon the approval by MRCS and the government (Ministry of Lands and Housing), a process of volunteer identification was done in the four target districts. Based on a pre-developed selection criteria, the emphasis was on those volunteers who had skills in carpentry and some building construction experience. Each of the selected identified their own volunteers to assist depending on the number of people that required support in different locations.

#### Training of volunteers in temporary shelter construction

The training started by having a training of trainers (ToT) workshop. Four participants were identified and trained in Blantyre. These trainers were then used to train volunteers from the four districts. The table below shows number of volunteers trained as at 22 February 2015

**Table 3: A table showing the volunteers trained per district on shelter construction**

District	No of Volunteers trained
Blantyre	20
Phalombe	62
Chikwawa	0 (Scheduled for the last week of February)
Nsanje	42

### Rolling out shelter construction

Following a series of meetings which have been taking place as indicated above, a plan to roll out the temporary shelter construction exercise was developed. The roll out started at Magoti camp (Nsanje District). This will be followed by the camps in Chikwawa and other camps in Nsanje. The rollout has so far been successful and progressing smoothly as planned. The beneficiaries like the structure and they feel it is a better structure to support their living during the emergency phase. However, they feel that the tarpaulins might be very hot to be used in some areas such as Nsanje and Chikwawa (these are low altitude areas ranging between 40 and 100 metres above sea level). The design and beneficiary satisfaction with the structure will be reviewed and adjustments made where necessary.



Emergency Shelter constructed in Magoti camp. Photo: MRCS

To support the roll out, local procurement of poles has been going on and suitable suppliers identified with capacity to supply 1,500 poles per week. Therefore the 5,300 poles required will be supplied in less than 3 weeks. In addition, the International Organisation for Migration has supplied 1,000 timber pieces (each measuring 6 metres in length and 3 inches by 2 inches).

### Updates on the Health Cluster

Following the increasing risk of outbreak of diarrhoeal diseases, preparedness measures have begun with activation of a team of volunteers previously trained in Epidemic Control and Surveillance. Twelve volunteers were deployed to camps in the west bank in Nsanje district to carry out hygiene promotion campaigns. The camps included Marka, Nyachilenda, Bitilinyu, Mchere, Mota Egul and Bangula. This area was considered at highest risk of cholera outbreak following confirmation of cases in Mozambique and the constant movement of people between the two countries. In the third week of February, cases were reported at Nkhaze health centre, with one death. In the days that followed, the number of suspected cases increased to reach 25 cases with 2 deaths (case fatality proportion=7.4%) in Nsanje and 5 suspected cases in Mwanza district (no death reported). Five cholera kits were mobilised from the IFRC regional offices in Botswana and will be used in setting up oral rehydration points in the IDP camps. Training of additional volunteers is also scheduled to take place. The volunteers will be trained and deployed to camps in the neighbouring Chikwawa district as well as other camps in Nsanje. Once the training is completed, the volunteers will intensify hygiene promotional activities in the camps, support in tracing patients' contacts, and support the running of the Oral Rehydration Points. The kits will be distributed as follows: 2 in Nsanje, 1 in Chikwawa, 1 in Phalombe and 1 in Blantyre districts and emergency cases in Mwanza district, with the possibility of MRCS working with MOH.



Desludging of latrines in Blantyre. Photo: MRCS

The MRCS received 500,000 male condoms and 1000 female condoms that will be distributed in the IDP camps, and 1,000 Uni-gold HIV testing kits (as unsolicited donation, all from Banja La Mtosngolo, a local non-governmental organisation). Plans for the distribution of condoms are underway, while the HIV testing kits will be donated to the health centres serving the displaced population. On the distribution of the Long Lasting Insecticide Treated Nets (LLINs) the Ministry of Health has issued a guidance note requiring targets at individual level in each household. The challenge with this is that resources are available for two LLINs per household (in addition to the two LLINs

that are part of the standard NFIs. The space in the emergency shelter is inadequate to allow for nets for each individual in every household to hang his/her net.

### Water, Sanitation and Hygiene Cluster

Carlsberg, a local brewing company donated bottled water (24,000 two litre bottles and 524, 20 litre bottles) to be distributed to the IDPs. However, no logistical support was provided. The water was delivered to Blantyre, and obtained temporary storage at the World Food Programme's vehicle service bay.

The construction of temporary, semi-permanent and permanent latrines in schools in Phalombe district is ongoing. In Blantyre, the desludging of 40 latrines in schools and churches used as IDP centres was completed in the third week of February. This led to some level of improvement of hygiene and sanitation in these facilities. In the camps in Nsanje, Phalombe and Chikwawa, access to sanitation facilities is still below the recommended SPHERE standards. High water table presents a challenge as to the depth to which pits can be excavated. The saturated soils also presents risks of collapse. Utilisation of these latrines was also hampered by high water as camp residents described them as not user friendly as water splashes back during use. As a result there were significant incidences of open defecation in the surrounding areas of the camps. The Community-Led Total Sanitation (CLTS) approach is being considered to be rolled out to address the problem of open defecation. The WASH team is setting up a system for spraying buildings where bed nets are impossible, and a contract has been negotiated with a company to start de-sludging and cleaning some of the many latrines in public buildings which have been vastly over-used in the last few months.



Latrine construction in Magoti camp. Photo: MRCS

In Magoti camp, the team set out to construct latrines in the newly established camp after the IDPs were relocated from local schools to allow learning to resume. The pits were excavated and separate latrines constructed for males and females. The photograph shows the construction work for latrines going on in the camp. The team also constructed bath shelters and a common cooking area in the camp.

The procurement of supplies to support repairs and rehabilitation of boreholes is ongoing, and the team is also assessing and identifying the boreholes to be repaired. The repair work will begin immediately once procurement has been completed and the flood waters have receded.

### Logistics

Many affected communities are still cut-off from the road network while others remain extremely difficult to access by large trucks for delivery of relief items. Distribution plans for relief items have been rolled out with regular weekly distributions to affected households in camps in the most affected districts of Nsanje, Chikwawa, Phalombe and Zomba.

