



Post-disaster shelter in India: A study of the long-term outcomes of post-disaster shelter projects



CONTENTS

1. EXECUTIVE SUMMARY	6	7. DESK STUDY FINDINGS	21
1.1 Background	6	7.1 Programme design	22
1.2 Coverage	6	7.2 Technical design of projects & shelters	22
1.3 Conclusions	6	7.3 Habitability / relevance of projects & shelters	23
1.4 Recommendations	10	7.4 Accountability to affected people	23
2. ACKNOWLEDGEMENTS	12	7.5 Significance and long term impact of projects	23
3. FOREWORD BY MD&CEO, CARE INDIA	13	8. BIHAR 2007 FLOODS RESPONSE	24
4. GLOSSARY	14	8.1 Studies undertaken	26
5. INTRODUCTION	15	8.2 Findings	26
5.1 This study	16	8.3 Project conclusions	32
5.2 Geography	16	9. ANDHRA PRADESH	37
6. OBJECTIVES & METHODOLOGY	18	2009 FLOODS RESPONSE	
6.1 Objectives	18	9.1 Studies undertaken	39
6.2 Methodology	18	9.2 Findings	39
6.3 Evaluation Team	20	9.3 Project conclusions	51

10.	TAMIL NADU		13.	STUDY CONCLUSIONS	99
	2004 TSUNAMI RESPONSE	55	13.1	Impact: The significance of shelter	99
10.1	Studies undertaken	56	13.2	Shelter and settlements: complementary support	100
10.2	Findings	58	13.3	Accountability: Whose choices? Whose risk?	100
10.3	Project conclusions	74	13.4	Specific needs & capacities: women, girls, men & boys	102
11.	ODISHA 2011 FLOODS RESPONSE	79	13.5	Relocation projects	103
11.1	Studies undertaken	81	13.6	The shelter sector in India	103
11.2	Findings	81	14.	RECOMMENDATIONS	104
11.3	Project conclusions	89	14.1	Impact: Scale and coverage	104
12.	CHRISTIAN AID STUDY SUMMARY	94	14.2	Shelter and settlements: Complementary programming	104
12.1	Conclusions	94	14.3	Accountability: Community & individual ownership	106
12.2	Recommendations	95	14.4	Specific needs & capacities: Women, girls, men & boys	107
			14.5	Relocation projects	108
			14.6	The shelter sector in India	108



1. EXECUTIVE SUMMARY

1.1 Background

Over the last 15 years CARE India and other NGOs have repeatedly responded to natural disasters where large numbers of people have lost their homes. These responses have frequently included both provision of short-term emergency shelter and construction of more durable housing, often designated transitional or permanent.

While there have been individual evaluations of some of CARE's programmes immediately upon completion, there has not been a comprehensive study of the medium- and long-term outcomes of post-disaster shelter programmes undertaken by CARE or many of its peer agencies. This study aims to evaluate the medium- to long-term effectiveness of post-disaster shelter responses and recommend measures to strengthen future shelter programmes, whether undertaken by CARE or other agencies, to most effectively address the complex and interconnected needs of disaster-affected women, girls, men & boys.

1.2 Coverage

The study covers 10 shelter programmes undertaken after natural disasters by CARE since 2001 and furthermore draws on separate evaluations of 3 Christian Aid & SEEDS post-disaster shelter programmes. The study covers projects in 12 States & Union Territory (Andaman & Nicobar Islands, Andhra Pradesh, Bihar, Gujarat, Jammu & Kashmir, Odisha, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand & West Bengal) and includes projects undertaken after the Indian Ocean tsunami, earthquakes, floods and cyclones.

1.3 Conclusions

The construction of durable houses as part of post-disaster shelter recovery programmes delivers both essential safe and dignified shelter, and a valuable asset, to the beneficiaries. This gives beneficiaries the security to focus on other urgent priorities and prevents them falling into destitution. Projects have generally increased the robustness of houses and successfully reduced risk of future natural disasters. There are several examples of houses built in the projects studies surviving significant natural hazards. **Post-disaster shelter programmes which provide durable housing successfully meet humanitarian needs and protect the vulnerable after disasters.**

Delivering shelter recovery programmes is complex and often subject to significant competing interests and obstacles. The needs of women, girls, men and boys, and the needs of different households, can vary significantly. A one-size-fits-all shelter design has limited flexibility to meet these varied needs. **Generally projects have focussed mainly on the shelter product to be delivered and not enough on building capacity and agency of the beneficiaries.**

The durability of shelter is a critical component of the longer-term success of shelter recovery programmes. **Maintenance burden and costs, and the economic capacity of beneficiaries, are key drivers for, or obstacles to, good long-term outcomes of shelter programmes:**

- Those who can mobilise the economic resources have built upon the asset they have been given (often literally) to make their house provide for all their needs, including the specific needs of women, girls, men and boys, and often to grow their income. The shelter assistance they have received has both protected them and given them the opportunity to improve their lives and reduce their poverty.
- Those who cannot mobilise economic resources – the very poorest, most vulnerable people in society – have been unable use their housing in this way. Secure shelter has allowed them to use their economic resources to survive, has protected them and met their urgent needs, but it has not led to a reduction in their poverty and the risks and vulnerabilities that come with this. They remain trapped in what many consider unsuitable housing which provides basic shelter but not much more. The specific needs of women, girls, men and boys in households remain unmet.

The projects studied have a limited range of approaches to delivering shelter assistance, essentially contractor-built durable, pukka houses or contractor-built houses with a mixture of durable and temporary materials. Importantly, designs used always considered local construction practice and used local materials and were appropriate to the context and local hazards. This improved acceptance, ownership and ability to maximise the value of shelters, and contributed significantly to effective disaster risk reduction, and should be encouraged in any future projects.

The scale and reach of the projects studied varied significantly. Some projects met a significant portion of the need in the context of a disaster where with many actors coverage of assistance was very good. Others met a very small proportion of the need in a context where there were no other actors. Inevitably in the projects with fewer resources the value of assistance must be reduced and the resources must be focussed on the most vulnerable. Projects did this by targeting both geographically and based on vulnerability (Schedule Castes, Schedule Tribes, religious minorities etc. in remote locations). Where budgets are insufficient, approaches combining durable and robust primary structure with temporary walling and cladding are appropriate to increase the cost effectiveness and reach of projects for the most vulnerable. However,

decisions about the type, value and quality of shelter assistance cannot be taken in isolation from the capacity of beneficiaries to effectively use, maintain and upgrade their houses. Little support was offered to partners and beneficiaries to do so. **Greater long-term improvements in safety and strength of buildings and greater support to partners and beneficiaries could have been delivered with more technical programme staff.**

There were notable attempts, led by women, to deal with settlement-wide problems in an organised manner and to represent their largely disenfranchised communities to those in positions of power. However, these were largely unsuccessful. **There was insufficient attention as part the shelter projects, especially the relocation projects, to institute good governance and representation for communities.** Had this been in place communities, and women, may have been more able so solve some of their lasting problems, even after projects end, funding disappears and NGO staff leave.

It is widely accepted that shelter projects will not be successful without addressing settlement-wide issues. This study supports that, but furthermore highlights that from the point of view of most disaster-affected people in the locations studied **it is livelihoods and WASH that most affect the wider success of projects:**

- Shelter assistance delivered in combination with effective livelihoods assistance can have transformative effect, improving not only housing and incomes, but also education, health and other areas. In particular it can have an empowering effect on women and girls.
- Ensuring adequate access to safe water must be considered in shelter programmes. Several projects studied have resulted in communities without acceptable water supply, leading to poor sanitation and additional burden, especially on women and girls.
- Provision of toilets, without associated hygiene promotion programming, does not lead to changed behaviour or reduction in open defecation. Women and adolescent girls in particular suffer as a result.

Projects generally reflect the priorities of donors, government and NGOs and generally do not take sufficient account of the priorities of disaster-affected people. All the projects studied

were agency-driven and largely contractor-built. The form projects and shelters took was driven by donors, government and agencies and not by disaster-affected people. The funding available per household varies significantly and leads to great variation in the assistance delivered. Robustness of buildings or speed of delivery has generally been prioritised over beneficiary choice and participation. **Physical risk of future natural disasters has been successfully reduced, but other vulnerabilities have not been so well addressed.**

There were examples of meaningful participation processes in which affected people felt able to significantly influence projects, leaving a lasting and positive impression. In most cases however communities are grateful for the significant support they have received, but do not remember being able to greatly influence the form it took. Largely due to the nature of post-disaster projects, but also due to insufficient consideration of how it could work, participation was less meaningful in the project design and beneficiary selection and more meaningful in the project implementation.

Donor mandates and priorities, coupled with insufficient technical understanding in agency programme teams, can lead to the almost arbitrary designation of houses as 'temporary', 'permanent' or even the highly confusing phrase 'semi-permanent'. These have the effect of obfuscating the true value and nature of what is being delivered. Temporary shelters are almost never temporary and no building is ever entirely permanent. Approaches that sought to maximise cost efficiency by designing buildings with durable primary structures and less durable cladding are entirely appropriate but were often lost in translation and not sufficiently understood, or agreed to, by beneficiaries. **It is not appropriate to deliver 'temporary' buildings to vulnerable people without their understanding and without a viable plan to replace them.**

None of the projects studies in detail involved specific consideration of the needs of disabled people, whether physically or mentally disabled. None of these projects involved specific consideration of the needs of elderly people. This has resulted in the needs of some of the more vulnerable people in society for safe shelter not being adequately met.

1.3.1 WOMEN'S EMPOWERMENT

Women's participation in projects, although deliberately included in all projects, has been somewhat formulaic and hasn't recognised specific opportunities for women to take a leading role, for example in supervising construction and acting as a client.

Often following successful lobbying of government, all projects attempted to empower women by ensuring they had sole or joint title to the houses that were provided (although not always to the land). The act of doing this generally did not empower women, but where the process involved the whole community, including men, and developed good understanding of the rights that come with ownership, giving title to women improved their status and confidence. **Giving land or property title to women is not in and of itself something that will empower women, but if done in a meaningful way it is a positive part of a wider process of gender equality and women's empowerment.**

A significant hurdle to achieving gender equality in property rights in the longer term is the fact that boys are almost always prioritised over girls when property is passed down to the next generation. Girls rarely inherit land or property title.

Reduced household and maintenance burden generally benefits women, who often bear responsibility for recurrent household tasks. In some cases women have been able to start businesses and generate their own income (sometimes with support from CARE livelihoods programming, sometimes without).



1.3.2 RELOCATION PROJECTS

It is well established that relocation of disaster-affected communities is very difficult to do successfully. This study generally supports that conclusion. It is clear that relocation projects are risky, with the risk primarily carried by the affected people. Creating new settlements is extremely complex and requires many resources and organisations to come together to make them a success.

Relocation projects can be successful and have a transformative effect if:

- They take place in close cooperation with and in line with the wishes of the relocated people
- The whole community is relocated
- The relocation site has access to adequate water supply, livelihoods, markets and services

Projects which reduce access to services, and in particular to education, negatively affect girls in particular. Relocation projects which prioritise reduction in vulnerability to particular natural hazards at the expense of increasing other vulnerabilities, and do so without sufficient input from affected people, are likely to cause lasting problems. **Relocations that happen against the wish of the affected people are very unlikely to be successful.**

1.3.3 THE SHELTER SECTOR IN INDIA

Despite great improvements in the capacity and effectiveness of the humanitarian system in India over recent decades, the most vulnerable in society in India are frequently excluded from access to services and assistance, and humanitarian shelter actors have a vital role to play in ensuring they are included in post disaster shelter and recovery programmes.

There is considerable experience and knowledge of post-disaster shelter within CARE and other actors in shelter in India, and there is a good level of collaboration between different shelter actors, including civil society, NGOs, private sector and government agencies. However, there is little active research or development of new approaches to shelter, and the shelter sector in India is only weakly linked to the global shelter sector. **There is a need and opportunity for the shelter sector in India to collaborate more closely to share knowledge both in India and globally, and to take a more leading role in the global shelter sector, the leadership of which is currently too heavily concentrated in Europe and the US.**

1.4 Recommendations

For detailed recommendations see section 14.
The key recommendations are:

1.4.1 IMPACT:

Future programmes should consider approaches which empower more disaster-affected people to build dignified shelters incorporating features to make them safer and more robust.

- A. More use of technical assistance to people building their own houses, provision of key materials, conditional cash grants or vouchers in projects using an owner-built approach should be explored to increase relevance and coverage.
- B. There should be an analysis of both physical and social hazards faced by disaster-affected people, leading to a clear prioritisation of disaster risk reduction measures to be included in buildings and projects. To do this agencies need to be able to draw on sufficient expertise.
- C. Flexibility in levels of assistance to give minimum assistance to large numbers and more intensive assistance to the most vulnerable could also assist achieving greater relevance and coverage.

1.4.2 SHELTER AND SETTLEMENTS:

Future shelter programmes should address settlement-wide as well as household issues and should greatly strengthen the integration of complementary programming, including:

- A. establishing good governance in settlements;
- B. ensuring adequate water supply;
- C. providing targeted complementary livelihoods support;
- D. provision of sanitation in combination with effective hygiene promotion;
- E. meaningfully addressing housing, land and property rights, particularly the rights of women.

