Global Shelter Cluster
ShelterCluster.org
Coordinating Humanitarian Shelter

Step 1 Understanding the context

Informing Choice for Better Shelter

A Protocol for Developing Shelter and Settlement Information Education Communication (IEC) Resources

1st Issue (February 2019)

Global Shelter Cluster – Promoting Safer Building Working Group

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Step 1 Understanding the context

1.1 Introduction

- All aspects of the assessment step will take time, and it will be an iterative process, building up a more complete understanding over time.
- Prioritise assessment and analysis on the basis of the IEC the technical working group (TWG) will produce and the information gap to be met. This will require some forecasting and understanding of the likely iterations of IEC resources the TWG aims to produce.
- A key guidance document that should be referred to is the World Bank's Post-Disaster Needs Assessment Guidelines related to housing.[1] These provide guidance on:
  - baseline information to be collected such as characteristics of existing housing stock, poverty, costs for repair and construction, monthly rents, typology, housing damage, ownership and tenure
  - damage to infrastructure related to housing (physical, production, delivery and access to goods and services, governance, risks and vulnerabilities)
  - land use
  - housing sector policies and financing
  - capacity for recovery
  - social processes and housing
  - recovery strategy (considering housing, land and property (HLP), policies, financing, labour, technology, construction, architecture, design, building codes and compliance, risk and vulnerabilities)
  - timeframes, partnership, coordination and management.

1.2 Plan for iterations of IEC and assessment

- Every context will be different and decisions about where the TWG should focus IEC assessment and analysis efforts will vary.
- The following is an example of a preliminary plan that the TWG should develop as early as possible post-crisis. It will always be a working draft plan.

[1] World Bank (2017) Post-Disaster Needs Assessment Guidelines: Housing (English). Post-Disaster Needs Assessment Guidelines: Volume B. Housing, Washington, D.C.: World Bank Group, http://documents.worldbank.org/curated/en/218781493631898783/Post-disaster-needs-assessment-guidelines-housing

Example of working plan for IEC subjects related to assessment and analysis needs

IEC subjects	Assessment and analysis required	Preliminary time frame to release IEC Note this example is for post-crisis (if not prepared as part of preparedness)
Emergency shelter	• Accompanied visit to look at household emergency shelter coping mechanisms in different contexts • Key informant interviews with sample of households and community leaders regarding information gaps concerning emergency shelter items or activities • Observation related to best practice and potentially harmful practice • Review of IEC related to emergency shelter material	1 to 2 weeks
Failure mechanisms E.g. press statement issued by cluster – general statement on types of failure mechanisms being seen, and any relevant information on both damaged and undamaged houses	• Accompanied visits (with construction artisans) • Rapid visual inspections of damaged and undamaged buildings by competent people[2] • Cross-check with national authorities undertaking detailed assessments as available	2 weeks
Debris management	• Work with early recovery coordinator	4 weeks
IEC on where to seek advice on how safe your building is	• Key informant interviews with national and local authorities • Key informant interviews with affected households on where they go for advice and who they trust • Discussions with stakeholders to understand skill levels	2 to 4 weeks
FAQs on emergency shelter, promoting safer building and access to assistance	• Focus group discussions with some households in different contexts • Gathering questions being asked • Key informant interviews with national and local authorities • Information from Communicating with Communities Working Group (CWC WG)	2 to 4 weeks then updated regularly
Early recovery promoting safer building	Note: Selecting steps as detailed in this protocol	4 to 12 weeks
Advice on HLP rights	Etc.	Etc.
Advice to renters etc.	Etc.	Etc.
Etc.		

[2] This is just to investigate failure mechanisms and is not to give occupiers advice on whether it is safe to re-enter, or to offer advice on how to repair, retrofit or rebuild.

- From the assessment of the information gap other topics that might emerge may include:
  - how to stay safe during demolition
  - site selection
  - how to stay safe during construction
  - how to seal off unfinished and abandoned buildings
  - guidance on selecting quality construction materials
  - guidance on selecting quality emergency shelter materials
  - guidance on use of non-food items (NFIs)
  - fire safety in camps and collective shelters
  - guidance on accessing assistance
  - given that structures cannot be built to resist all severities of events, guidance on when to evacuate, and the importance of evacuation centres
  - guidance on construction for a range of different construction technologies
  - guidance on repair
  - guidance on retrofitting.