Planned interventions	Implementation (%)
<b>Quality Programming / Areas common to all sectors</b>	
<b>Outcome 1:</b> Continuous and detailed assessment and analysis is used to inform the design and implementation of the operation	<ul style="list-style-type: none"> <li>FACT team completed the assessments, and some of the reports have been submitted. Team awaiting the release of PDNA and DTM assessment reports</li> </ul>
<b>Health and care</b>	
<b>Outcome 2:</b> The immediate risks to the health of affected populations are reduced.	<ul style="list-style-type: none"> <li>Health promotion by volunteers is going on, Outbreak of cholera has been reported (mainly case importations from Mozambique). Local transmission has not yet been confirmed in the camps.</li> </ul>

	<ul style="list-style-type: none"> <li>• 12 volunteers are carrying out hygiene promotion in camps in Nsanje. Training of additional volunteers to begin in the last week of February. The trained volunteers will be deployed to Phalombe, Chikwawa and other parts of Nsanje</li> <li>• 5 cholera kits have been received, and are being deployed to the field to support set up of ORP in camps</li> <li>• Distribution has been planned for 500,000 male condoms received from a local NGO, with an additional 300,000 expected from MoH</li> <li>• Discussions are going on with United Nations Population Fund (UNFPA) on a partnership in which MRCS will support in distribution of dignity kits and condoms; educating and advocating for girls empowerment and sensitizing on violence against girls, promoting safe deliveries and antenatal services and training for volunteers on these aspects.</li> </ul>
<b>Water, sanitation, &amp; hygiene promotion</b>	
<b>Outcome 3:</b> Immediate reduction in risk of waterborne and water related diseases in targeted communities	<ul style="list-style-type: none"> <li>• Desludging of latrines in Blantyre almost completed.</li> <li>• Construction of temporary latrines in Magoti camp ongoing</li> <li>• Procurement for spare parts to support rehabilitation of 20 boreholes on course</li> <li>• Construction of temporary, semi-permanent and permanent latrines going on in schools in Phalombe</li> </ul>
<b>Shelter and settlements</b>	
<b>Outcome 4:</b> The immediate shelter and settlement needs of the target population are met	<ul style="list-style-type: none"> <li>• Training for trainers completed</li> <li>• Training of volunteers to be involved in shelter construction has been completed in Blantyre, Nsanje and Phalombe. Training for Chikwawa volunteers is scheduled for last week of February</li> <li>• Construction of emergency shelter is ongoing in Magoti camp. Scale up in Phalombe and Blantyre to be done upon completion of the process for procuring construction poles.</li> <li>• Relief distributions ongoing, mostly in accessible camps</li> <li>• Discussions are ongoing on the development of transitional shelter design to support early recovery</li> </ul>
<b>Restoring Family Links &amp; Protection</b>	
<b>Outcome 5:</b> Missing individuals are re-united with their families	<ul style="list-style-type: none"> <li>• ICRC RFL Officer has not arrived</li> <li>• Discussions still ongoing on the setting up of the tracing programme in camps</li> </ul>
<b>Food security, nutrition, and livelihoods</b>	
<b>Outcome 6:</b> Basic food and nutrition are met within the most vulnerable households	<ul style="list-style-type: none"> <li>• Procurement has been initiated for the supply of cassava cuttings and sweet potato vines to be distributed to farmers as part of early recovery measures</li> </ul>
<b>National Society capacity building and Disaster Preparedness</b>	
<b>Outcome 7:</b> The emergency response planning is a collaborative effort by the domestic NS leadership and the Federation team	<ul style="list-style-type: none"> <li>• MRCS is fully in charge of the programme</li> <li>• Plans have been included in the revised appeal to strengthen the financial and procurement systems for the national society</li> </ul>