While it is recognised that funding is rarely available for comprehensive programmes, and different actors and agencies provide different services to people in need, humanitarian actors have a responsibility, for which they should be held accountable, to avoid harm, to meet unmet needs, and to empower disaster-affected people.

1.4.3 ACCOUNTABILITY:

CARE India and other shelter actors should greatly strengthen their approaches to community engagement in shelter projects, with the aim to improve community ownership of projects and individual ownership of shelters.

- A. In order to empower people to take charge of their own shelter recovery, and to give people meaningful control and choices, CARE, together with other shelter actors in India, should develop a community engagement approach for shelter programming, incorporating rapid community assessment of shelter needs and capacities, project and shelter design, implementation and monitoring.
- B. CARE and other agencies should develop clearer language to describe what they deliver, and avoid the simplistic use of temporary and permanent.
- C. CARE should develop a standard template for a maintenance manual, to be delivered with all shelters.
- D. All documentation provided to beneficiaries and communities must be translated into their own language.
- E. Projects must have adequate budget for adequate staffing and technical capacity to support partner NGOs and communities and hence to achieve consistent quality.

“A larger initiative of repositioning shelter aid in itself as a process needs to be looked at collectively.”

Christian Aid study

1.4.4 SPECIFIC NEEDS AND CAPACITIES:

Shelter projects should not be seen as the simple delivery of products, and their design must address the different needs of individuals.

- A. All shelter programming should be based on a gender analysis in addition to a more general needs analysis, and should include a gender action plan.
- B. Women should play a leading role in community participation, in receiving assistance and in monitoring implementation of projects at a household level, recognising that women mostly lead on all household responsibilities and are therefore often well placed to take on these roles. Child care arrangements should be provided to ensure women are not prevented from participating because of their child care responsibilities.
- C. All shelter projects should have an integrated strategy for ensuring women's meaningful and equitable ownership of housing and land. This strategy should involve both men and women, and should address inheritance of property.
- D. Shelter project design and implementation should incorporate the IASC Global Protection Cluster *Guidelines for Integrating Gender-Based Violence Interventions in Humanitarian Action*¹, and in particular the *Thematic Area Guides for Shelter, Settlement and Reconstruction and for Housing, Land and Property*.
- E. All projects must have sufficiently flexibility to deliver shelter that meets the specific needs of older people or people with disabilities, whatever these may be. Initial budgeting should assume 15% of people have specific access needs, but this figure must be verified by assessments as it can vary significantly.

1.4.5 RELOCATION PROJECTS:

Relocation projects must be a last resort, and CARE and other agencies should fully explore all options that avoid relocation, together with the community, before proceeding with relocation projects. Communities being relocated must have a good understanding of the risks of relocation and what resources are available to support them.

- A. Where relocation is clearly contrary to the wishes of the community concerned, CARE should not participate in the project and should instead concentrate on supporting them to access effective representation and supporting them in other ways.
- B. Where relocation is unavoidable and is in line with community wishes:
 - i. Relocation sites should be selected which have existing infrastructure and access to essential services. Instating these later rarely happens.
 - ii. The entire community should be included in the relocation project. Projects which relocate only parts of communities lead to fragmentation of communities and isolation of vulnerable groups.
 - iii. Significant extra attention must be paid to developing good governance and access to representation for communities in new settlements.

1.4.6 THE SHELTER SECTOR IN INDIA

- A. **CARE and other NGOs and civil society organisations must continue to work closely and effectively with government agencies, and where appropriate the private sector, to ensure effective response which reaches and meets the needs of the most vulnerable.** This will require strong cooperation and strong advocacy based on expert knowledge and experience.
 - i. Along with enhanced governance approaches in shelter responses, NGOs should strengthen their ability to be a voice for the most vulnerable after disasters and ensure strong advocacy capacity.
- B. **A strong and sustainable India Shelter Forum should be formed** to foster discussion, learning and knowledge management amongst shelter actors in India in order to improve the relevance and effectiveness of shelter responses and to allow the Indian shelter sector to engage in global discussions, access global research and learning and take a leading role in the global shelter sector.

1. www.gbvguidelines.org



2. ACKNOWLEDGEMENTS

This study has been made possible by generous funding from the Happold Foundation. The Happold Foundation's mission is to have growing influence in the development of a community of people working to improve the built environment. It seeks to deliver social benefit through its network of influential members, its programme for personal development of scholars, its support for innovation in engineering education and its engagement with projects that bring great benefit to the underprivileged.

Christian Aid has undertaken a separate study of shelter projects they have undertaken in India, and CARE is grateful that they have contributed very insightful conclusions and recommendations from their study to be included in this report. The summary conclusions and recommendations are included in section 12 and have been carefully considered in the conclusions and recommendations made in this report.

CARE India is thankful to Safer World Communication for support in planning and designing this study and in development of this report.

CARE India would like to express its gratitude to Ms Eilia Jafar- Head Disaster Management Unit for her guidance and support during the entire study. Thanks are also due to the CARE India team of Mr Dev Prakash, Mr Satish Kumar and Mr Ashok Kumar Singh for their support in planning and resourcing the study team.

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CARE India would also like to thank Gursharan Kaur who put together all the logistics for the study team to locate and relocate from one state to the other during the entire study.

3. FOREWORD

BY MR. RAJAN BAHADUR, MD & CEO CARE INDIA

CARE has been working in India since 1950 and currently operates in 14 states of India. Emergency response is a core part of CARE's mandate and CARE India responds to major disasters by providing humanitarian aid and rehabilitation interventions. Core areas of focus in emergency response are food security and livelihoods, shelter, water, sanitation & hygiene promotion and sexual & reproductive health.

In the wake of disasters (such as tsunamis, earthquakes, cyclones and floods) thousands are displaced and rendered homeless. The need for shelter becomes of utmost importance for the disaster affected people, without which they are exposed to numerous life-threatening risks. Women and children are the worst sufferers and require special attention. For CARE India shelter is not just a structure. It is a space that provides security, privacy and a sense of dignity. CARE India has been responding to shelter needs of disaster affected people both in the immediate aftermath of a disaster as well as during the early recovery phase. The range of activities under shelter and rehabilitation support provided by CARE India include provision of shelter, non-food items (NFIs), emergency shelter (temporary), transitional shelter (semi-permanent), permanent shelter, community shelter and repair and construction of public buildings. CARE India has also organized training of its own staff as well as for peer organisations. CARE India is a member of the India Shelter Forum and recognizes the holistic nature of shelter programming and will make efforts to integrate the linkages with other sectors like WASH and protection maintaining focus on women and girls.

CARE India is committed to quality and standards in shelter programming with efficiency and effectiveness. With this very intention CARE India has conducted a Post Disaster Shelter Evaluation in order to evaluate the medium – to long-term effectiveness of CARE India's shelter programmes and recommend measures to strengthen future shelter programmes, whether undertaken by CARE India or other agencies, to most effectively address the complex and interconnected needs of disaster-affected women, girls, men & boys.

I would like to thank Happold Foundation for their support to the Post Disaster Shelter Evaluation project which is for sure going to turn a new leaf in the progress of Shelter sector as a whole. I hope this report will benefit key stakeholders like peer NGOs, Government agencies, academicians as well as implementing agencies nationally and internationally in increasing their knowledge and understanding of improvising on Shelter construction.

I also understand that this is the beginning of an onward journey to ensure safer shelter post disaster. I also see this as an important tool to advocate for the shelter needs of affected communities with a prime objective to respect our fundamental right to Life with Dignity.

4. GLOSSARY

Kutcha houses	Houses with thatched roofs and mud walls
Pukka houses	Houses built with concrete materials
Panchayati Raj Institution	The Panchayati Raj is a democratic system of local government in India, based on the traditional Panchayat system and introduced by constitutional amendment in 1992.
Patta	Government authorised legal title to land
Anganwadi Centre	The word Anganwadi means "courtyard shelter" in Indian languages. They were started by the Indian government in 1975 as part of the Integrated Child Development Services program to combat child hunger and malnutrition. A typical Anganwadi centre also provides basic health care in Indian villages.
Indira Awas Yojana	Government housing scheme for households classified as falling below the poverty line (BPL).
Below poverty line	Below Poverty Line is an economic benchmark and poverty threshold used by the government of India to indicate economic disadvantage and to identify individuals and households in need of government assistance and aid. It is determined using various parameters which vary from state to state and within states.
Shelter	In this report the word shelter is used to designate either: <ol style="list-style-type: none">1. a makeshift dwelling used in an emergency, or2. being protected or shielded from the environment, elements and weather.
House	In this report the word house is used to designate dwellings which provide long-term or permanent housing for their occupants in order to reflect the fact that such homes are much more than just basic shelter.
Scheduled Caste (SC)	The Scheduled Castes and Scheduled Tribes are official designations given to various groups of historically disadvantaged people in India. The terms are recognised in the Constitution of India.
Scheduled Tribe (ST)	Scheduled Castes are sometimes referred to as Dalits.
Other Backward Class (OBC)	Also often called Other Backward Caste, OBC is a collective term used to classify castes which are socially and educationally disadvantaged.
Other Category (OC)	Also referred to as 'Open Category' or 'Other Caste', these are castes which are not formally categorised.



5. INTRODUCTION

Between 2001 and this study in 2015 India has faced a number of disasters, including the tsunami, earthquakes, floods and cyclones. These resulted in widespread loss of life and loss of public and private property. Affected populations were often displaced and left homeless.

Ten of CARE India's disaster responses in the last 14 years (see Table 1), and many other responses by CARE's peer agencies, have included construction of shelter for affected people. The implementation of all these ten projects was done in partnership with local NGOs, an approach which has over many years of experience been shown to improve active community participation, monitoring and ongoing engagement with communities after completion of projects. Furthermore some were in partnership with government (such as the tsunami response in Tamil Nadu in 2004) or the armed forces (such as the response to

the Jammu & Kashmir Earthquake in 2005).

There are various technical standards which apply to disaster response and post-disaster shelter construction in India, including the SPHERE Standards, National Disaster Management Agency (NDMA) guidelines on the management of earthquakes, floods and cyclones, the Indian National Building Code, and building bye-laws.

The NDMA guidelines highlight the importance of and include specifications for hazard-resistant construction, and CARE India's Disaster Preparedness Strategy includes the approach of 'Building Back Better' with the aim to use post-disaster recovery programming to increase resilience of buildings and communities to future hazards.

5.1 This study

This study has been conducted by CARE India with the purpose of evaluating the medium- to long-term effectiveness of post-disaster shelter programmes and to recommend measures to strengthen future shelter programmes in India, whether undertaken by CARE or other agencies, to most effectively address the complex and interconnected needs of disaster-affected women, girls, men & boys, and to assess whether shelter programmes have indeed achieved the aim to 'Build Back Better'.

The study includes a desk review of all ten projects, of which four projects were selected for further in-depth evaluation and field visits. See Table 1 for details of the projects studied.

This report presents summarised findings, conclusions and recommendations for the desk study and for each of the projects visited, then compares the individual findings to produce overall recommendations for post-disaster shelter programming in India.

5.2 Geography

The study covered shelter programmes implemented by CARE during the last 15 years in ten States/Union Territories of India, and furthermore includes reviews of programmes implemented by Christian Aid and SEEDS in 2 states.

An overview of the programmes which are included in the study is given in Table 1, and the locations of the programmes are shown in Figure 1.

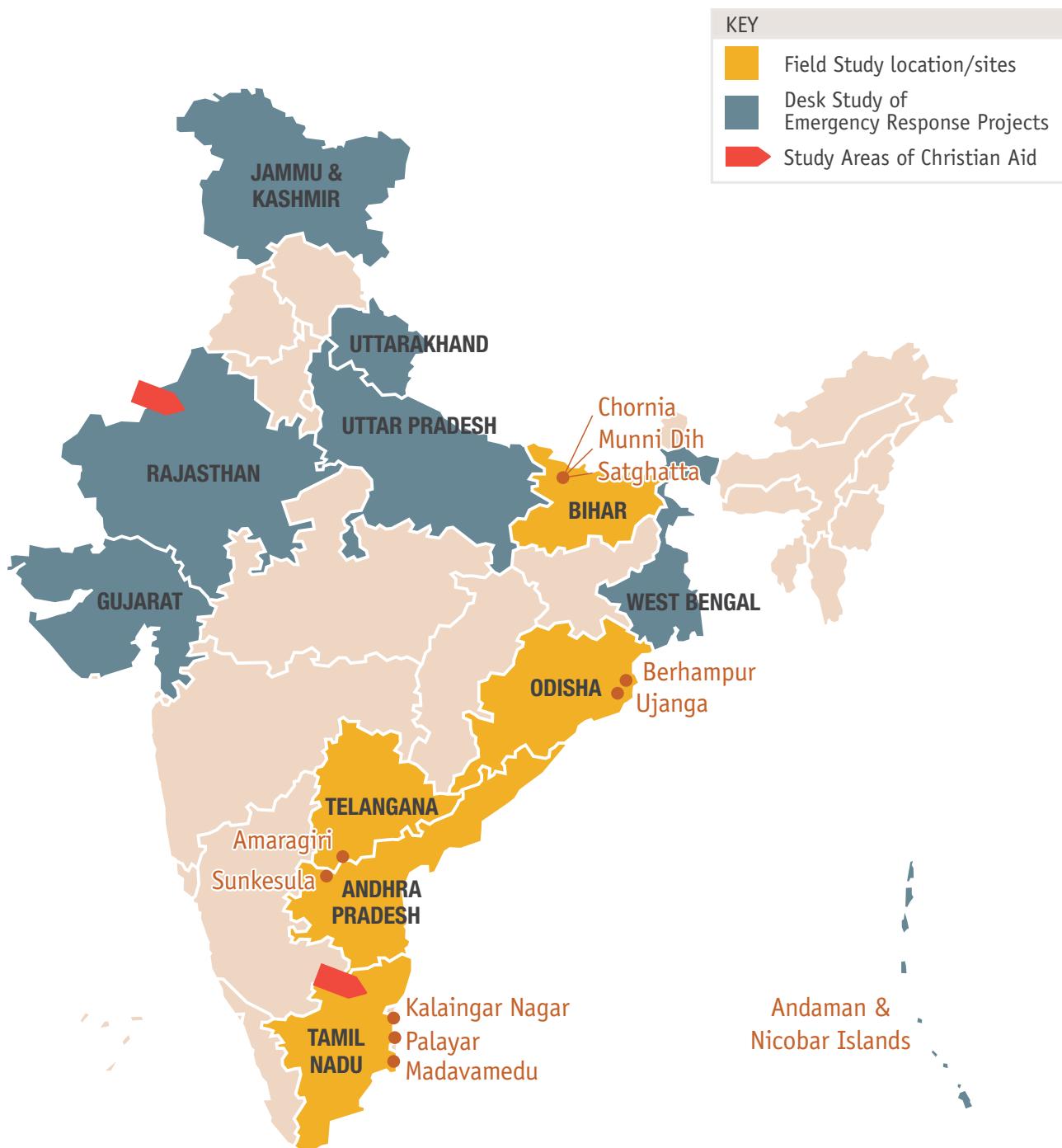
Table 1: Overview of shelter projects included in the study