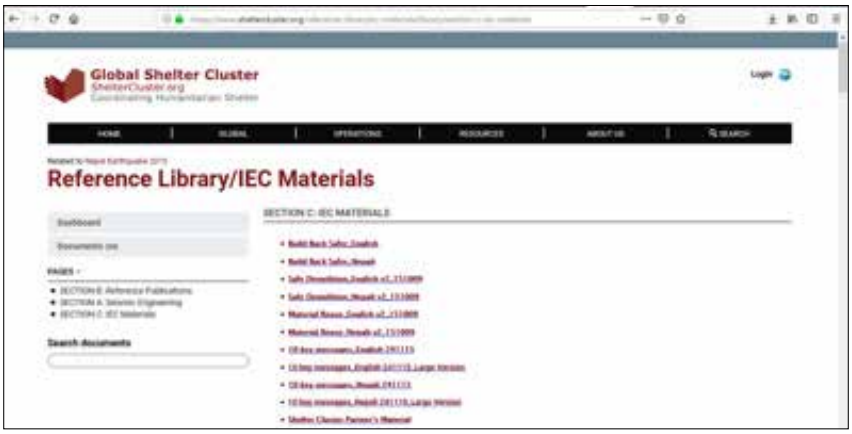
1.3 Review of existing IEC initiatives

1.3.1 Importance of sub-step

- IEC promoting better shelter and settlement outcomes needs to be context and target group specific. There will often be resources that have been used before, and it is critical to identify these resources and what lessons were learned in those and in similar contexts.

1.3.2 Sources of existing IEC material

- Investigate existing sources of appropriate IEC resources. This can include the following:
  - national institutes which publish building codes and guidance to support the building codes
  - relevant national and regional institutes and NGOs (for example, Nepal Society of Earthquake Engineering (NSET), national technical colleges etc.).
  - country or context-specific resources produced under past promoting safer building (PSB) initiatives. The relevant government authorities and agencies may be aware of these
  - Shelter Cluster website (www.sheltercluster.org) – search using key terms
  - Facebook Group called 'IEC Visual Literacy for Building Library'
  - shelter agencies/practitioners' libraries – many shelter practitioners have their own agency and personal libraries. Ask in the cluster for relevant items or post in the various forums (such as the Humanitarian Shelter Facebook Group)
  - The Humanitarian Library, https://www.humanitarianlibrary.org, created by the Shelter Centre, may have appropriate resources and has good search functionality
  - U.S. FEMA (Federal Emergency Management Agency) and U.S. Army Corps of Engineers resources related to construction, housing and settlement considerations
  - UK Building Research Establishment (BRE) publications
  - ITDG/Practical Action published documents
  - Global Facility for Disaster Reduction and Recovery (GFDRR), https://www.gfdrr.org/en/publications



Source: https://www.sheltercluster.org/reference-libraryiec-materials/library/section-c-iec-materials [accessed 03 Feb 2019]

- UN International Strategy for Disaster Reduction (ISDR) and Global Platform for Disaster Risk Reduction (GPDRR), https://www.unisdr.org/we/coordinate/global-platform
- Earthquake Engineering Research Institute (EERI), https://www.eeri.org/
- Asia Disaster Preparedness Centre (ADPC), http://www.adpc.net/igo/contents/Publications/Default.asp
- Indian National Information Centre of Earthquake Engineering (NICEE), https://www.nicee.org/EQTips.php
- International Federation of Red Cross and Red Crescent Societies (IFRC)
- UN agencies not already listed above (UNHCR, IOM, UNICEF, UNDP)
- And many other sources.

1.3.3 Existing better shelter initiatives

- Investigate existing better shelter initiatives in the country or region that have already been undertaken. Investigate what worked and what did not. For example, in Tonga in the early 1980s the UK government built many model houses that have since withstood a number of high wind events, and details are still being copied by households in 2018.[3] However, it is noted that the resources required to construct these may not be available to many households and communities.
- Seek evaluation reports from these initiatives, and if these do not exist because of the time that has elapsed, where possible visit past better shelter initiatives in the country/context and discuss with households and stakeholders who are connected to these initiatives.

1.3.4 Review of existing IEC resources

- Gather any potentially relevant material and hold a discussion with the TWG under the following agenda:
  1. Does the resource correspond to a known information gap? What evidence is there for this gap?
  2. Is there any information (e.g. evaluations or reviews) on the appropriateness, quality or impact of the resource?
  3. Does the material come from a credible source? Is it likely to have been quality reviewed appropriately?