## Contact information

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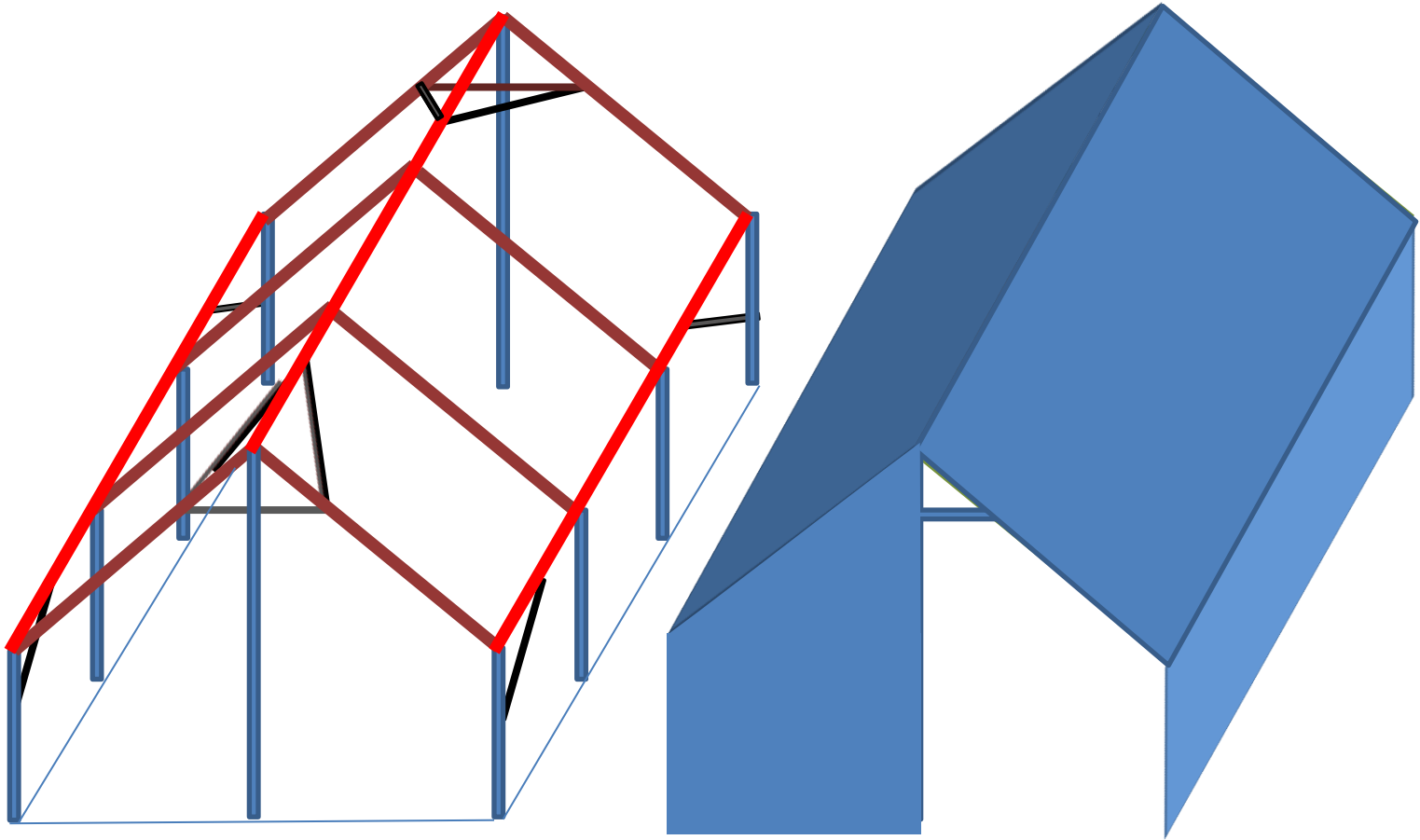
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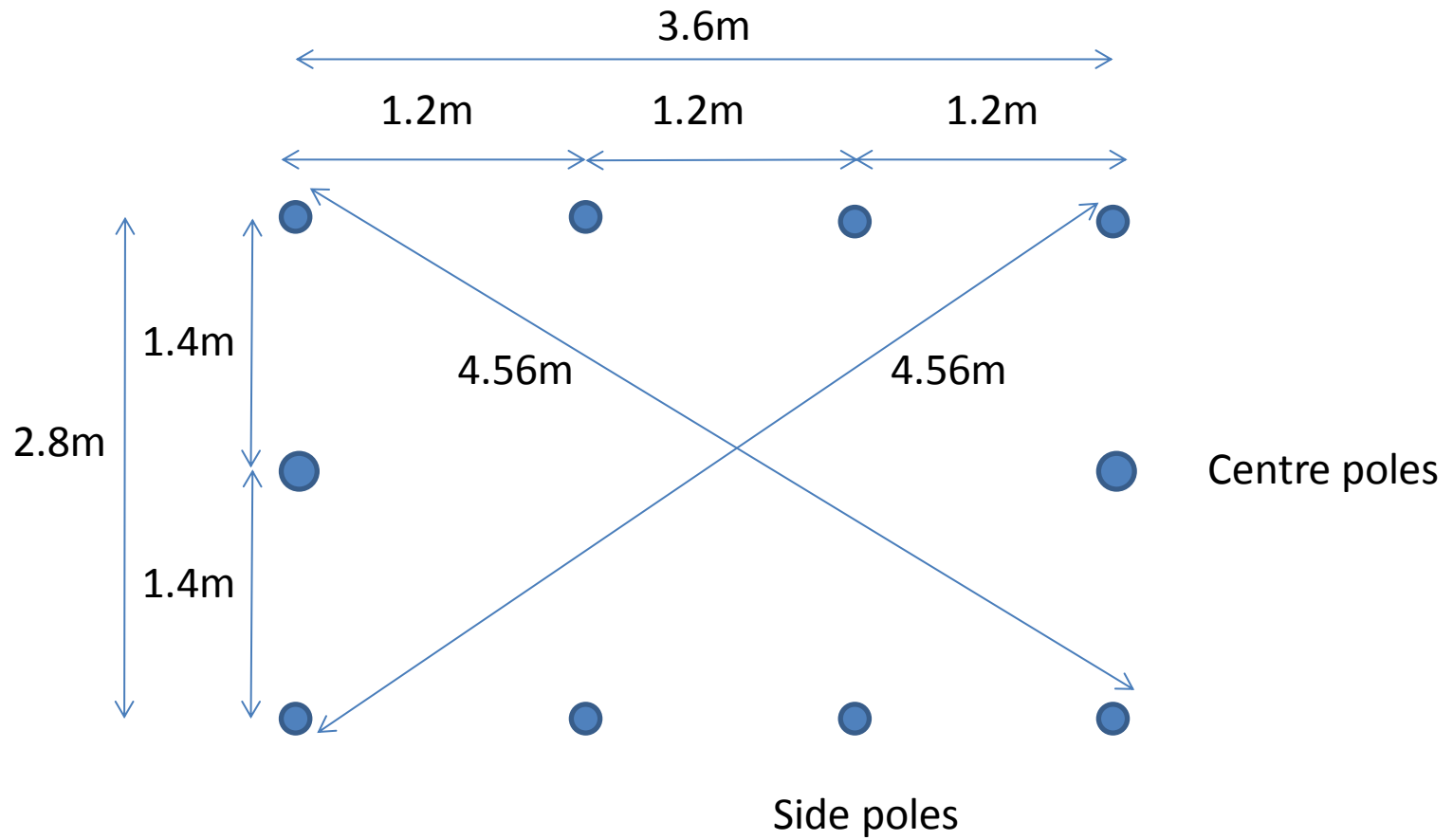
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1. Save lives, protect livelihoods, and strengthen recovery from disaster and crises.
2. Enable healthy and safe living.
3. Promote social inclusion and a culture of non-violence and peace.