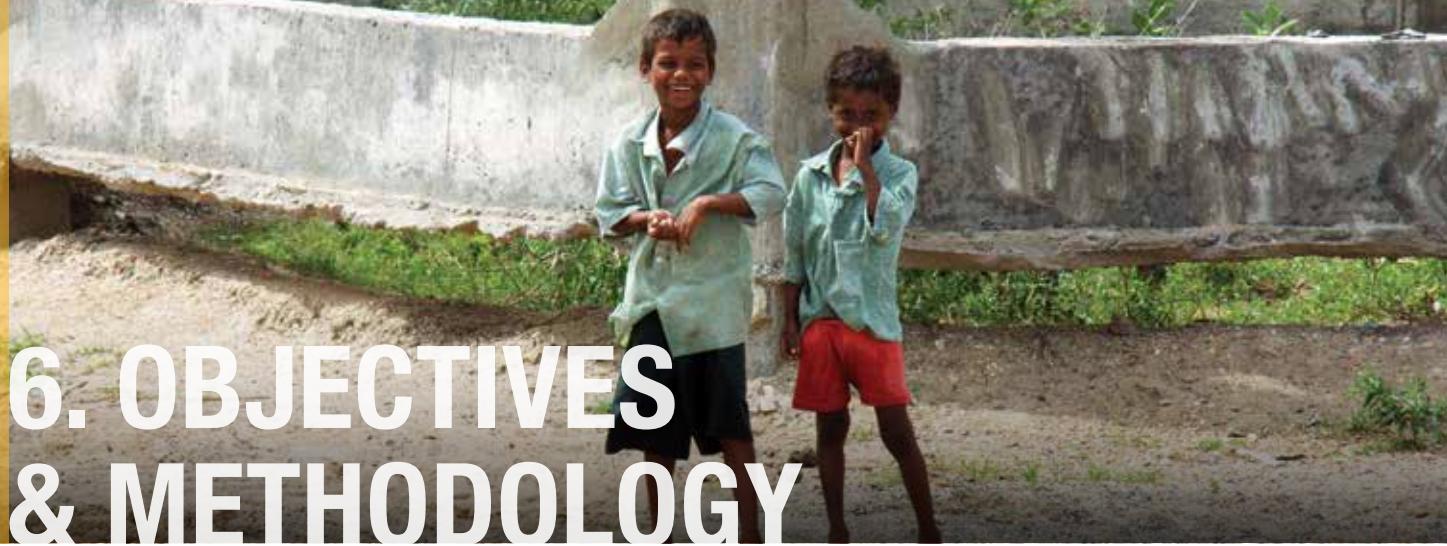
Year	Type of disaster	Geographical area	No. & type ¹ of shelters	NGOs	Level of Study
2001	Earthquake	Gujarat	4999, permanent	CARE, SEDF	Literature review only
2004	Tsunami	Tamil Nadu	1713, permanent	CARE, CREED, SEVAI, Voice Trust, MATA, SOSOD	In-depth
2004	Tsunami	Andaman & Nicobar Islands	286, permanent	CARE, MAM	Literature review only
2005	Earthquake	Jammu & Kashmir	352, transitional	CARE, CEE	Literature review only
2007	Floods	Bihar	145, transitional/temporary	CARE, NIRDESH, ADITHI	In depth
2007	Floods	Uttar Pradesh	75, transitional	CARE, BGSVS	Literature review only
2009	Cyclone	West Bengal	115, transitional	CARE, HDC, RKLS	Literature review only ²
2009	Floods	Andhra Pradesh	148, permanent	CARE, SVK, APARD	In depth
2011	Floods	Odisha	200, transitional/temporary	CARE, Gram-Utthan	In depth
2013	Floods	Uttarakhand	83, permanent	CARE, SHARD	Literature review only

1) The type of shelters given is the description in the project design and does not necessarily reflect the actual durability of the structures

2) Originally it was intended to also visit the response to Cyclone AILA in West Bengal in 2009 but due to the Nepal earthquake on April 25th 2015 the field visits had to be postponed until after the onset of the monsoon season. Consequently, the West Bengal project areas were inaccessible at the time of the field visits.

Figure 1: Emergency Response Project Locations





6. OBJECTIVES & METHODOLOGY

6.1 Objectives

The overarching objective of this study is to evaluate the medium- to long-term effectiveness of post-disaster shelter responses and recommend measures to strengthen future shelter programmes, whether undertaken by CARE or other agencies, to most effectively address the complex and interconnected needs of disaster-affected women, girls, men & boys.

The following themes were studied in order to obtain lessons and make recommendations for future programmes:

- Programme design
- Technical design of projects & shelters
- Habitability and relevance of projects & shelters
- Significance and long term impact of projects
- Comparison with other agencies' projects
- Accountability to affected people

The overarching objective of this study is to evaluate the medium- to long-term effectiveness of CARE's shelter programmes and recommend measures to strengthen future shelter programmes.

6.2 Methodology

A mixed method approach was adopted for the study utilising both quantitative and qualitative data. The study took place between April and August 2015. Terms of Reference, including guiding questions for the study, are included in Annex 1. The study sought to answer the guiding questions by the following methods:

A secondary data analysis of all CARE India's past shelter projects and strategy documents including:

- CARE India overall programme and shelter strategies and donor proposal documents
- Shelter design documents
- State monitoring & evaluation reports

In depth studies & field visits of four selected shelter projects, including:

- Technical and socio-economic household surveys of 254 households which received shelters
- Focus group discussions using semi-structured interviews, including:
 - » Women-only groups
 - » Men-only groups
 - » Mixed groups
- Key informant interviews with:
 - » CARE Regional office staff
 - » Partner staff at state level
 - » Selected beneficiaries
 - » Selected non-beneficiaries
 - » Government officials
- Field observations from the study team

6.2.1 SURVEY

Two different survey instruments were prepared based on the study objectives, to investigate the socio-economic and the direct shelter outcomes of the programmes respectively, including both closed and open ended questions. Questions about whether the project and shelter met people's needs, about involvement of women and about ownership of shelters were included on both surveys as a means of triangulating information about primary project objectives and gender roles in the project.

The survey formats prepared for the study were translated into local languages and pilot tested at field level to verify their appropriateness and applicability prior to the study. See Annex 2.

Enumerators were employed at each project location to undertake the socio-economic survey, and were oriented on the survey questionnaires. The technical survey was carried out by the technical shelter experts at each location except Tamil Nadu, where enumerators were employed. These enumerators similarly received an orientation.

For each survey a sample was taken in each location approximately equal to 10% of the number of households assisted. The sampling was as random as could be achieved, but is not truly random as only respondents who were available at the time of visiting could be included. This was in particular affected by the time of day at which different locations were visited, as in some cases people were away at work when the survey was undertaken.

In the technical survey people were asked to state whether the shelters met the particular needs of women, girls, men and boys. However, respondents struggled to understand the question and to answer on behalf of other members of their household. Many did not answer, so the results of this question were inconclusive and hence have been excluded from the analysis. The focus group discussions have provided better evidence of the gender-appropriateness of the projects.

Table 2: Survey sample sizes

Location	Number of households assisted	Sample size planned	Actual sample, socio-economic survey	Actual sample, technical survey
Bihar	145	15	40	13
Andhra Pradesh	148	15	35	15
Tamil Nadu	1713	171	206	195
Odisha	200	20	24	31
Total	2206	221	305	254

6.2.2 FOCUS GROUP DISCUSSIONS (FGD)

At least one focus group discussion was carried out with recipients of the shelters at each project location. Purposive sampling was used to ensure that focus group discussions included a cross-section of people (ages, gender and caste) in each location. Where possible separate discussions were held with men and women. The gender expert team members facilitated all meetings with the women.

Semi-structured interviews were used to guide the focus group discussions. Two different sets of questions were used, one focussing purely

on socio-economic issues (led by the gender expert) and one on more technical shelter issues as well as some socio-economic issues (led by the technical shelter experts).

Two members team facilitated each discussion with specific roles: one for documentation and other for facilitation. Sharing of the objectives of the meeting before initiating the discussion was mandatory for all team members facilitating the FGDs. This ensured participants understood the reason for the exercise and minimised the raising of expectations of further assistance.

6.2.3 KEY INFORMANT INTERVIEWS

Key informant interviews were carried out involving the following:

- Key CARE staff
- Partner NGO staff
- Government representatives
- Selected households at each location

Purposive sampling was used to select the households to be interviewed, to ensure evidence was collected from a range of households and individuals in different situations and from different backgrounds. For beneficiaries from the community, the same semi-structured interview formats were used as for the focus group discussions. For other people the interview was not structured and interviewees were given considerable freedom to discuss what they thought was relevant.

6.2.4 FIELD VISITS

The study team undertook field visits to see the physical situation of the shelters and settlements first-hand and to undertake focus-group discussions and key informant interviews.

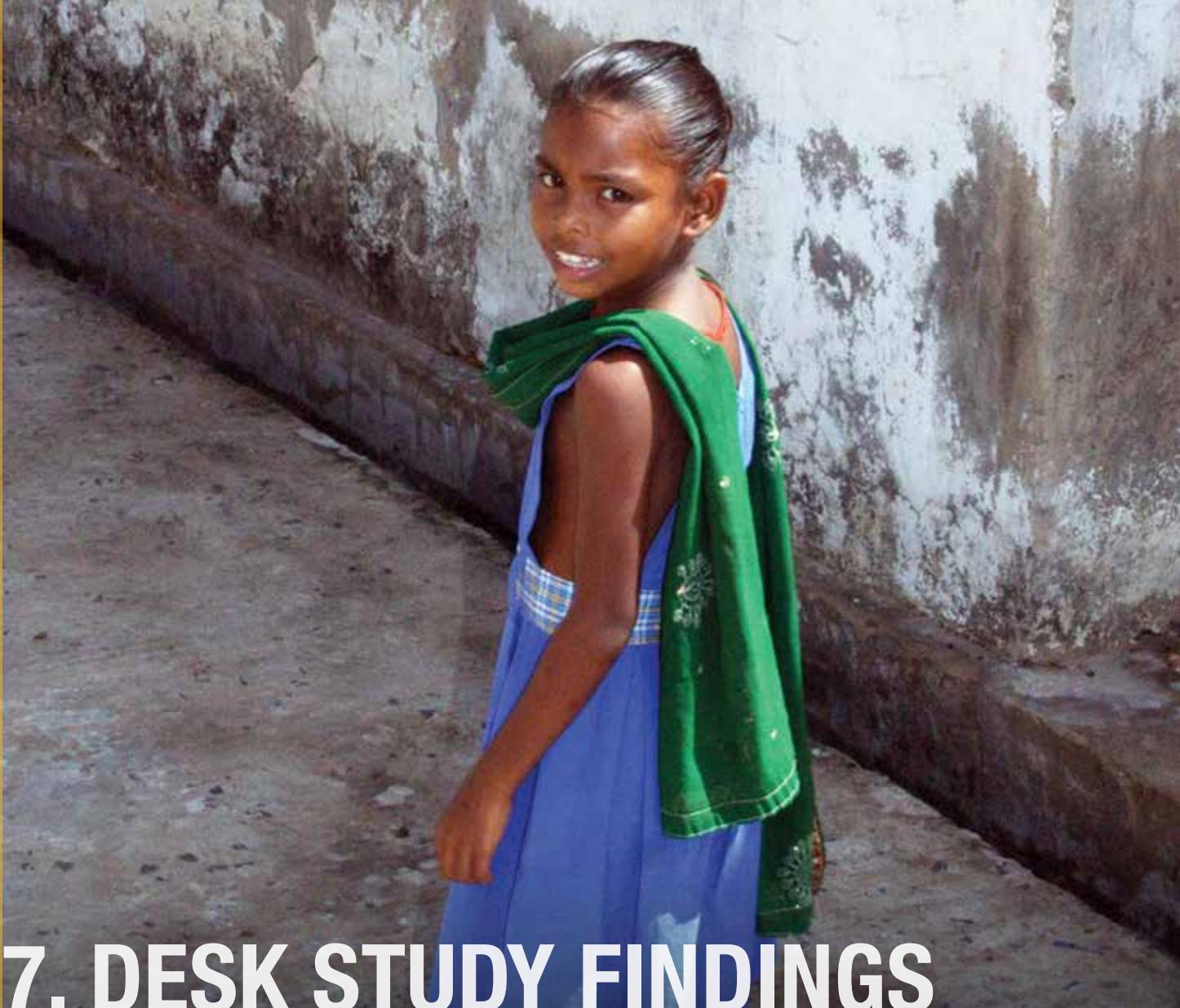
Study team visits took place at the same time as the surveys so that the study team was also able to oversee data collection by the enumerators. This enabled spot checks and quality control. Collected data was reviewed at the end of each day.