[3] B. Morgenstern-Kennedy, conversation with David Dalgado, 22 May 2018.

4. Do agencies in the TWG have existing programmes where this material can be discussed with households and with tradespeople to check their understanding of the material, whether it is clear and that it is a feasible solution (e.g. can be built) and will have the desired impact? [The TWG should reconvene after this process]
5. Technical quality issues? Do any members of the TWG have concerns regarding the quality of the material?
6. If there are quality issues, can these be investigated, and the material modified?
7. Is there good evidence regarding the technical appropriateness of what is advised by the IEC?
8. Are the objectives of the IEC clear?
9. Is the resource appropriate in quality in terms of effective communication?
10. How would it be used or rolled out?
11. How would monitoring, adjustment and measurement of the impact of the IEC be undertaken and managed?

1.3.5 Output – review of existing IEC and better shelter and settlement initiatives

- A table similar to that shown below can be produced summarising the information found.

Name of IEC resource	Produced by and date	Summary of content	Past use (context, how rolled out)	Information gap it corresponds with	Note on quality, appropriateness and impact	Can IEC be used or modified for this TWG?	How would it used/ rolled out?	How would impact be measured?

1.4 Review coping mechanisms in relation to shelter and settlement

1.4.1 Importance of sub-step

- Any IEC resources developed need to fill an information gap and be appropriate to the local context. This sub-step reflects upon good and bad practice that is being seen and is therefore relevant and locally achievable.
- A key tool that could be referred to here could be the World Bank/GFDRR's Analysing the Social Impacts of Disaster Guidance.[4]

1.4.2 Process – review of coping mechanisms

- This review will normally involve accompanied visits to different contexts to see how households and communities are coping, what kind of emergency shelter solutions they are using, and how people are rebuilding.
- Key questions/observations can include the following.
  - Are people using damaged material/debris to rebuild?
  - Is emergency shelter material being used appropriately (e.g. to create as much covered space as possible, maximise life of tarpaulin etc.)?
  - What good and bad practice can be seen regarding coping mechanisms?
  - Are people getting into debt or selling assets (which will likely impact on promoting better shelter and settlement later)?
  - Where are people getting information on likely assistance?

[4] World Bank/GFDRR (2011) Analysing the Social Impacts of Disasters, Volume 1: Methodology, and Volume 2: Tools, http://siteresources.worldbank.org/INTEAPREGTOPSOCDEV/Resources/PostDisasterocialAnalysisToolsVolumeI.pdf; and http://siteresources.worldbank.org/INTEAPREGTOPSOCDEV/Resources/PostDisasterSocialAnalysisToolsVolumeII.pdf

- Do households consider they are getting the right information? And information from reliable sources?
- Are there information gaps being filled by unsubstantiated 'rumours'?

Note that for many of the above it will take time for this to emerge, and some coping mechanisms will evolve with time. It is suggested that this is investigated and then the output written up and then updated regularly.

- As part of the visit, discuss information gaps with households or key informants in relation to the above to understand if information on how to manage debris or use emergency shelter material better would likely have the intended impact; i.e. is it an information gap barrier or a combination of other factors?
- Take photos to document coping mechanisms: how people are using emergency shelter, how they are rebuilding, or managing debris, for example.
- ***Preparedness:*** If undertaking this sub-step as part of preparedness this will usually require reflecting upon what happened in past disasters in the country or the region. At a community level, tools such as the IFRC's Participatory Approach for Safe Shelter Awareness (PASSA)[5] could be used.

1.5 Shelter and settlement vulnerabilities – identify what failed and why?

Photo: Nepal Shelter Cluster, 2015

1.5.1 Importance of sub-step

- This sub-step is focused on the better shelter and settlement objective related to promoting safer building specifically.
- This sub-step will allow the TWG to identify shelter and settlement vulnerabilities and poor practice, but also good practice (through 'what stood up and why?'). This sub-step also allows

[5] IFRC (2010) PASSA, Participatory Approach for Safe Shelter Awareness, https://www.ifrc.org/PageFiles/95526/publications/305400-PASSA%20manual-EN-LR.pdf

for discussion amongst households and skilled trades (builders, carpenters, masons) about failure mechanisms/vulnerabilities, and barriers and enablers related to construction practices that contribute to that failure mechanism or vulnerability. This should include settlement-level vulnerabilities.