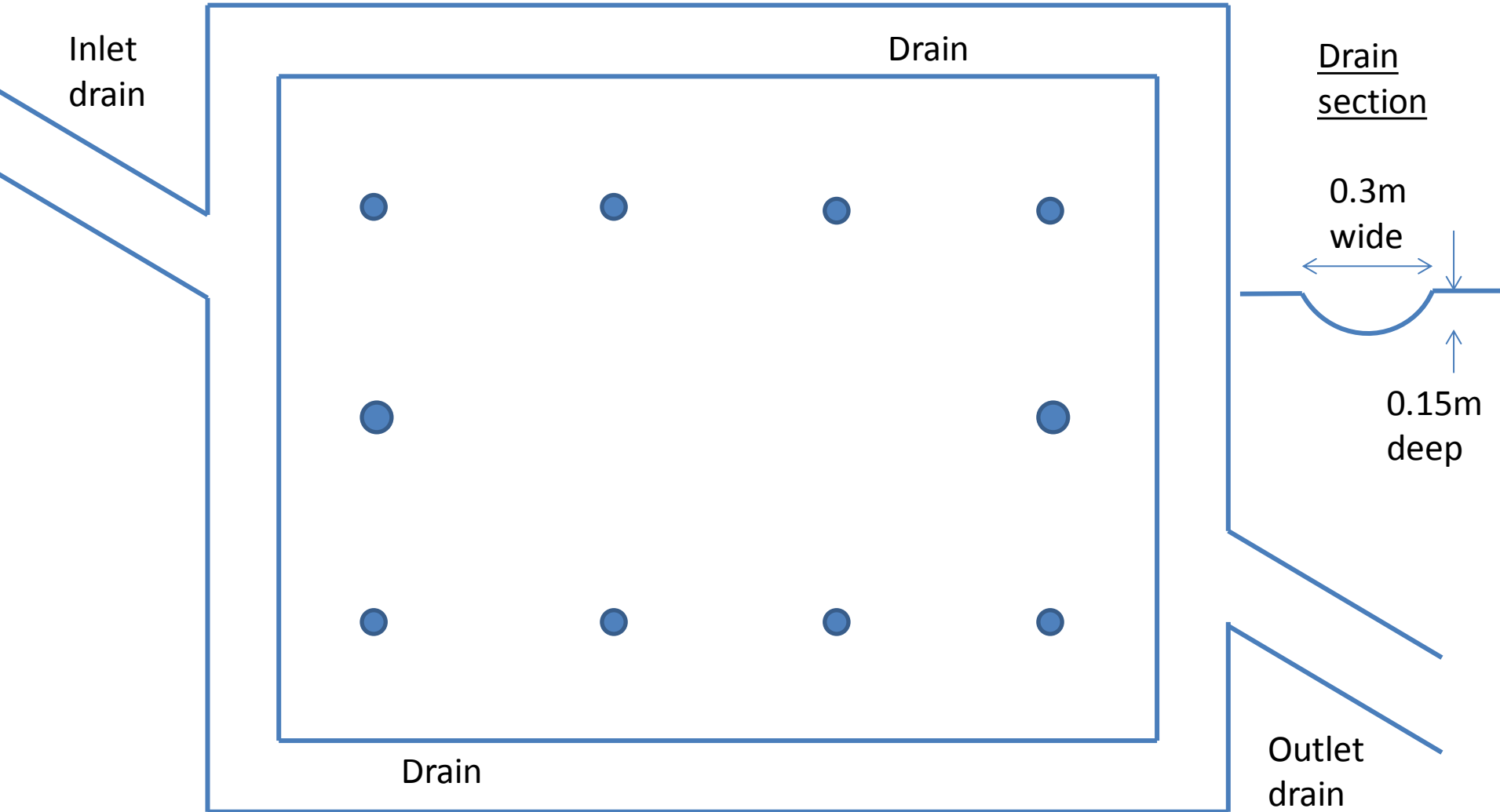
# MALAWI FLOOD SHELTER DESIGN



# MALAWI FLOOD SHELTER DESIGN PLAN

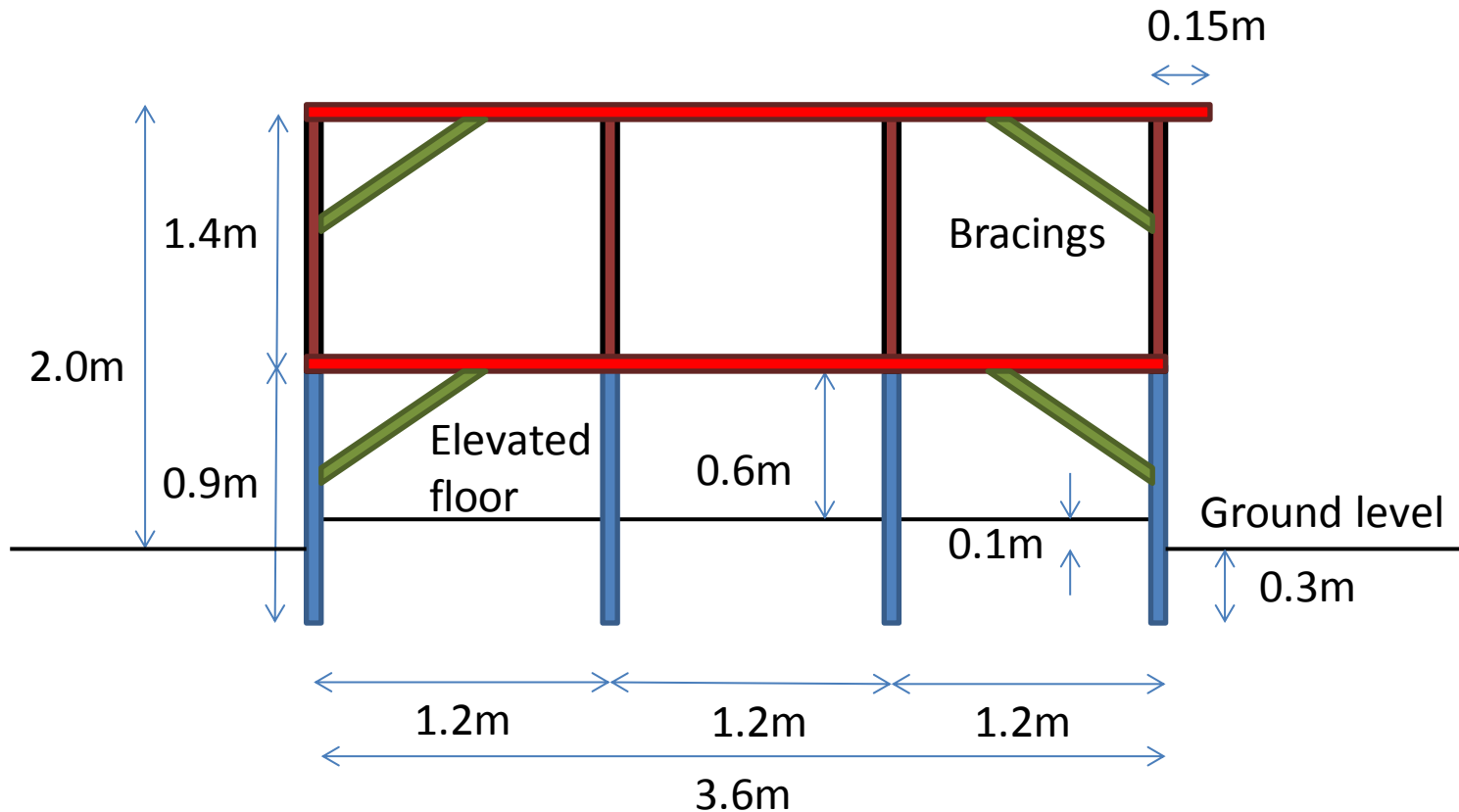


# MALAWI FLOOD SHELTER DESIGN DRAIN PLAN

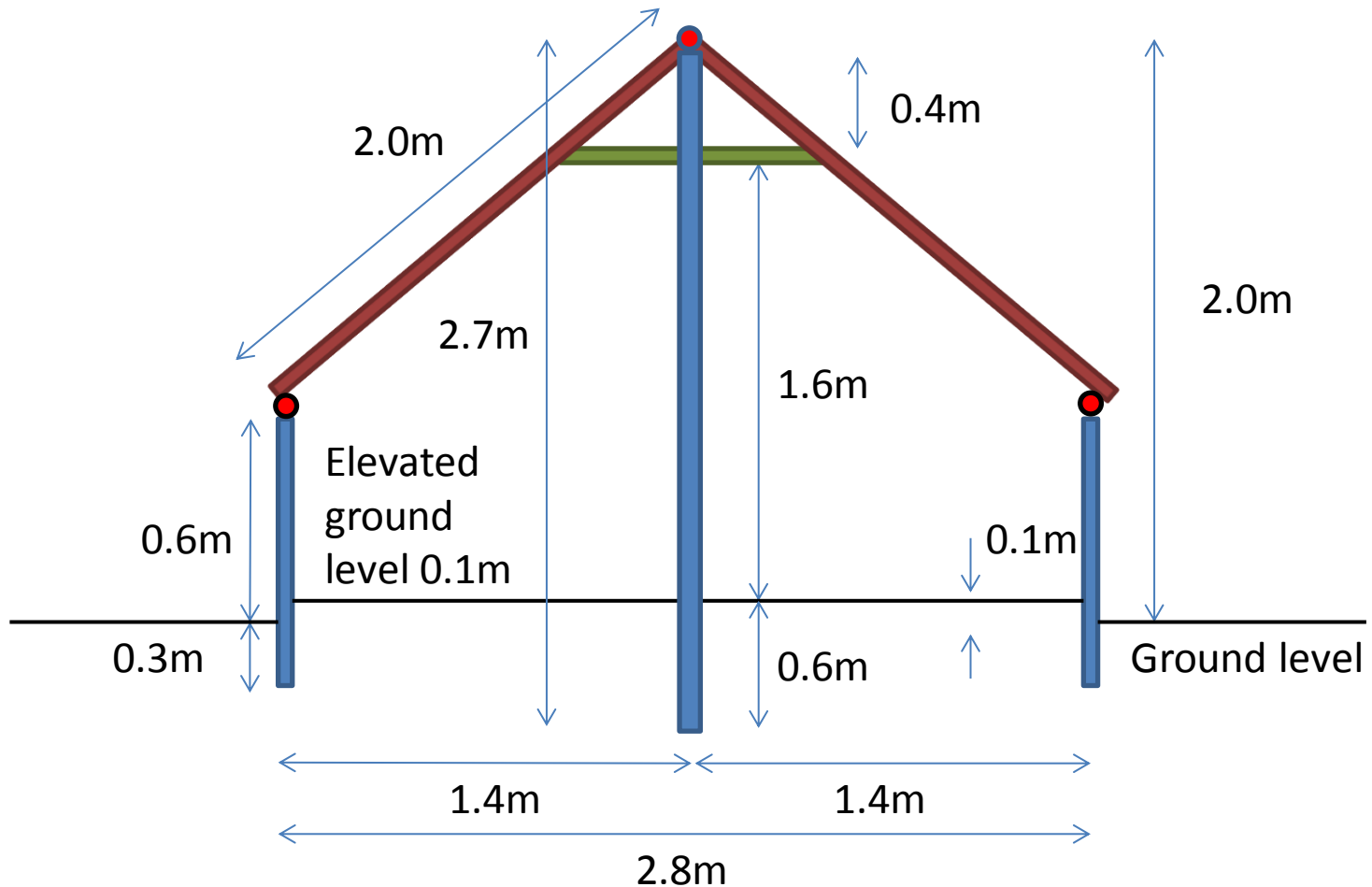