6.3 Evaluation Team

The study team included the following members:

Team lead	Rabindra Kumar Gouda CARE India Technical expert (Shelter Consultant)
Study coordinator	Wasi MD Alam CARE India Disaster Management Unit
Technical expert	Tom Newby CARE International Emergency Shelter Team Leader
Gender experts	Lata Krishnan CARE India Sashi Kumar CARE India
Desk Study	Rohit Prasad Volunteer

Assistance was provided by CARE India regional offices and staff from partner NGOs.



7. DESK STUDY FINDINGS

The desk study reviewed all ten of the post-disaster shelter projects undertaken by CARE between 2004 and 2015. In addition to this Christian Aid undertook studies of shelter projects undertaken by them in collaboration with SEEDS India, and contributed findings from those desk studies to this report. For a summary of the projects studied see Table 1.

Formal documents studied include:

- Andhra Pradesh Floods: Project reports
- Tamil Nadu Tsunami: Project evaluation reports
- Andaman & Nicobar Islands Tsunami: Project evaluation report
- Cyclone Aila, West Bengal: Project Proposal
- Bihar and Uttar Pradesh Floods: Project reports, One form humanitarian report
- Odisha Floods: Impact Assessment report, One form humanitarian report
- Uttarakhand Floods: Project report
- Gujarat Earthquake: Evaluation reports

Documentation generally has more significant information on the assistance delivered and the processes of delivery than on the technical quality of construction and on wider impacts other than just providing shelter.

7.1 Programme design

The implemented projects all targeted vulnerable people from Scheduled Castes, Scheduled Tribes, OBC and other minority communities. Assistance was further targeted at people whose shelters had been completely destroyed in disasters, single women, female-headed households and families with disabled people.

There is not much data available on inclusion of different genders in community feedback processes but vulnerable communities were involved in all projects in the identification of beneficiaries. They were consulted as part of process to finalise programme designs and provided labour for shelter construction. Both women and men were typically involved in monitoring of the construction and procurement of construction materials.

In certain cases it was found that the community level committees formed to manage and monitor projects avoided hearing complaints because they were afraid of the implications and did not want to spoil relationships with the NGOs providing them with support or cause construction of shelters to be halted.

The approaches to construction of shelters included both contractor driven and community driven. It was clear from the project evaluations that the use of contractors to undertake construction results in lower community participation in and ownership of the project and the shelters.

It is clear from the desk study that community processes need to be well articulated in the agreements with partner NGOs, with clearly indicated deliverables. The entire process of community consultation process should be discussed clearly and ensure participation from different stakeholders.

Shelter programmes should be delivered in tandem with other interventions to holistically address settlement-wide issues. There is a specific need to strengthen community governance and where possible there should be on-going engagement with the community after completion of shelter projects. Community mobilization could include creation of residents' associations or similar bodies to be empowered to take up problems like inadequate water supply and lack of other civic amenities.

7.2 Technical design of projects & shelters

CARE utilized its experience and expertise to include disaster risk reduction features in the design of the various shelters built and used SPHERE minimum standards to guide the size and design of shelters in all the projects. Where designs were provided by other agencies (such as in the Andhra Pradesh floods, where the AP State Housing Corporation Ltd completed the designs), CARE typically adjusted the designs based on local hazards, context and community feedback.

The construction quality was managed across all projects either by active monitoring by partner NGO and CARE staff and by local teams formed at the community level. Gender-balanced procurement committees were generally formed at the community level. The review of project documentation didn't highlight any quality problems resulting from this approach, and in general the approach was deemed effective in ensuring efficient and smooth implementation.

In the Andaman and Nicobar Islands the project, a relocation project, addressed both housing and settlement-wise infrastructure, supported by government agencies, so it was particularly strong technically.

No serious problems with construction quality were found by the desk study, but there were several non-structural issues with construction quality in the Tamil Nadu tsunami project. The scale of this project was felt to have challenged CARE and its partner NGOs capacity to monitor construction.

7.3 Habitability & relevance of projects & shelters

In some projects there were reports of women being unable to cook inside due to smoke generated from fires and absence of acceptable ventilation.

WASH needs were addressed in many of the projects, but not all. In the Andaman and Nicobar Islands all houses had individual water supply and toilets, while in the cyclone Aila response all houses were built with toilets. In Jammu & Kashmir new water supply and tanks were installed. Evaluations of projects including WASH interventions report high use of toilets, but it should be noted that the evaluations took place at the end of the project implementation and may not reflect lasting practice.

In the Andaman and Nicobar islands women and girls overwhelmingly (98%) reported feeling safe in and around their houses, but also noted that the absence of street lighting was a problem.



7.4 Accountability to affected people

There were no consistent findings on accountability across the different projects. However, several project evaluations noted that a contractor-built approach diminished accountability. In the Gujarat earthquake response in particular it was noted that community participation was weak in all aspects because of using a contractor-built approach at such a large scale. Typically participation and accountability is good in smaller projects and weaker in larger projects.

Accountability to affected people in relocation projects comes out as a particular problem. In the Andaman and Nicobar Islands beneficiaries noted significant problems with access to services and livelihoods. This was despite significant efforts made to involve the community in all aspects of the programme.

7.5 Significance and long term impact of projects

The shelter interventions have consistently provided the beneficiaries with a safe and dignified place to live, although there is variation in whether the shelter provided meets the wider needs of households and the specific needs of individuals.

Many projects also provided employment for the duration of the projects and have avoided beneficiaries falling into debt as a result of the disasters.

It was also found that the projects which had an additional livelihood component along with the shelter construction helped the affected community to recover from the shock of disaster quicker in comparison to the projects which only had the shelter construction component. This was particularly the case with the responses to Cyclone Aila in West Bengal and to floods in Andhra Pradesh and in Bihar and Uttar Pradesh.

Women are generally aware of the joint title to their shelters built during post Tsunami response. Some women highlighted that they feel safer as they are no longer scared of being thrown out of the house, but many do not see how having title to their homes can practically benefit them.

8. BIHAR 2007 FLOODS RESPONSE

In August 2007 severe flooding hit Northern India, affecting particularly the States of Bihar and Uttar Pradesh. 19 of the 38 districts in Bihar (approximately 40% of the land area) experienced flooding, affecting an estimated 10 million people². Around 29,000 houses were destroyed and 44,000 were severely damaged. More than 10,000 people were displaced.

Floods are a recurring phenomenon in the state of Bihar. Almost every year, floods bring lives to a standstill and cause devastation in the settlements. The kutch houses constructed by local communities are often on vulnerable land and make use of local building materials (like mud, thatch and cement tile roofing) and traditional technologies. In floods these houses are prone to being washed away or collapsing due to scouring of foundations and erosion of walls. Almost every year, a substantial amount is spent by the Government and the INGO/ NGO community on temporary shelter.

Focus group discussion participants explained that during the floods most people took refuge on elevated land near their village, although a small number took refuge in neighbouring villages. The vast majority of beneficiaries were displaced from their homes for more than one month.

On asking who they relied upon for support post disaster over half the respondents said NGOs, a little under half said they looked to the Panchayati Raj Institution (PRI, the local council at village level) for support and a small minority said they relied upon government support.

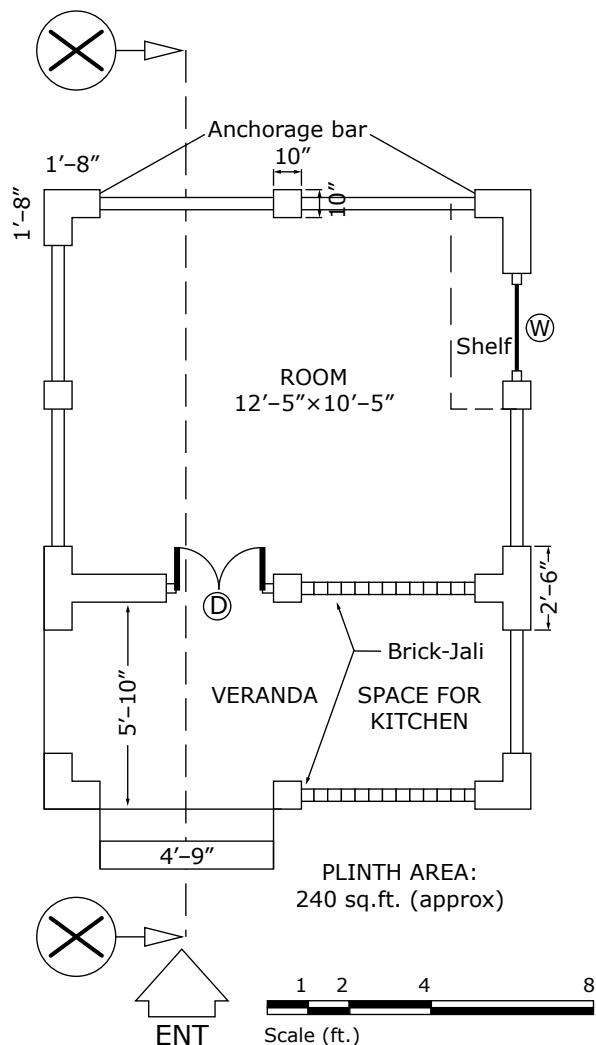


Figure 2: Floor plan of house
(note the brick walls indicated were not built)

2. AlertNet (Reuters Foundation). 8 August 2007.



Figure 3: Two post-disaster houses from the Bihar project showing the structure. It is notable that the mud render has come off and not been replaced. The first picture shows the base of the toilet with the rest of the toilet removed. The second picture shows the veranda area used for cooking.

CARE's shelter response, with local partner NGOs NIRDESH and ADITHI, involved the agency-led construction of 145 houses in remote villages of Muzaffarpur district. Assessments after the 2007 flooding indicated that kutcha houses had suffered most in the floods. A design was developed for small 'transitional' houses incorporating brick plinths and frames and a tiled bamboo roof. The walling was bamboo matting intended to be rendered with mud. Houses had a small veranda and an attached toilet. The intention was that this design would:

- increase flood resistance by raising the houses on a plinth
- provide a durable frame strong enough to survive flooding and high winds
- provide a durable and maintainable roof which maintains an acceptable internal environment
- provide temporary walling that could be maintained or replaced by the occupants
- avoid open defecation

Beneficiaries worked as unskilled labour for the construction of the houses. They helped the skilled masons during earth filling and by weaving bamboo mats for the wall. Selected masons from neighbouring village were trained by a team of architects. Skilled masons were also given hands-on training during the construction. CARE also provided cash for work and information on safer building practices in the communities in which houses were built.

8.1 Studies undertaken

The sample size for socio-economic survey in Bihar was 40, of which 22 respondents were women and 18 men. For the technical survey 13 households were surveyed in two villages (Chornia and Munni Dih), out of 75 households which received houses (17%

of recipients). All households had their pre-disaster houses fully destroyed by the flooding. During the survey we found that 77% of the respondents were male and 23% female. All of the surveyed households (technical) in Bihar were Scheduled Caste.

Table 3: Focus Group Discussions & interviews undertaken in Bihar

Type	Location	Date
Interview with partner NGO staff	Patna	14 July 2015
Focus Group Discussion, men	Munni Dih	15 July 2015
Focus Group Discussion, women	Munni Dih	15 July 2015
Focus Group Discussion, mixed	Chornia & Satghatta combined	16 July 2015
Focus Group Discussion, women	Chornia & Satghatta combined	16 July 2015
Interview with government officials	Patna	17 July 2015

8.2 Findings

8.2.1 BENEFICIARY SELECTION & PLANNING

Survey respondents largely felt that the beneficiary selection process was led by the local NGO. Although some also felt that local leaders and the PRI played a leading role in selection. None of the Bihar respondents raised any concerns with the beneficiary selection process.

Beneficiaries felt that the main criteria for selection of beneficiaries had been whether their houses had been completely destroyed ("fully damaged"). The actual criteria used for targeting shelter assistance included whether households were flood-affected, female-headed, living below the poverty line, were beneficiaries of CARE relief activities during the relief phase or were vulnerable families prone to migration.