- This assessment step should help the TWG to find the evidence related to problems and failure mechanisms needed to inform the development of IEC.

1.5.2 Process – identify what failed and why?

- The UNISDR 2010 Guidance Note on Recovery: Shelter[6] identified the following vulnerability factors:
  - poor, weak or inappropriate materials
  - inappropriate building design
  - insufficient building codes
  - inadequate code enforcement
  - poor land-use planning
  - high density living: higher population density can translate to an increase in the number of people who are exposed to hazards
  - fatalism/lack of information/knowledge
  - dependence on weak infrastructure.
- When undertaking this sub-step, the headings related to these vulnerability factors should be kept in mind so that discussions can be structured and the documenting of this sub-step can be comprehensive.
- Depending on the context and hazard type, look for rapid methodologies for considering what failed and why, which should include a literature search on past disasters in the country or region.
- The TWG members may also undertake this sub-step through the following.
  - Accompanied visits in communities. See CRAterre Assessing Local Building Culture Guide.[7] This could be undertaken by a number of agencies in the TWG working in different contexts.

One example of how an accompanied visit was undertaken is from the early days of the Typhoon Haiyan response in the Philippines in late 2013. An international structural engineer working with local partners gathered a group of community members, some with damaged houses and some without. Together they spent a few hours walking around the community and looked at how some buildings had failed and why some had not. The specifics of the failure mechanisms were investigated (with the international structural engineer, supported by local built environment professionals from the local partners) and the barriers and enablers related to the construction practices specific to each failure mechanism were discussed with the households and community members. Photos of the construction detail or failure mechanism were also taken. The process as a whole allowed for an exploration of failure mechanisms, facilitated an increased understanding of the local building culture, and acted as a direct means of promoting safer building to the households who participated in the exercise.

[6] UNISDR, UNDP and IRP (2010) Guidance Note on Recovery: Shelter, https://www.unisdr.org/we/inform/publications/16770
[7] Caimi, A. (2015) Assessing Local Building Cultures for Resilience and Development: A Practical Guide for Community-Based Assessment, http://craterre.org/diffusion:ouvrages-telechargeables/view/id/d3845900ac17b593a04d696bdeaf69d5?new_lang=en_GB 70

- Prior consent should be agreed with households in advance, to confirm that it is acceptable to look in detail at their houses. Articulating judgements or statements which could be sensitive should be avoided.
- Expert reports from national and other engineering and architecture institutions or national agencies responsible for structural assessment of buildings. For example, this could include reports from national building regulation agencies or the ministry of housing. It could also include, for earthquakes in South Asia for example, organisations like NSET, EERI, or the Earthquake Engineering Field Investigation Team (EEFIT) of the Institution of Structural Engineers, UK. The focus should be on reputable and, ideally, local organisations. On occasion some of these institutions can be working with insurance companies, who can be a useful point of contact.
- Focus group discussions with skilled construction workers looking at the photos of failures and shelter vulnerabilities and discussing why these happened. Discussions can consider the detail of the failure mechanism, what existing construction practices might have reduced the risk of this failure, and what barriers there may have been preventing the application of these construction practices.

1.5.3 Output – identify what failed and why?

- Photos of different failure mechanisms with brief analysis for the different typologies.
- Photos of what failed and what did not for the different typologies as applicable.
- Photos related to different shelter vulnerabilities (for example, settlement issues).
- A brief two to five-page summary report can be produced using the shelter vulnerability factor headings as a structure (from the UNISDR 2010 Guidance Note on Recovery: Shelter,[8] and listed at 1.5.2 above), which brings together the pertinent points from the discussions during the accompanied visits, drawing upon the documentation from the agencies undertaking the sub-step in the field, i.e. focus group discussions (FGDs), key informant interviews (KIIs) and expert visit reports. This will provide summary evidence that will help focus the development of safer building promotion.

1.6 Exploring knowledge attitude and practice (KAP) in relation to shelter and settlement

1.6.1 Importance of sub-step

- The purpose of this sub-step is to break down the problem in terms of the three elements of knowledge, attitude and practice.
- The output of this should help to focus the nature of the IEC to be developed and the objectives of the TWG.
- KAP could also provide a baseline to measure change against; however, if this is the intention then it needs to be rigorous, and for the initial pass at this sub-step it is suggested that this is focused upon qualitatively, and later repeated more rigorously as necessary if being used as a baseline for monitoring purposes.