# MALAWI FLOOD SHELTER DESIGN

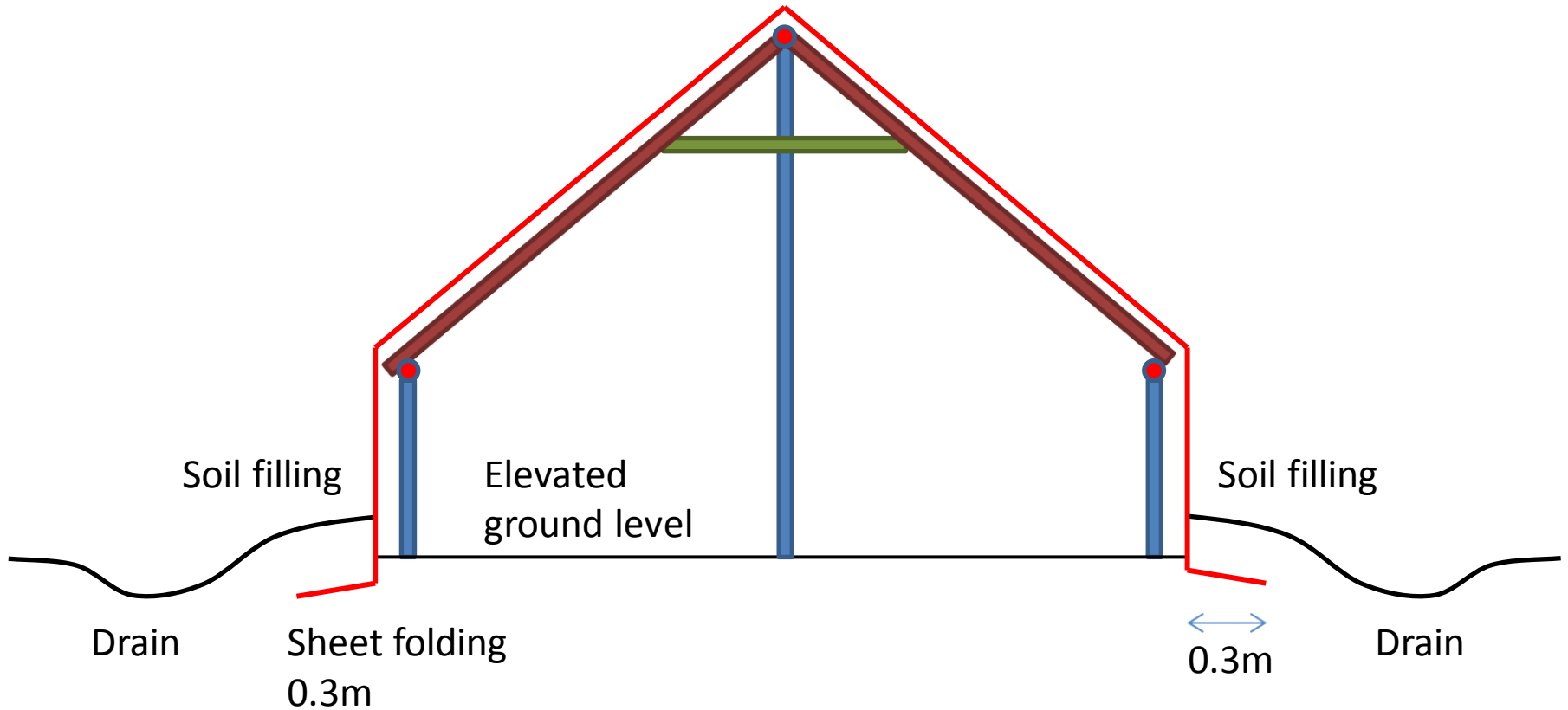
## SIDE ELEVATION



# MALAWI FLOOD SHELTER DESIGN FRONT AND BACK ELEVATIONS

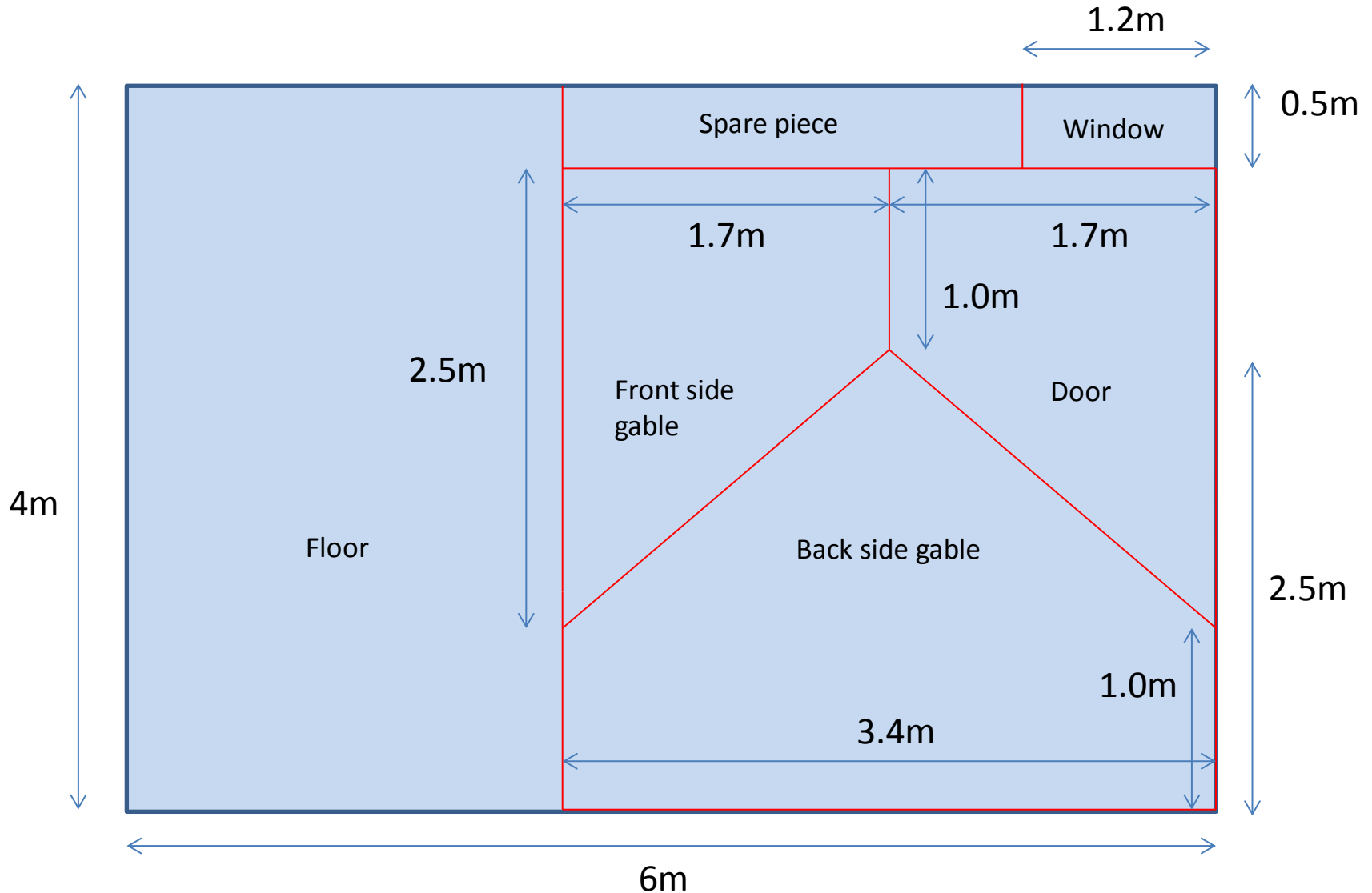


# MALAWI FLOOD SHELTER DESIGN ROOF AND LONG SIDE SHEETING