Focus group discussions recalled that widows and Schedule Caste communities would be the focus point for the construction of houses. Staff from partner NGO NIRDESH explained that initially the Mukhiya (Village Head) and the Ward Panchayat (the village level council) were contacted to identify the most affected people, and that the Musahar

community were chosen for the shelter interventions. The Musahar are part of the Mahadalits, the most marginalized community amongst those affected. Community meetings were held and 35 Musahar households were suggested by the villagers. The Panchayat also suggested masons for the mason training, and NIRDESH later employed some of these masons to undertake construction work.

NIRDESH staff explained that there was a conscious effort to integrate vulnerable beneficiaries while assessing shelter needs. Marginalized groups of people like women headed family, physically disabled people, elderly and child headed household were considered as beneficiaries for the intervention on an equal basis. NIRDESH staff also said that in Bihar one of the criteria for beneficiary was whether households owned land for house construction. They found that of the beneficiaries selected, 55% had legal title in the woman's name and 45% in man's name; none had a shared title.

All those surveyed felt the process of this project was fair (but it should be noted all respondents were beneficiaries). Some non-beneficiaries in the focus group discussions had believed that since others received houses they would too in due course, but after 2 years they had given up on this hope. They did not express anger but it appears the selection process was not well understood by all.

A local architect (Anindya Sarkar) undertook a study of local building typology and context. Detailed individual and group interviews were undertaken to identify local construction techniques, building materials and local knowledge. This information fed into the design of the project and the houses.

8.2.2 SHELTER AND SETTLEMENT

All survey respondents agreed that the amount of space in the house was adequate, but all also agreed that there was no provision for private space. Approximately half of those surveyed had added a kitchen, or enclosed the veranda to form a kitchen, while the remainder cook outdoors. Most of the survey respondents said that the houses built by CARE were the same size or bigger than their pre-disaster homes. Only 8% had bigger houses before.

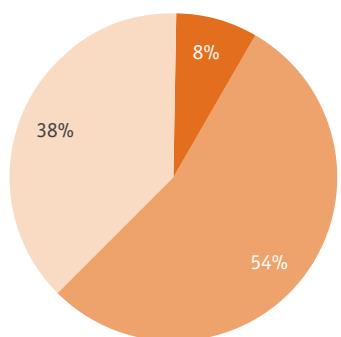
When asked whether houses were resistant to various hazards those surveyed demonstrated a lot of confidence in the houses. Given that these buildings were constructed as transitional shelters (concrete columns with bamboo walling and timber framed roofs) this is in particular an interesting

finding. Women in one focus group discussion noted that the design of the houses was better than what they had before, and that because of the plinth no water or mud enters their houses now.

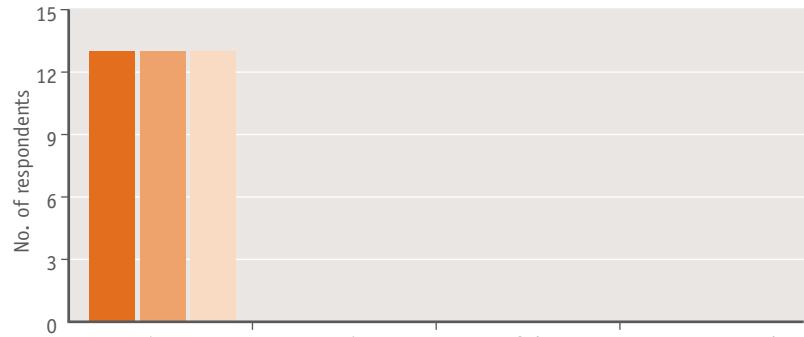
All respondents felt that material quality, construction quality and the quality of technical supervision on the project was good and that the houses provide comfortable lighting and ventilation. Almost all survey respondents said that there is some leakage in their houses during rainy season, but there were no reports of damage due to other natural hazards.

All those surveyed agreed that the houses were maintainable. Although all had plans to extend none of the respondents had actually been able to upgrade or extend their houses apart from a few who had filled some of the walls in with bricks instead of the original bamboo. It was generally agreed that building materials were readily available locally. It was evident from group discussions that many were unwilling to extend or upgrade their houses as they were expecting to receive a house from the government's Indira Awas scheme. However, the focus groups also agreed that the houses were lasting well and were generally in good condition given their age of 8 years.

SIZE OF PRE-DISASTER HOUSE



PERCEPTIONS OF RESISTANCE TO HAZARDS



KEY

█ Bigger	█ Smaller
█ Same size	█ Not answered

KEY

█ Wind/cyclones	█ Earthquakes
█ Floods	



Figure 4: Photos showing toilets with damaged or removed enclosures.

The cost of maintenance was raised in one women's focus group, saying that before the project their house used to be destroyed every year during the rainy season, costing between Rs 5,000/- and 10,000/- to repair in addition to the labour needed, which was typically provided by the women.

In contrast one woman said she had only spent Rs 1,500/- on her house since the floods. However, the women also said that it's expensive for them to do the less frequent but more significant maintenance that their new houses require: they feel they have to spend more money at one go to repair. NIRDESH staff explained that they had provided some advice on maintenance, but not specific guidance for the materials used. From the field visits it was evident that maintenance to walls and roofs was being neglected in many houses.

All survey respondents felt that in general the houses provided for their social, religious and cultural needs. Many beneficiaries have designated a space in the living room for religious worship, something that was not included in the design.

When asked whether the houses met the specific individual needs of men, women, boys and girls, many survey respondents did not answer. This could be for a variety of reasons, including a lack of understanding of differential impact and needs, an unwillingness to answer on behalf of other members of the household, households not including some of the groups or the surveyor not explaining the question adequately. Those who felt the house design did meet the specific needs of particular inhabitants mentioned that the house is providing safety to elders and children. Some said that having space for a kitchen inside the house ensured safety for women and girls and that having a hand pump and toilet near to their house addressed their daily needs.

The focus group discussions highlighted that the houses were beyond the capabilities of local people to construct, and that this led to masons from elsewhere being recruited and trained to build the house, although some local labour was used. It was noted that this meant the training had no lasting impact on the community or the recipients of houses. Men said that the training was available to anyone who was interested, while women said they were 'not considered for the training'. Women typically supported construction largely by doing manual labour.

8.2.2.1 WASH

The houses were built with attached toilets. Staff from NIRDESH explained that there was initial reluctance from beneficiaries to have toilets attached to houses, but after explanations of the importance the beneficiaries agreed. In one of the focus group discussions women said they had never used toilets prior to this construction and that they prefer open defecation in the evenings. They felt that the location of toilet was wrong and that in their culture it is considered unhealthy if cooking is done near the toilet, and they fear that the pit will quickly fill up and it will be difficult for the family to stay in the house. It was clear from the field visits and focus group discussions that none of the toilets were now in use, and indeed the vast majority have had the enclosures removed. Many are used for other purposes, such as washing kitchen utensils and clothes. One toilet was now used as plant pot.

One woman explained that she had used the toilet for a whole year after the end of the project, but had been subject to ridicule in the village so eventually returned to open defecation. She felt that the toilet was important, especially for women and adolescent girls.

One of the focus group discussions highlighted the fact that tube wells were provided, shared between 5-7 families. Women explained that before they had only one water source for entire village and used to face significant difficulties. They explained things were greatly improved and the tube wells brought relief for all and especially for the women.

8.2.3 PARTICIPATION & ACCOUNTABILITY

The local NGOs put in place a number of measures to allow participation and monitoring of the project, including construction and procurement monitoring committees and complaints mechanisms.

None were able to answer the survey question on whether the household had been consulted on the design of the house, suggesting that any consultation was cursory at best. Similarly, in the focus groups people struggled to remember how the committees for beneficiary selection and monitoring had worked. This was especially the case in the women's focus groups, suggesting that women were less actively involved than men (NIRDESH had formed a monitoring committee made up of 4 men and 2 women which worked in parallel with NIRDESH's engineer).



Figure 5: Photos showing toilets with damaged or removed enclosures, with one being used to grow vines. Note also the variation in the level of maintenance carried out on the mud render.

Only three survey respondents felt they had played a role in monitoring construction. All those questioned agreed the community had made no direct contribution to the project (cash, in-kind, unpaid labour or otherwise). All survey respondents however felt that they had been adequately involved in the process of planning the shelter assistance. Most of the survey respondents were aware of the village committees formed for monitoring of the shelter project, but a small number of female respondents were not aware of the committees. All respondents knew about the complaints mechanism set up during the project and 30% of respondents said they had used the mechanism to give feedback or make a complaint. Importantly the overwhelming majority of respondents felt that their feedback was not incorporated in the project.

All survey respondents said that women were made part of all processes and were adequately involved in all decision making for planning process and felt women were consulted on the design of the house. Almost all said that the suggestions and feedback provided by women were considered in the design. This largely contradicts the findings from the focus group discussions, where women generally seemed to have little recollection of substantive involvement in the projects. All respondents answered that information about the house construction was shared by CARE and Partner NGO staff, but 30% of respondents felt this information was not sufficient to give good understanding of the project.

It is notable that CARE appeared to be the most visible actor in the process of constructing houses in this project. All survey respondents identified CARE as having undertaken design, construction, construction monitoring, control of corruption and none identified the partner NGO. This is most likely due to the fact that it was identified surveyors from CARE undertaking the survey causing people to tend to note CARE's contribution rather than others. It should also be noted that the houses have CARE logos on them, but no logos from the partner NGOs. In the focus group discussions some could not remember the names of any of the NGOs who had worked on the projects and in one discussion none could remember anything other than a 'foreign NGO' being the organisation that helped them.



Figure 6: House with CARE logo. Note the house on the right has had one of the bamboo wall panels replaced

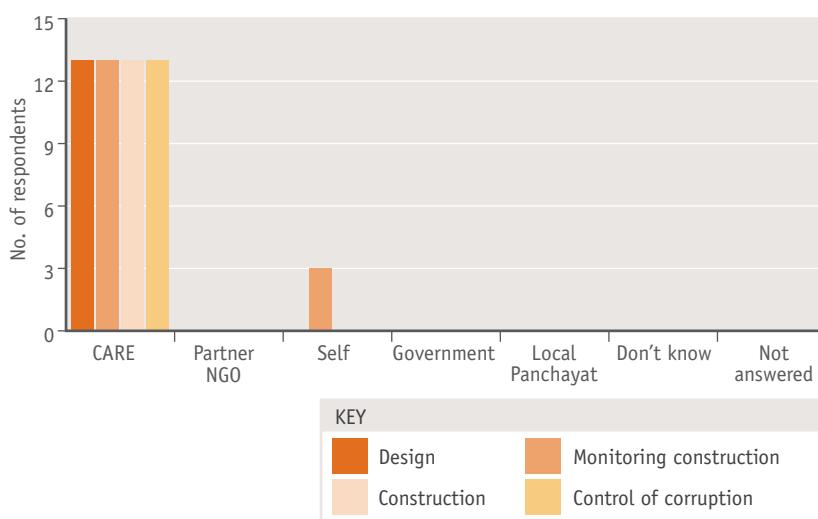
8.2.4 OWNERSHIP

All survey respondents stated that their land title was held by a man while the title of their house was held by a woman. All said they had papers for the house title. As one focus group discussion explored, ownership was given to women in the form of a certificate with the CARE logo. The Block Development Officer (BDO) and Village head also put their signature on the certificate. The certificates were distributed by the Panchayat head, a representative from the local NGO and CARE, in front of all villagers.

However, from the women's focus group discussions it was evident that women in Chornia village were not aware of the ownership of their houses whereas

women of Satghatta village were aware that their names are on the house titles. Interestingly women in the focus groups were not clear on why they had been given joint ownership of the houses. One of the women suggested that it was because she played an active role in and participated in all meetings during the construction. It was also suggested that it was because the men in the family were normally drunk. It appears that nobody explained to women why their names were included on titles or discussed with them their thoughts on equal ownership rights.

PERCEPTIONS OF WHO DID WHAT



Case study: The story of Lalita Devi

Lalita Devi lives in Chornia village of Berua Panchayat in Gayaghat block of Bihar State. She is married, with four children. Her husband works as a daily wage labourer, and has now been joined in this work by her elder two children, who are over 18. Despite this the family is very poor. Before the flood they had no savings.

During the flood their house and all their possessions were completely washed away. The family stayed in a community shelter for two months, supported by CARE and government agencies. The children had to leave school and start work in order to survive. They were selected to receive a house from CARE.

Currently Lalita and her family are able to save a little money for the future. Lalita feels that the shelter support from CARE enabled them to survive and developed the self-confidence of the family. However, she also explained that the house is no longer sufficient because her children have grown up and more space is needed. She is hoping to receive a concrete house from the Indira Awas Yojana scheme.

Case study: The story of Girija Devi

Girija Devi took an active part in one of the focus group discussions. She is married and has one son and four daughters. Sulinder Majhi, her husband, is a migrant worker and earns Rs 6-7,000/- per month. During the agricultural season they both work as labourers, earning Rs 50/- per day.

Girija was only able to study until third standard, but she understands the importance of education and sends all her children to school. Her children study every evening and she never allows their studies to be compromised.

"I will try my best to educate my children as far as possible and allow my daughters to marry only after 18 years".