[8] UNISDR, UNDP and IRP (2010) Guidance Note on Recovery: Shelter, https://www.unisdr.org/we/inform/publications/16770

[9] An example similar to this was presented by Kate Crawford at a UK Shelter Forum in the mid-2010s. The author (David Dalgado) may have also elaborated or misremembered based on his time on a Haiti earthquake recovery programme.

There are several questions that arise in terms of KAP when looking at the objective of promoting safer building, for example, in the context of examining the failure of concrete corner columns in Haiti's capital Port-au-Prince[9] after the 2010 earthquake.

- Did people know how to tie steel reinforcement cages according to the appropriate codes for a seismic area?
- What was the reason for the small diameter of steel reinforcement bars used? Was this due to a lack of knowledge of the appropriate size of bar or an attempt to save money?
- Or was it due to prioritising other expenditure, either in relation to construction or other elements of household expenditure?
- Or was it because those constructing didn't have the tools to bend bars over a certain diameter?
- Or because those constructing were not supervised?

1.6.2 Process – exploring knowledge attitude and practice

- Use sub-step 1.5 Shelter and settlement vulnerabilities – identify what failed and why? to identify the most relevant vulnerabilities to focus on.
- Sources of existing information regarding KAP for promoting better shelter and settlement should be investigated, including:
  - World Housing Encyclopedia Report database,[10] specific to earthquake regions
  - local building culture country profile produced by CRAterre, if this exists
  - documents on knowledge and building practices by national authorities, national or regional institutes
  - available country data on building typologies (form and construction technology).
- Key informant interviews can be held with:
  - national authorities related to the building code
  - construction college staff
  - skilled trades (builders, masons, carpenters)
  - hardware stores and suppliers.
- Focus group discussions can be held with households regarding knowledge, attitude and practice in relation to better shelter and settlement. From the shelter vulnerabilities sub-step, photos can be presented showing good and bad practice for different elements of the building (and different technologies and contexts as necessary), and then questions asked to explore knowledge, attitude and practice in relation to each vulnerability.
- Development and running of a KII or FGD methodology to look in-depth at KAP with households and skilled trades should be undertaken by someone who has significant technical knowledge and experience of social science research. An assessment specialist can be involved or consulted to advise on directness of questions or use of proxy indicators where appropriate. If it is difficult to find these specialists within agencies connected to the TWG, discuss with specialist NGOs (e.g. REACH), and local and national universities.
- If the household may have suffered trauma due to house failure, refreshing this trauma must be avoided.

[10] http://www.world-housing.net/

- Although knowledge and practice can often be surveyed or observed, attitude can be more difficult to consider. Groups of households can be asked to rank different elements of building practice, as well as expenditure on building and other household priorities, in order of perceived importance. Attitudes are also explored more in the behaviour factors sub-step.
- Observations can be undertaken to examine construction practice where elements of a building are exposed or where construction is ongoing.

An example survey form which considers knowledge is given in the tools section which accompanies this protocol.

1.6.3 Output – exploring knowledge attitude and practice

- For each significant shelter vulnerability identified, summary information regarding KAP can be documented. There may also be more general KAP information (such as that which relates to household priorities) that needs to be documented.
- Information related to KAP is returned to in Step 7 on monitoring.

1.7 Identifying key practice and behaviour factors

1.7.1 Importance of sub-step

- This sub-step should help the TWG to gain an understanding of the practice and behaviour factors that contribute to better shelter and settlement, for example, through a 'doer and non-doer' analysis.[11] A 'doer and non-doer' analysis has been used in a wide range of methodologies exploring behaviour and practice and is elaborated on in this sub-step. This methodology involves determining all factors that are a barrier or enabler to the practice or behaviour, and then ranking the factors.
- It is suggested that to undertake this properly, a person with experience in social science and behaviour factor analysis is consulted throughout the process, or directly engaged to lead on this sub-step.
- The purpose of this sub-step is to:
  - better understand motivators and barriers to better shelter and settlement
  - provide a basis for using specific behaviour change techniques in response to the key behaviour factors identified, of which knowledge of the hazard, and associated failure mechanism and preventative measures, will only be one factor.
- Note that some information related to practice and behaviour factors will have already been gained through sub-step 1.5 Shelter and settlement vulnerabilities – identify what failed and why? and sub-step 1.6 Exploring knowledge attitude and practice (KAP) in relation to shelter and settlement.
- The World Bank's guidance on analysing the social impacts of disasters may be an important reference document for this sub-step.[12]

[11] Kittle, B. (2013) A Practical Guide to Conducting a Barrier Analysis, New York, NY: Helen Keller International, https://pdf.usaid.gov/pdf_docs/PA00JMZW.pdf However, the research methodology described in this document examines barrier analysis predominantly in relation to health. Barrier analysis research methodologies can and have been applied in relation to shelter and settlement.