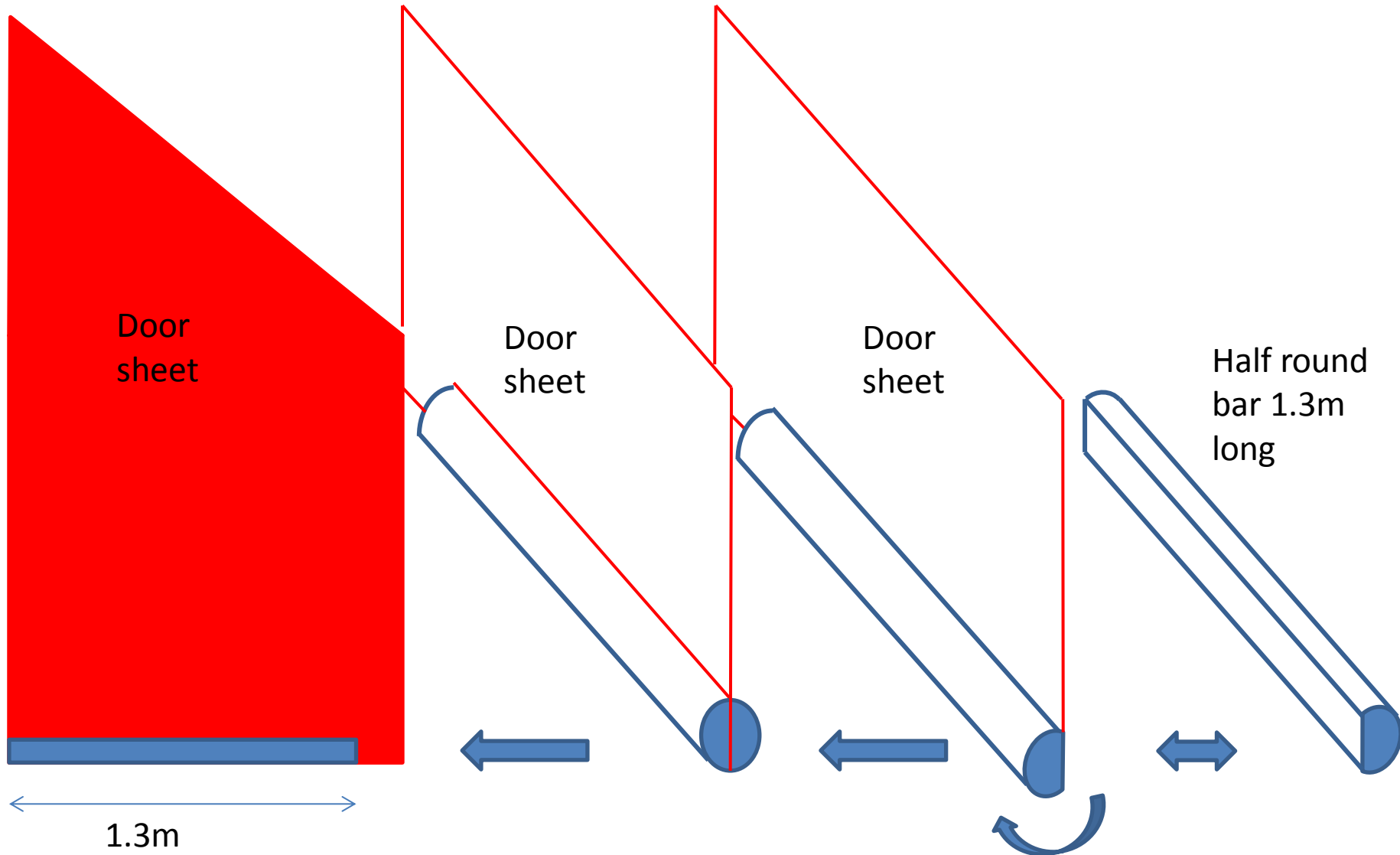
# MALAWI FLOOD SHELTER DESIGN

## TARPAULINE SHEET CUTTING



# MALAWI FLOOD SHELTER DESIGN

## DOOR DESIGN

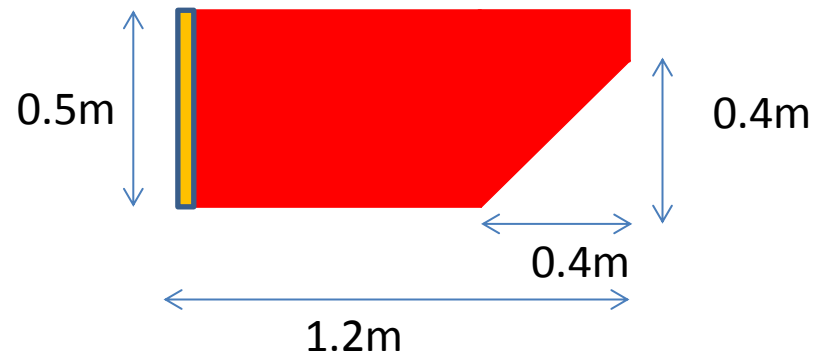
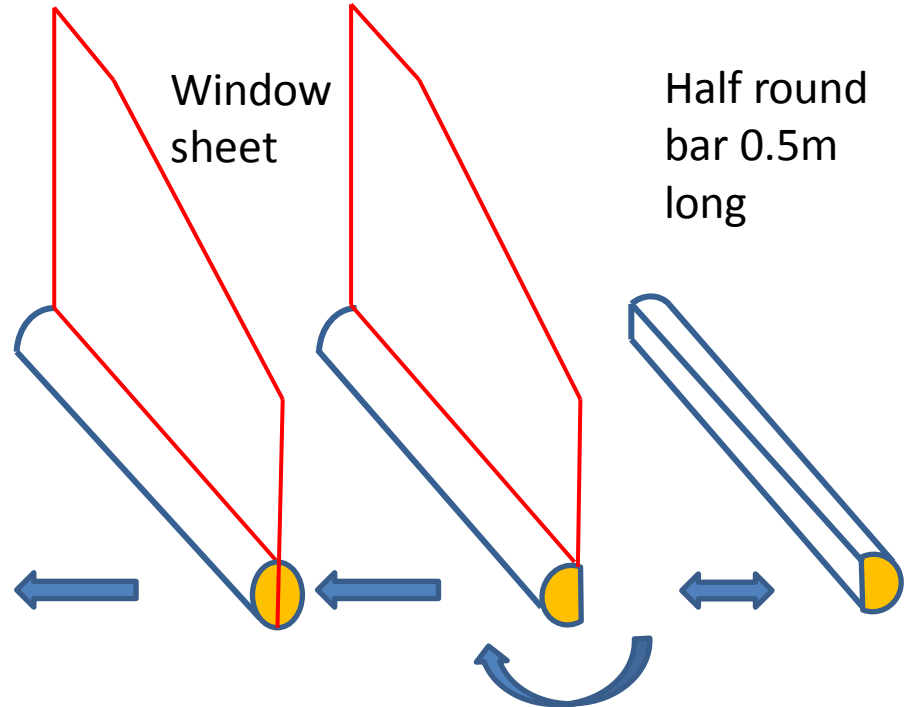