Girija explained that:

"this house has brought economic benefits to our family. Earlier my family used to spend around six to seven thousands in repairing our shelter every year."

Girija is now able to save much of that money, increasing their resilience against periods when they have no work. Girija is concerned about her family's health, as they are unable to use the toilet and there is no functioning health centre nearby.



Photo credit: CARE/Lata Krishnan

8.3 Project conclusions

8.3.1 PROGRAMME DESIGN

There is considerable satisfaction with the programme and the houses, and generally consistent answers from the surveys and focus group discussions. All felt that the programme had been completed in a timely fashion, that the support from CARE was good and that the location of their houses was acceptable.

Importantly, all respondents said that avoiding relocation meant their livelihoods were accessible from the location of their homes and at the focus group discussions it was noted that both boys and girls could attend school easily.

All survey respondents agreed that their families' needs had been met by the house, that they felt compensated for their losses in the floods and that they felt safe in and around the house. Findings from focus group discussions were generally the same. The programme met its intended objectives.

The project provided safe, dignified shelter for all its beneficiaries, and indeed appears to have ensured safer, more durable housing than people had previously. It is particularly notable that the provision of a brick plinth has effectively resulted in much more flood-resistant housing, a DRR success.

In terms of meeting specific individual needs and looking at the sustainability, there were some gaps. The programme did not identify, and hence could not meet, all such needs. The improved durability

of the structure has reduced the burden on women of having to repair the home every year, but failing to provide associated hygiene promotion has meant that the construction of toilets failed; women and adolescent girls are particularly affected by this.

Although it has been a long time since the project was implemented, it appears that beneficiary selection processes were fair and adequate. While there were clear efforts to enable participation from the community and sufficient consultation was done to ensure the programme was adequate and appropriate, opportunity for further meaningful beneficiary participation seems to have been limited due to the agency-driven, contractor-built approach to constructing the houses. It should be noted that this approach led to rapid delivery of the project, with houses built in 2 months. Participation of women appears to have been less meaningful than of men, and there is evidence of the programme reinforcing rather than challenging some gender stereotypes.

The programme was well coordinated with government and local authorities. No other agencies were implementing projects in the same locations. Working with partner NGOs is a positive approach which builds the capacity of the local NGOs and increases speed of delivery. However, in this project the partners were more sub-contractor than equal partner and visibility and credit for the work has largely been given to CARE.



8.3.1.1 RECOMMENDATIONS

1. Future programmes should be better at identifying and acting upon specific needs and specifically should identify opportunities to empower women and girls.
2. While using a partner NGO as a sub-contractor can result in effective project delivery, future projects should provide more equal visibility to partners and should consider how to better leverage the knowledge and capacity of partners, and to build partners' capacities, as a partnership which is more one of equals.

8.3.2 TECHNICAL DESIGN & CONSTRUCTION OF SHELTERS

The design and construction of the houses is appropriate to the context and provides a degree of robustness against flooding and wind. An appropriate balance has been struck between using locally available skills and materials and increasing the robustness of the houses. The resulting resistance to flooding in particular, due to the brick plinth, was noted by the beneficiaries and represents a real improvement in their resilience. Although the buildings have not been exposed to major flooding, they have proved resistant to the rainy season and have kept their occupants consistently dry.

Construction quality is generally good, with the plinth, frames and roof being well built. The bamboo walls, and in some houses the tiled roofs, are generally in need of maintenance. This has typically not been done, with a few exceptions. Two houses, which appear to be totally unoccupied or only occasionally occupied, are in very poor state and need more repair. The more durable nature of the houses, compared to the previous housing stock, has resulted in significant financial savings for the owners but has also led to a lack of knowledge and understanding about required maintenance

regimes. Although there is anecdotal evidence of people purposefully not maintaining houses in expectation of receiving Indira Awas houses from the government. The lack of knowledge and the higher cost of the less frequent maintenance required has meant this maintenance is not being done.

Despite maintenance being required on many houses, the houses still provide dignified and safe living spaces, although this may change in the coming years if maintenance is not done. Beneficiaries remain very happy with the houses. As the primary frame of the houses is still robust and intact, it is likely occupants will be forced to undertake work on the less durable parts of the housing as the walls and roofs deteriorate further.

Construction training given did not benefit the affected communities, and instead benefited masons from elsewhere (which is not, in itself, a negative). Women did not feel they were able to take part in training and were not offered the option of playing any other role but their traditional role in construction. The use of a contractor-built rather than owner-built approach has led to good construction quality but less understanding and ownership of the house structures. It is likely this contributes to the maintenance problems identified.



8.3.2.1 RECOMMENDATIONS

- 1. Future programmes involving construction of houses should pay much more attention to maintenance requirements. Recipients should be given clear instructions on how to maintain each part of their homes, with anticipated durability (life to first maintenance) of all key parts and estimates of maintenance costs. This should apply whether houses or parts of houses are intended to be permanent or temporary.**
- 2. Participation of affected men and women in design and construction of houses should be increased in future programmes, even in agency-driven, contractor-built programmes, to increase understanding of the buildings, allow communities to effectively provide feedback on the design and increase ownership of buildings.**

8.3.3 HABITABILITY & RELEVANCE OF SHELTERS

Recipients of houses were generally pleased with them, even 8 years after the disaster. The houses were mostly of a similar or larger size and of more robust construction than the buildings people had lived in before, and were therefore seen as an improvement in people's situation. The veranda has been used by some as a kitchen (as intended) and by others as a place for worship, and is a valuable part of the building. The houses have met or exceeded people's expectations and satisfaction with the programme is high.

Provision of brick plinths and strong primary frames for the houses has greatly increased the habitability and resilience of them to annual weather cycles. Combining this with cheaper timber roofs and bamboo walls has made for a cost-effective response which aligns with beneficiaries' expectations.

Provision of hand-pumps had also improved the water supply compared to the pre-disaster situation, but the provision of toilets has failed to stop or reduce open defecation. The WASH aspects of the programme, implemented as part of a shelter response, focussed on the infrastructure but not on the hygiene promotion. Although there were women in the community who preferred using toilets, they were not supported by the programme and community pressure forced them to revert to open defecation.

As the project re-built housing in the existing community without relocation, access to markets, livelihoods, education and other services remains good.



8.3.3.1 RECOMMENDATIONS

- 1. Shelter programmes which include WASH interventions must have access to sufficient WASH expertise and resources to ensure the investment in infrastructure is supported by appropriate hygiene promotion and behaviour change programming. Women and girls, especially adolescent girls, should be actively engaged in this programming.**
- 2. Where-ever possible post-disaster recovery programmes should avoid relocation as the outcomes from re-building in-situ on wider livelihoods and well-being are usually better.**
- 3. Design and provision of post-disaster shelter programmes must take the expectations and aspirations of beneficiaries into account very strongly to ensure that expectations are effectively managed and addressed. Beneficiaries' perceptions of the value and success of shelter projects depends largely on their expectations and aspirations.**
- 4. Investment in effective DRR features and ensuring key elements of the shelters' structures are robust, even if other parts are temporary, is a cost effective way to combine emergency response with increasing longer term resilience. Future programmes should investigate similar approaches with clear analysis of where investment in permanent structure elements is justifiable.**

8.3.4 SIGNIFICANCE & LONG-TERM IMPACT

The floods response project constructed 75 houses (and an additional 75 in a different location, not visited). Compared to the overall need, with an estimated 29,000 houses destroyed, this meets less than 1% of the need.

While the DRR measures implemented in the houses have been successful, the contractor-built approach used for the project has limited the transfer of ownership, skills and knowledge to the community. It is unlikely the community could replicate the measures without external support, and similar houses remain unaffordable without improvements in the economic situation of the community. No evidence was seen of house designs being replicated even though the plinth in particular was greatly valued. However, the increased durability of the houses has allowed households to make savings in maintenance costs freeing up resources for other priorities. The programme has greatly supported the recovery of flood-affected communities who were directly assisted, but has had limited wider impact.

Housing, land & property rights were addressed by giving the title of houses to women wherever possible (noting that men generally own the

land). This was successful in that women now have legal right to the houses, but this appears to have only superficially empowered women as they were not involved in any discussions around the reasons for them having title and there is little evidence of any effect on power dynamics or men or women's understanding of gender roles.

The project has had some effects on empowerment of women, by reducing the burden they face from maintenance of houses. However, other opportunities to empower women were missed; in particular, they were insufficiently supported to use toilets even if they preferred to do so.

In the communities visited the beneficiary selection appeared to have been fair and was well accepted by communities, and the programme had contributed to the resilience and cohesiveness of the communities. Overall, the programme achieved its intended impact to provide safe and dignified shelter, and additionally has increased the resilience of house recipients.

Given the increase in robustness of houses and the effective recovery of and improvement in living standards of the communities' supported, the project was cost effective. However, the scale of the project was small.



8.3.4.1 RECOMMENDATIONS

- 1. Shelter programmes should aim to meet a larger proportion of the need without compromising on the inclusion of key DRR features in shelters. Future programmes should consider approaches which empower more disaster-affected people to build dignified shelters incorporating features to make them safer and more robust.**
- 2. Better understanding of the needs and aspirations of women and girls in future projects, coupled with sufficient resources to act upon that understanding, will allow projects to support and empower them. Post disaster recovery projects should have specific budget set aside to allow inclusion of measures to empower vulnerable and marginalised groups.**
- 3. Providing land or house titles to women must be accompanied by open discussions with men and women about gender equality, the reasons for equal title and by raising awareness of women's rights.**

8.3.5 ACCOUNTABILITY

CARE, NIRDESH and ADITHI implemented good community consultation and feedback mechanisms. Due to memories fading over the 8 years since the project it's difficult to assess to what extent the feedback of affected people affected the project. It is clear that the agency-designed approach did limit the ability of people to affect the design of the houses or the project. This has not done any harm in this case, but as noted above may have limited the ability of the project to empower marginalised groups or to have significant wider benefits beyond the direct objectives of the programme.

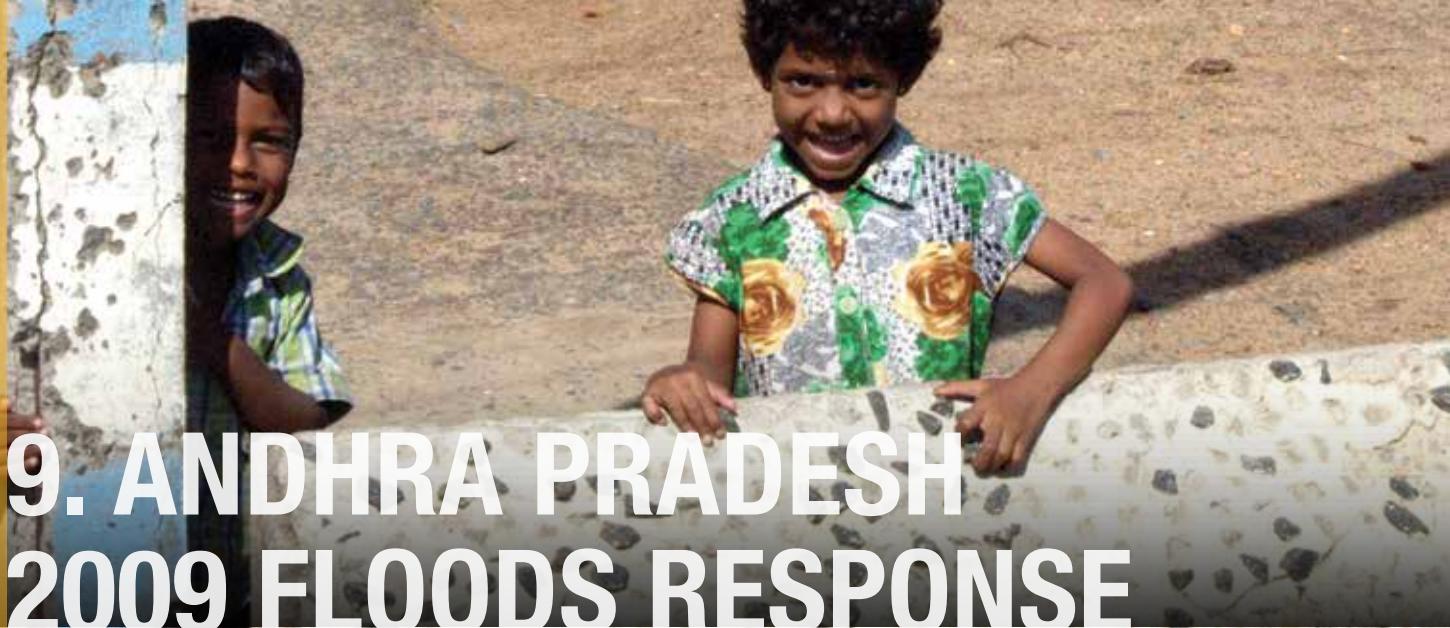
Few of the beneficiaries remembered the significant involvement of a local partner, largely due to the much higher visibility of CARE in the project.

Local partners do have a long-term presence in the region and an on-going relationship with the communities, which has the potential to increase accountability to affected people in the longer term.