[12] World Bank/GFDRR (2011) Analyzing the Social Impacts of Disasters Volume 1: Methodology and Volume 2: Tools, http://siteresources.worldbank.org/INTEAPREGTOPSOCDEV/Resources/PostDisasterocialAnalysisToolsVolumeI.pdf and http://siteresources.worldbank.org/INTEAPREGTOPSOCDEV/Resources/PostDisasterSocialAnalysisToolsVolumeII.pdf

1.7.2 Process – identifying key behaviour factors

- To rapidly get a basic understanding of behaviour factors, FGDs or workshops can be held with affected and non-affected households.
- The photos from sub-step 1.5 Shelter and settlement vulnerabilities – identify what failed and why? can be used. They do not have to be photos from the actual houses or of the workshop member participants.
- FGDs/workshops can be organised to draw out information under the behaviour factor headings listed in the following table.
- Note that behaviour factor analysis might be different post-crisis and change with time if normalisation occurs. So, it may need to be monitored and updated at key points.
- The following table is based on the Risks, Attitudes, Norms, Abilities, and Self-regulation (RANAS) methodology[13] with definitions modified for shelter and housing, and the CRS' report on extending impact[14] which includes 'determinants of behaviour'.

Behavioural factor	Definition
Risk factors: represent a person's understanding and perception of the safety risk.	
Hazard, failure mechanism, preventative measures knowledge	A person's knowledge about a hazard event (e.g. cyclone) and how this can lead to the failure mechanism occurring (e.g. gable wall failure due to wind loading) and measures to prevent this.
Risk perception	A person's estimate about the general probability of the hazard event occurring and their subjective awareness of the risk of the failure mechanism occurring; i.e. how likely is it to happen?
Perceived severity	A person's assessment of the seriousness of a hazard event occurring and the significance of the failure's consequences; i.e. if your house blows down, what does it mean for you and your household?
Attitude factors: represent a person's positive or negative stance towards a construction practice or behaviour.	
Beliefs about costs and benefits	A person's beliefs about monetary and non-monetary costs (time, effort, etc.) and benefits (reduced safety risks in cyclones, reduced maintenance needs) of a construction practice or behaviour, including social benefits (higher status, appreciation by others).
Feelings	A person's emotions (joy, pride, disgust etc.) which arise when thinking of a construction practice, behaviour or its consequences.
Perceived divine will	Whether people believe their lives are influenced by supernatural forces or religion. For example, some people may believe that an earthquake is a punishment from God.
Norm factors: represent the perceived social pressure towards a behaviour.	
Others' behaviour	A person's or household's observation and awareness of others' construction practices or behaviours, and their perceptions as to which construction practices or behaviours are typically practiced by others.
Others' (dis)approval	A person's perceptions as to which behaviours are typically approved or disapproved of by relatives, friends, or neighbours. This includes the awareness of institutional norms, i.e. the dos and don'ts expressed by recognised authorities such as village, tribe, or religious leaders, and other institutions.

[13] Contzen, N. and Mosler, H-J. (2015) RANAS (Risks, Attitudes, Norms, Abilities, and Self-regulation (RANAS) Methodological Factsheets, Number 3, https://www.susana.org/en/knowledge-hub/resources-and-publications/library/details/2397

[14] Turnbull, M., Sterrett, C.L., Hirano, S. and Hilleboe, A. (2015) Extending Impact: Factors Influencing Households to Adopt Hazard-Resistant Construction Practices in Post-Disaster Settings. A Study by Catholic Relief Services, Baltimore, MD: Catholic Relief Services – United States Conference of Catholic Bishops.