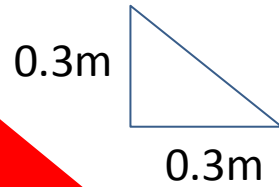
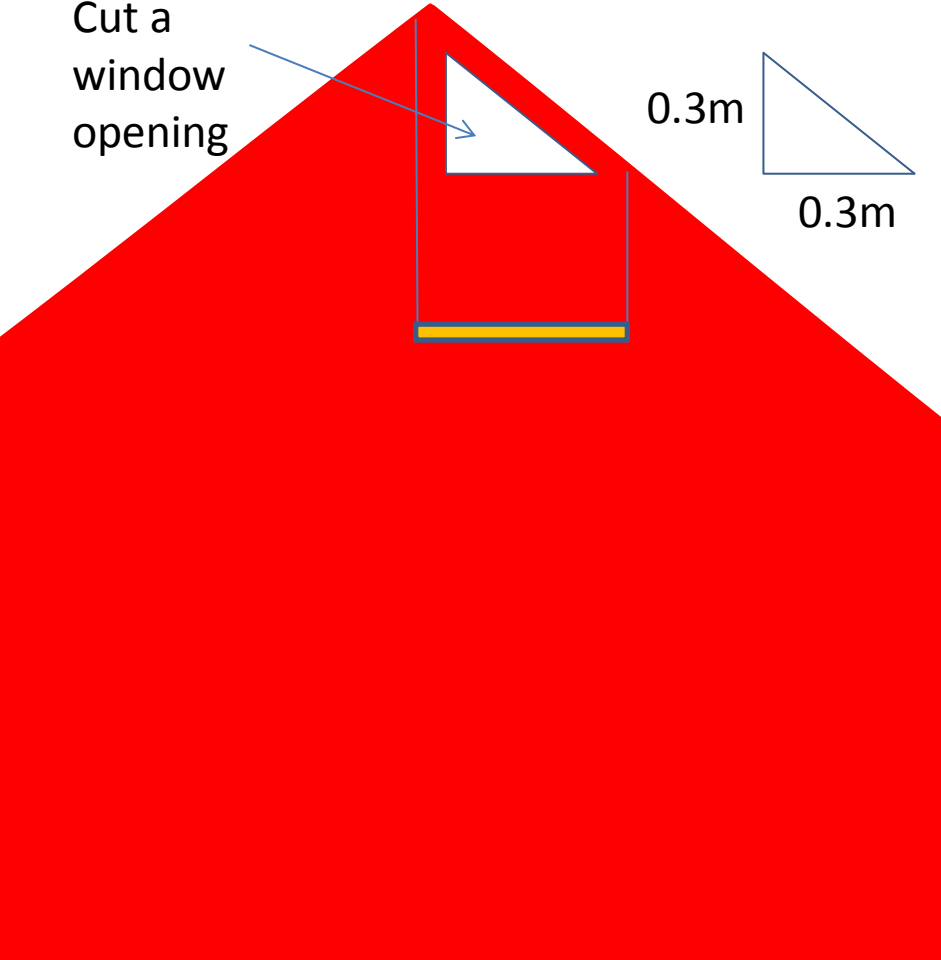


# MALAWI FLOOD SHELTER DESIGN

## WINDOW DESIGN



Cut a window opening



# MALAWI FLOOD SHELTER DESIGN FRAMES



1 window pole 0.5m



8 side poles 0.9m



12 bracings 1.0m



1 door pole 1.3m



8 trusses 2.0m



2 centre poles 2.6m



2 purlins 3.6m



1 purlins 3.75m



All in all 10 local eucalyptus poles with a diameter of not less than 80mm along the first one meter of the pole will be used for each shelter.