8.3.5.1 RECOMMENDATIONS

1. Even with agency-designed, contractor-built projects it is necessary to involve the community very early in the project so they can meaningfully influence project and shelter design. In particular, meaningful engagement of women and girls will lead to improved outcomes.
2. Partner NGOs should be given equal visibility with CARE and given a mandate by CARE to provide on-going feedback to CARE after the end of projects, in order to feed into continual learning and highlight any problems after CARE has ended its direct involvement.



9. ANDHRA PRADESH 2009 FLOODS RESPONSE

In September 2009 the Krishna River and Tungabhadra River overflowed, and the water levels necessitated the release of waters from the Nagarjunasagar Dam and Vijay Awada's Prakasam Barrage. This inundated around 400 villages in Kurnool, Krishna, Guntur and Nalgonda districts of Andhra Pradesh. Over 1,300,000 people (13 lakh) were affected. The floods were considered the worst in over 100 years.³⁴

Andhra Pradesh sees frequent floods and cyclones, which can be very destructive. Between 1892 and 1977 the coastal districts of the state were hit by 56 cyclones. Almost half of the storms in the Bay of Bengal become severe cyclones, often accompanied by storm surges. Low lying areas along the coast are particularly vulnerable to extensive flooding and sea water incursion. Andhra Pradesh also has a high population density along the coast. Disasters are often exacerbated by a lack of maintenance of flood protection and irrigation systems, drains, embankments etc. and a lack of comprehensive coastal zone and delta management.

Scheduled Castes and Scheduled Tribes and the rural poor who relied on micro enterprises like weaving were particularly hard hit. CARE responded in two locations, focusing on affected people from marginalized communities. The locations were the village of Sunkesula in Kurnool district and Amaragiri village in Mahbubnagar District. Sunkesula is a large village near the Nagarjunasagar Dam which was severely damaged by the floods.

It is a mixed community with people from Scheduled Castes, Muslims, Christians and a community of puppeteers called Bommalatta. Gundlapenta was home to a community from the Chenchu tribe, and was completely destroyed. Inhabitants lost their houses, fishing nets and livestock, and all household belongings completely swept away.

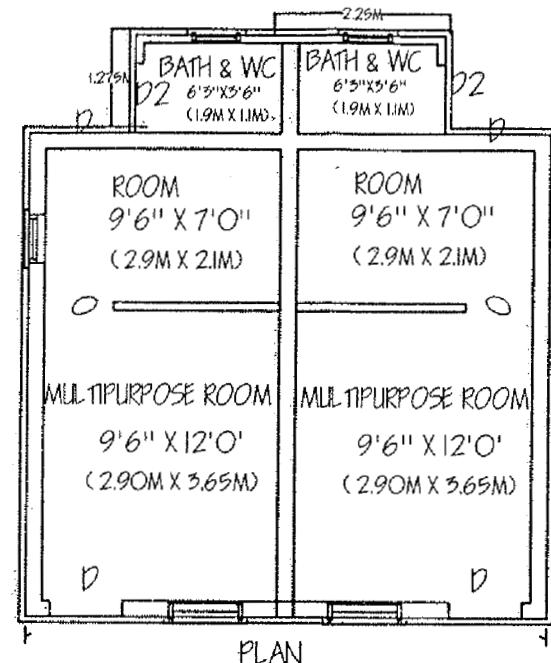


Figure 7: Initial design of houses before beneficiary consultation

3. Andhra Pradesh Floods, Sphere India Situation Report, 5th October 2009. http://reliefweb.int/sites/reliefweb.int/files/resources/F1BE94903C26C4C6852576460063E054-Full_Report.pdf

4. http://news.bbc.co.uk/1/hi/world/south_asia/8292606.stm



Figure 8: Houses built in Sunkesula village showing patios and lean-to cover added.



Figure 9: Houses built in Amaragiri village. The house on the left has had a staircase added, while the house on the right has had a lean-to kitchen and patio built.

Table 4: Focus Group Discussions & interviews undertaken in Andhra Pradesh

Type	Location	Date
Interview with partner staff from APARD	Kurnool	18 July 2015
Focus group discussion – mixed	Sunkesula	19 July 2015
Focus group discussion – women	Sunkesula	19 July 2015
Focus group discussion – women	Amaragiri	20 July 2015
Focus group discussion – men	Amaragiri	20 July 2015

Following assessments, the Government of Andhra Pradesh decided to relocate the families of Gundlapenta village to the nearby Amaragiri village, which was in a safer location. With partner NGO SVK, CARE constructed 48 permanent houses on the outskirts of Amaragiri to shelter all the previous occupants of Gundlapenta, and also had an associated livelihoods programme providing goats.

In Sunkesula it was decided by the government to relocate the most affected, most vulnerable households to a new location on higher ground around 1.5km from the existing village, on the understanding that CARE would construct the houses and the government would provide roads, water supply and services. 100 permanent houses were built in Sunkesula. To meet the costs of the houses the government provided 45,000 rupees and CARE provided 70,000 rupees per household. In Sunkesula CARE worked with local partner NGO Awakening People's Action for Rural Development Society (APARD).

Both projects included a process of settlement planning led by CARE.

The houses built were pukka houses with a concrete frame and roof. They were built in pairs with a communal dividing wall, and designs varied slightly in Sunkesula and Amaragiri.

9.1 Studies undertaken

The sample size for the socio-economic survey in Andhra Pradesh was 35, including 22 from Sunkesula and 13 from Amaragiri. All respondents were female. The sample size for the technical survey was 15, including 8 from Sunkesula and 7 from Amaragiri. 6 (40%) respondents were male and 9 (60%) female.

9.2 Findings

Those displaced by flooding were accommodated in relief camps for up to three months, after which they were able to return to their land. Those surveyed in this study explained they took refuge in Panchayat buildings if possible or higher land near their villages, and most were displaced for over a month. Chenchus in Amaragiri Village explained they spent several days out in the open on hillsides.

In both Sunkesula and Amaragiri survey respondents said that they depended entirely on NGOs for any support during the disaster.

Vulnerable groups

CHENCHU TRIBE

The Chenchu are a Schedule Tribe living the Nallamalai Hills in the districts of Kurnool, Prakasham, Guntur, Mahbubnagar and Nalgonda in Andhra Pradesh, with a total population of around 41,000 . They are very marginalised and disadvantaged. The literacy rate amongst Chenchus is 25% for men and only 10% for women. The primary occupation of Chenchus is fishing, complemented by goat rearing and Non Timber Forest Products (NTFP) collection.

BOMMALATTAM

Bommalattam is a form of puppetry traditionally practised in Tamil Nadu. Once widely practised by puppeteer communities, who passed the art from generation to generation, there are now few families that perform the puppet shows.

Bommalattam puppets are made of cloth, wood, leather and other materials, and the puppets are controlled with strings and wires. Highly skilled and experienced players stand behind a screen, unseen by the audience, and move the puppets. A Bommalattam troupe includes five to eight members, but a single puppeteer presents the whole show.

9.2.1 BENEFICIARY SELECTION

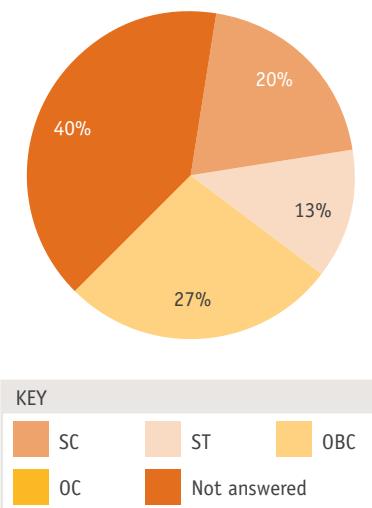
Criteria for selection included whether houses were destroyed (“fully damaged”) and furthermore targeted people from marginalized communities. Staff from the local partner NGO, APARD, explained that the beneficiary selection in Sunkesula was extremely difficult. They had to select 100 households out of 650 households with destroyed houses, all in considerable need. Those with the least assets and lowest incomes were selected, and women-headed households were prioritised. It was noted that all had patta (land title) in their existing locations and had lived there for around 15 years before the disaster. APARD staff said that there were some tensions resulting as only a minority of those affected received houses, and that despite further funding being mentioned at the time but never materialising.

In Sunkesula the beneficiaries were a mix of Scheduled Caste, Other Backward Class (OBC), Muslims and people from the Bommalatta community. In Amaragiri all beneficiaries were from the Chenchu tribe.

Most survey respondents stated that beneficiary selection was undertaken by NGOs, although a small minority said that the Panchayat also played a role in selecting beneficiaries. All survey respondents agreed that beneficiaries were selected on the basis of having fully destroyed houses. A small number also identified women-headed households as being targeted for assistance. All households surveyed had their pre-disaster households fully destroyed by the flooding (it should be noted that Chenchu respondents in Amaragiri felt that they had no houses before as they lived in makeshift shelters).

No survey respondents reported any dissatisfaction with the beneficiary selection and all thought it was fair; but all those surveyed were beneficiaries. Because both projects were relocation projects there were no non-beneficiaries present in the communities.

CASTE OF HOUSEHOLD



9.2.2 SHELTER & SETTLEMENT

70% of the socio-economic survey respondents felt that their family's needs were not fully met by the houses, while 30% felt the houses did fully meet their needs. The different responses correlate closely with location; respondents from Sunkesula largely don't feel the houses meet their needs while respondents from Amaragiri largely do. Reasons quoted for the houses being insufficient included the insufficient size of the kitchen and the lack of provision for internal fires for cooking; the absence of a staircase to access the roof and insufficient shelving for storage. Reasons given for the houses meeting needs included the fact that they provided sufficient space for the family to live in safety. Several people noted that the internal toilets next to the kitchen were unpopular and seen as unsanitary; one household had blocked up the back door partly because of the smell from the toilet.

When asked whether the houses and the project addressed people's social and cultural needs, those from Amaragiri largely responded that the project had brought the whole community together in one place for the first time and provided houses large enough for their entire family to sleep indoors. Their previous houses were widely spread and were so small that the whole family could not fit inside at once. Respondents from Sunkesula were very appreciative of bathing and toilet facilities being inside their houses, but raised concerns about the poor water supply and difficulties accessing schools, Anganwadi Centres, healthcare and other services. They also noted the lack of proper roads to the village.



Figure 10: Damage to toilets in Sunkesula due to subsidence

All respondents, from both villages, agreed that the houses enabled social interaction, and many stated that the houses allowed them to host family and visitors. 13% of respondents felt that the houses did not provide for their religious needs, largely explained by the absence of specific space for religious worship. The men's focus group in Amaragiri also noted that the new houses and location meant they were safe from malaria and dengue fever.

The houses in Sunkesula and Amaragiri are largely still in very good condition six years after construction. Neither location has faced any significant flooding or other natural hazards since construction. In Sunkesula there was however widespread damage to the toilets attached to the houses. This appeared to be due to the fact that the toilets did not have adequate foundations and hence settlement of ground had caused them to separate from the main structure.

All technical survey respondents felt that the construction quality was high (despite the problems with toilets in Sunkesula). 87% also felt that the material quality and technical supervision had been good, with 13% saying they didn't know. All respondents said their houses provided comfortable lighting and ventilation. When asked whether houses were resistant to various hazards those surveyed demonstrated a lot of confidence in the houses.

All the survey respondents (from both communities) felt that the houses had adequate space overall for their needs. However, 60% of respondents said that the houses were inadequate to provide

sufficient privacy. One third of respondents said there was no kitchen in their house, despite houses having been built with a space for a kitchen. Many respondents had largely used the kitchen space for something else, most often a pooja room. Focus Group participants explained they had wanted fully detached houses, but it had been explained to them that this was beyond the project budget.

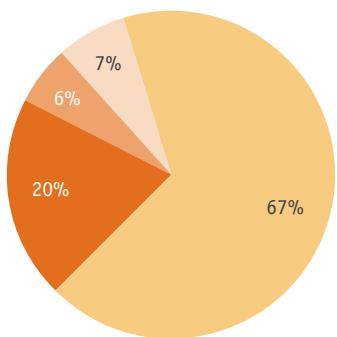
None of the respondents from Amaragiri answered the question about the size of their previous house as they considered that they didn't have houses before the relocation and had lived in makeshift shelters.

All survey respondents felt that the project was completed in a timely manner and that the support provided by CARE was good. All respondents said they feel safe in and around their houses. When asked if they feel compensated for losses, 13% of respondents (all from Sunkesula) said they did not.

93% of respondents said the location of their houses was acceptable, but only 80% said their livelihoods were easily accessible from their living place.

73% of respondents had upgraded their house or its surroundings in some way, for example by adding a patio, a kitchen or some other improvement. From the field visit it was clear that very few had made structural amendments or extended their houses using durable materials. The vast majority of upgrades involved adding a patio, fence or thatched lean-to kitchen structure (see Figure 5 and Figure 6). Only one house in Amaragiri had a significant upgrade, with the addition of staircase

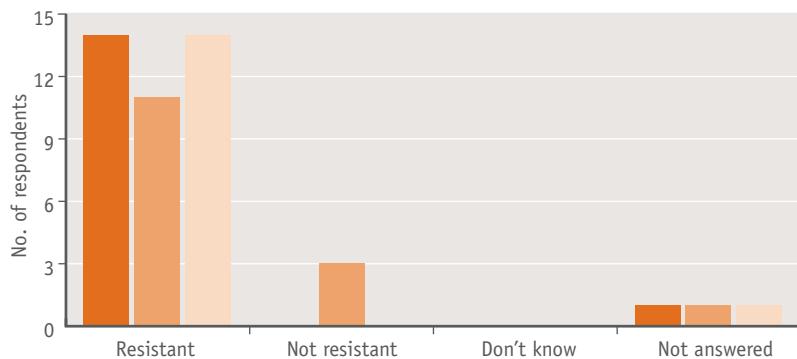
SIZE OF PRE-DISASTER HOUSE



KEY

■ Bigger	■ Smaller
■ Same size	■ Not answered

PERCEPTIONS OF RESISTANCE TO HAZARDS



KEY

■ Wind/cyclones	■ Earthquakes
■ Floods	

to the roof. 93% of respondents said they did have plans to extend or upgrade their houses, but many also said they did not have the resources to do so. 13% of respondents also said building materials were not locally available, although 87% said they were. All respondents agreed their houses were easier to maintain than their previous houses.