Personal importance	A person's beliefs about what she or he should do or should not do.
Culture	Although this may be partly covered by 'Others' behaviour' and 'Others' (dis)approval', this is specific to history, customs, lifestyle, cultural values and practices within a self-defined group. Culture may be associated with ethnicity or lifestyle and often influences an individual's perceived social norms. Values related to modernity would fit into this category.
Ability factors: represent a person's confidence in her or his ability to undertake a construction practice or behaviour.	
How-to-do knowledge	A person's knowledge of how to execute the construction practice or behaviour.
Confidence in performance	A person's perceived ability to organise and execute the courses of action required for the construction practice or behaviour.
Confidence in continuation	A person's perceived ability to continue to undertake maintenance (e.g. replace roof strapping if it corrodes) of the construction practice undertaken, or to continue to practise a behaviour; this includes the person's confidence in being able to deal with barriers that arise.
Confidence in recovering from setbacks	A person's perceived ability to recover from setbacks that may arise during the implementation of the construction practice, or to continue the behaviour after disruptions.
Self-regulation factors: represent a person's attempts to plan and self-monitor the implementation of a construction practice or behaviour and to manage conflicting goals and distracting cues.	
Action planning	The extent of a person's attempts to plan a construction practice or behaviour's execution, including the when, where, and how of the construction practice or behaviour.
Action control	The extent of a person's attempts to self-monitor a behaviour by continuously evaluating and correcting the ongoing behaviour towards a behavioural goal.
Barrier planning	The extent of a person's attempts to plan to overcome barriers which would impede the behaviour.
Remembering	A person's perceived ease of remembering to practise the new practice or behaviour in key situations.
Commitment	The obligation a person feels to practise a behaviour.
External constraint factors: represent an influencer largely outside of the individual's or household's control.	
Sanctions/enforcement	Whether laws or regulations (including informal ones) influence the ways in which people construct their homes. For example, some people may be aware of set designs, where if they construct to these designs, they will be automatically be approved by the local authority building control.
Access	Whether people have access to the resources (such as time, money, tools, land etc.) they need to use for the construction practices or behaviour.
Housing, land and property rights – including security of tenure	Although this may partly relate to 'policy', it is specific to security of tenure. This would impact on whether someone feels they have adequate security of tenure to allow them or make it worthwhile to invest in improving their home. For tenants and others, it may also determine whether they are allowed to make changes to the structure of their building or rebuild. It could also relate to uncertainty of land-ownership, which may cause people to face a barrier when reconstructing.

1.7.3 Output – identifying key behaviour factors

At the end of this sub-step the TWG should have a ranked list that provides a general understanding of what the key behaviour factors are that need to be addressed. In subsequent steps these can then be matched with appropriate behaviour change techniques, and appropriate IEC.

1.7.4 Background information – identifying key behaviour factors

A number of different behaviour change models and frameworks were reviewed and these are shown below. This information is given for those wishing to look more into behaviour factors for shelter and settlement practices, since this area is not well developed for shelter and settlement programming.

- The Capability, Opportunity, Motivation and Behaviour (COM-B) model from public health.
- The Risks, Attitudes, Norms, Abilities, and Self-regulation (RANAS) model[15] from public health and water and sanitation and hygiene promotion (WaSH).
- Sanitation marketing.[16] This approach mixes social and commercial marketing and describes the 'marketing mix' Four Ps, described below. In terms of better shelter outcomes related to promoting safer building this could be as follows.
    - ***Product*** – understanding what benefits of the construction practice or safer building component (e.g. concrete banding) are important to the target audience. The benefit to the household may not relate to the structural element giving reduced risk of roof failure, but rather the use of concrete could be a symbol of modernity. The methodology also highlights that consumers may not care about the technology and how it works but focus on the product, which is easier to understand.
    - ***Place*** – refers to where a product or service is sold or obtained, and how it is distributed. This considers access to points of sale – an issue of particular importance in rural areas where transportation is often limited and expensive – and proper training of suppliers.
    - ***Price*** – refers to both the monetary and non-monetary costs a household incurs when undertaking a construction practice or using a safer building component. Reduced space, for example, could be one non-monetary cost. This would 'explore affordability and availability of cash and willingness to pay. Strategies such as standardization, modularization, and increased access to financing may help address these challenges.'[17]
    - ***Promotion*** – this refers to communicating details about the product, price, place, and the behaviour promoted to the target audience.

As previously described, this section of the report builds upon and pulls heavily from CRS' 'Extending impact' report and the RANAS model.

1.8 Identifying values related to the home

1.8.1 Importance of sub-step

- Identifying the value and belief system of households is important to assist with understanding motivators which can improve the potential impact of the IEC resource intervention. Note that this may develop with time.

[15] Contzen, N. and Mosler, H-J. (2015) RANAS (Risks, Attitudes, Norms, Abilities, and Self-regulation (RANAS) Methodological Factsheets, https://www.susana.org/en/knowledge-hub/resources-and-publications/library/details/2397
[16] World Bank Water and Sanitation Program: Sanitation Marketing, no date, https://www.wsp.org/toolkit/what-is-sanitation-marketing
[17] World Bank Water and Sanitation Program: Sanitation Marketing, no date, https://www.wsp.org/toolkit/marketing-mix-price

- In some contexts,[18] households and communities may choose to make their households more resilient through non-structural means such as becoming more devoutly religious. Or choosing to use cement for ornate plastering rather than using it for structural elements in the building to ensure social standing in the community.[19] Exploration of households' values and what their houses mean to them is important to understanding motivators to help in the detailed development of IEC resources and the appropriate roll-out strategy. Within the household opinions will differ and it is suggested that the focus is on those most involved in decision making related to shelter and settlement, which may not be limited to the head of the household.

1.8.2 Process – identifying values related to the home

- Review information from the KAP and behaviour factor sub-steps in relation to attitude (from KAP), culture, feelings, perceived divine will, and others' (dis)approval.
- Where possible, consult anthropologists, social scientists and architects who know the context to understand if there are existing reports and past studies which summarise:
  - what the most important attributes of a home are to households and communities
  - value and belief system in relation to better shelter and settlement.
- Review any past studies or evaluation reports from resilience projects in the context, specifically related to how communities worked themselves to become more resilient and what activities or measures were prioritised.
- Review agencies' reports related to how different members of the households use the home in this context. For example, many agencies will view shelter programmes with a gender lens or undertake a gender analysis and have information on how girls, women, boys and men use and value the home differently.
- Understand how much people spend on constructing their homes, for the different typologies, and consider the different components (how much on the latrine, septic tank etc.); also, how much they spend maintaining and operating it (e.g. replacing perishable items or emptying septic tanks). This will also be useful to understand how people prioritise.
- The review of values related to the home can be complemented/confirmed through FGDs with household groups to understand what function a home needs to fulfil, and the value attached to a home, under the following headings:
  - safety of structure
  - safety of external environment (external to dwelling, i.e. settlement safety)
  - construction materials
  - durability
  - reduced maintenance
  - healthy internal environment (ventilation, thermal comfort, vector control, internal light)
  - security and lockable doors and windows
  - privacy
  - appearance (what signals modernity, tradition, wealth, poverty)
  - faith and familial relationship factors
  - positioning within plot of land (e.g. kitchen garden needs, internal courtyard etc.)
  - location and attributes related to WaSH facilities (latrine, bathing, clothes washing, kitchen utensil washing). For example, in some Islamic cultures the latrine cannot face towards Mecca

[18] Humanitarian Benchmark Consulting (2017) Shelter Cluster Scoping Study Report: Pidie Jaya Earthquake.
[19] Jake Zairins and Jim Kennedy, information from separate conversations with David Dalgado, June 2018, related to the Aceh tsunami response.

- location and attributes related to cooking area
- space requirements, internal footprint of rooms, floor to ceiling heights
- livelihood-related needs related to the building (e.g. door and window needs, use of porch, side access)
- needs related to extended family (land rights – dowry needs for example, ability to extend up when family grows).

  (Note that there may be other headings: this is just an example list.)

This could be undertaken by asking households to describe their ideal village house, for example, in relation to the above topics. Where possible, ask the focus group to rank the attributes related to the value of a home. Modifications to this process and the headings will need to be undertaken depending on the context. For example, with urban contexts, renters, or multi-family building habitation, there may be other considerations and methodology needed.

1.8.3 Output – identifying values related to the home

- Two to three-page summary report with the headings proposed for the FGD in reference to values and attributes associated with the home which may impact on better shelter and settlement IEC resources.
- Annexes to this report can include the costs of construction for different typologies (broken down by the different components of the house) and for operation and maintenance. This can be used later when looking at the cost of specific technical solutions or changes that the TWG may want to advocate for.