The majority (83%) of survey respondents felt that local people were involved in the construction of the houses. All respondents remembered that there had been skills training for masons during the project, but noted that the masons were not from their communities but instead came from nearby villages. None of the recipients of houses received any skills training, so respondents all agreed that the training had led to no lasting effect in their community. One of the women in Amaragiri explained that nobody from their community is skilled in construction work, and hence the partner NGO, SVK, had selected and trained masons from

nearby areas. All the masons trained and employed were men even though some of the women in the focus group discussion said that if given the chance they would have liked to receive the training.

When asked how they would improve the houses, suggestions from focus group participants included:

- Addition of a covered space in front of the house for social activities and to provide protection from poor weather
- A larger kitchen because the kitchen provided was too small to cook for larger families and larger living areas
- Separated toilets and bathing areas would increase the chances that people might use the toilet.
- Addition of stairs to the roof so this could be used, for example for drying crops (it was noted that CARE had provided ladders when this was requested)

9.2.2.1 WASH

Only one survey respondent had a toilet before the disaster, located outside their house. All others previously had no toilets. The majority of respondents to the surveys either felt that the WASH needs of women and girls had not been addressed in the project or they didn't know. Only 20% of respondents felt women and girls' WASH needs were adequately addressed. It was noted in the focus group discussions that in both Sunkesula and Amaragiri the availability of potable water is a significant problem. The construction of toilets was appreciated by some, and was noted as particularly important for women and (adolescent) girls. However, most said they use the toilets for bathing but still practice open defecation.

"The focus was only on constructing our houses. If some emphasis would have been on generating awareness for changing our behaviour it would have made us use these toilets."

– Sujatamma, a female beneficiary from the BC community

In Amaragiri nobody uses the toilets partly due to the shortage of water, and instead practices open defecation by the river. In Sunkesula, women from the Muslim community explained that they are not allowed to go outside for defecation, so are using their toilets (apart from one family which has locked the house up and left). Around five members of the Backwards Caste community said they used their toilets. Members of the Bommalatta community said they all used the toilets for storage and practiced open defecation, and only one woman from the Scheduled Caste community said she used the toilet, explaining that although there is a shortage of water she still prefers using her toilet to open defecation. She said this resulted in women of her community sometimes making fun of her but this doesn't bother her. Many said they could not use the toilets because of water scarcity and because there had been insufficient explanation of why it was important. Some also noted that they would have preferred the toilets not to be attached to the houses. Some toilets

on the BC side of the village were also damaged, some beyond use; see Figure 9. Men in the mixed focus group discussion said only women used the toilets, but that they would use them if it rained.

The focus group participants in Sunkesula explained that the women of the house are responsible for cleaning the toilet and since there is water scarcity this is difficult. They said it was the men who went to get water (two times each day) because it was too far for the women to go. Focus group discussions in Amaragiri also highlighted the problems with access to water. A local, un-named organisation provides 10 pitchers of water per household per day by tanker. However, this water is muddy and red in colour, so for drinking water women walk to two working boreholes some distance away, which can take several hours. Especially during the rains, women find it difficult organizing water for their families. There are working boreholes in the original Amaragiri village, but the original occupants are unwilling to share these with the Chenchu community.

In Sunkesula the original settlement plan was to include a water tower serving communal taps for each of the areas of the new village. The tower was in fact constructed, and is visible on the horizon. The pipes were delivered and the taps built, but the system was never connected and has never functioned. Instead villagers have to walk to the neighbouring village of Sunkesula to get water, around 3km away. A borehole which is closer, within 1 km, is saline so cannot be used for drinking or cooking. Another organisation, which villagers could not name, started construction of a new water tower in 2011 but never finished.

One of the women in the village, Narsamma, had taken the initiative to raise the water supply issue with government officials but had not been able to resolve the situation. Villagers were unable or unwilling to explain what the political or other problems were which prevented the water supply being completed.



Figure 11: Water supply infrastructure built but unusable in Sunkesula.

Clockwise from top: An existing water tower on the horizon, pipes delivered but not connected, one of three communal water tank & tap stands, a bore hole supplying saline water, a half-built water tower in the village.

9.2.2.2 LIVELIHOODS & SERVICES

Apart from the difficulties caused by the lack of water supply, the focus group discussions highlighted several other impacts of the relocation on access to livelihoods and services. The women's focus group in Sunkesula discussed the effect of the relocation on access to education and health services. The nearest Anganwadi Centre (child health centre) and school are in Sunkesula, 3km away, and there are no transport services and roads are bad. Children from the village walk this distance in a group of around 20-25 every day. After 10th Standard the nearest school is 30km away in Kurnool. Many have to discontinue their education at this point. This especially affects girls as the journey is not seen as safe for them to make.

"If I want to continue my education that means either I have to travel to Kurnool all alone every day or I have to stay there in a hostel; which needs lots of money. It is difficult for my parents to organize that much money for me and I understand that. Also travelling alone to Kurnool...no..no.. my parents can't allow me to do that... they are also worried about my safety and security".
– Manisha, an adolescent girl from Sunkesula whose education was discontinued after the 10th Standard

In Sunkesula livelihoods activities varied depending on group. Many BC members own some land and mix cultivation of that land with labour work on the land of others. SC members typically work as paid labour on the land of others, including the BC members in the village. Both these groups explained that they are now further from the land they work on, although a small number have found new opportunities working on the nearby sugar-cane plantation or rearing goats instead of cultivating the land. Women typically also undertake unskilled labour work, earning INR 100 per day compared to men's INR 200 per day. One woman explained she used to do domestic work, but the relocation means she no longer lives amongst the people who would employ her. The Muslim community generally work as small-scale fruit traders, and since the relocation have to travel further to access markets.

The traditional livelihood of the puppeteer community is in peril because they lost all their equipment and their puppets in the floods. Older people in the community fear that their traditional way of life will be lost as most of the younger generation have now started other livelihood options. Some of those of working age from the puppeteer and Muslim communities have migrated elsewhere for work, leaving fragmented families, including child-headed households.

Case study: expertise lost and livelihood at stake

Before the flood Srinivasula was part of a team of 4 women and 6 men who travelled to nearby villages to put on puppet shows during evenings in the dry season. Villages would arrange food and accommodation for them and contribute INR 10/- per family, resulting in the team making up to Rs 4000/- per night. They would enact stories like Ramayana and Mahabharata, and it was an opportunity to spread ancient stories and history. In the floods they lost their sound system, musical instruments and their puppets. They have not been able to replace their equipment, estimating it would cost at least Rs 150,000 (1.5 lakh).

Srinivasula has visited everyone he can think of, including the Collector, ADM, Zilla Parishad, BDO and others. They listen to his stories and say 'we will get back to you'. So far nobody has.

Now Srinivasulu undertakes daily labour to support his wife Anjenama and their four sons and two daughters. If they are not able to replace their equipment Srinivasulu worries the expertise of his community will be snuffed out, and their way of life lost.

In Amaragiri the primary occupation is fishing, and the relocation has not changed this, although they have slightly further to travel to access the fishing areas. They typically receive nets on loan from middle men and sell their fish back to them. Around six families now depend on goat rearing, after CARE distributed goats during the response. One family in particular has done this very successfully and has a large herd and has raised enough to extend their house. Access to the forest has not been affected by the relocation, and some families still collect non-timber forest products and sell them to a local co-operative society.

The relocation has given them easier access to the market at Kollapur, which is 10km away by road or 6km through the forest. Women at the focus group discussion said they could now buy things they previously could not have. One family interviewed by the study team had been able to buy a television and was saving for a rice-cooker. One woman had purchased a steel cabinet for safe-keeping of her possessions, and was now using this to safely store title documents for six women in the community.

The women's focus group also explained that they now had better access to health facilities and support. Previously they would give birth without assistance and in emergencies would have to go to Kollapur by boat, whereas now they can access Auxiliary Nurse Midwife visits and get to hospital

by road. Focus group discussions identified access to education as a significant improvement in their lives, and there was considerable pride that one girl and one boy had been able to complete intermediate studies at Kollapur High School. Overall the focus group participants agreed that their lives and opportunities had greatly improved due to the relocation and improved housing. The men's focus group discussion echoed this, saying that the houses constructed by CARE have made it easier for them to improve livelihoods, education, health and participation in Panchayat Ray Institution.

Women in Amaragiri did point out that the relocation had given access to alcohol, sold by the inhabitants of the original village. Women said this caused increased spending by men, but also an increase in domestic violence against women. They explained there was tension with the other community in Amaragiri as a result and women were afraid of the possible financial consequences of alcohol addiction, including men potentially mortgaging houses to pay for alcohol debts.

Case study: first generation to go to school



The lives of Nagayya and his family members have been greatly changed by the shelter project in Amaragiri. The father, mother and four sons live together in the shelter, and the mother explained that "even if it rains now, still I'm safe here". Previously they lived in a leaky simple wooden hut, with one door and no lighting. Because of the lower costs of maintaining their shelter they have been able to save money, and as a result bought a TV two years, a rice cooker 1 year ago and now they are saving for a bed and some ornaments. They have electricity 24 hours a day and said the lighting in the shelter and the street-lighting outside makes them feel safe.

Previously they would leave before dawn and return at dusk in order to make a living, and they never saw anyone or socialised. Now they can socialise, have meetings and take part in festivals

The father explained that his eldest son is the first in his family to attend school, and will also go to high school 20km away, because it has a special hostel for tribal communities. His son will get a job in the forestry department or become a teacher:

"However I have to do it I will earn the money to educate my child.
We have faced problems; we will not let our children face the same problems"
- Nagayya

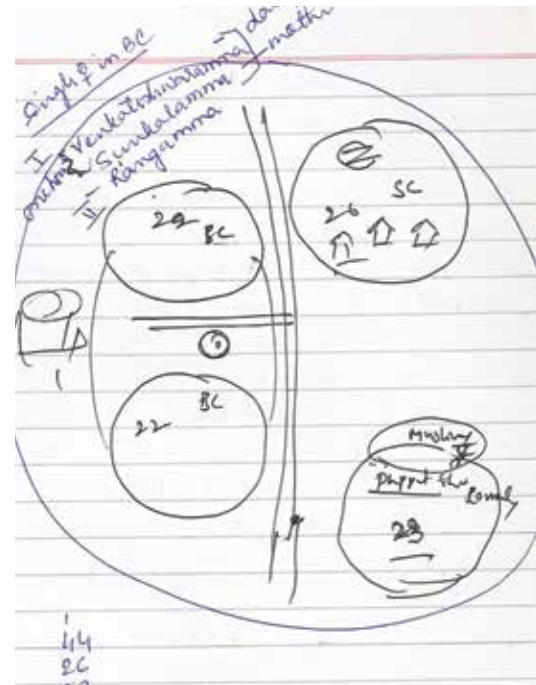
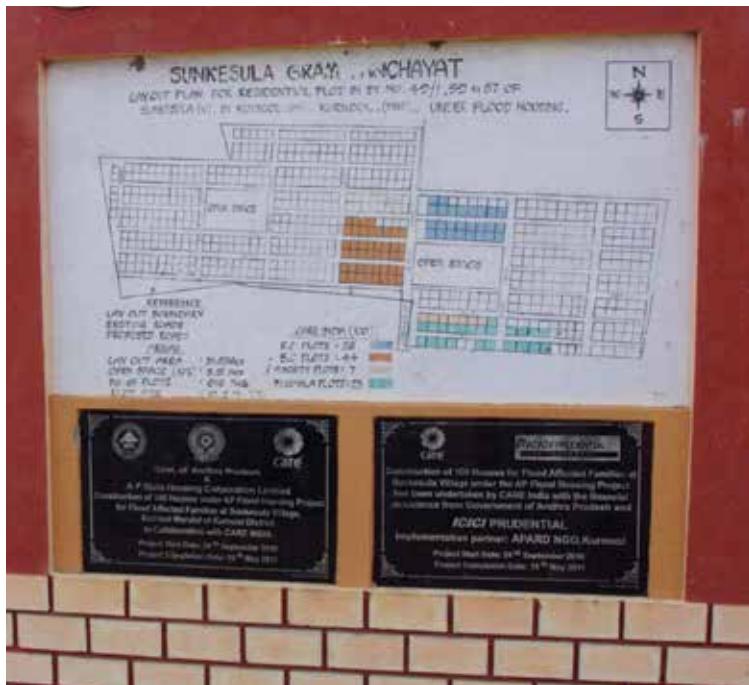


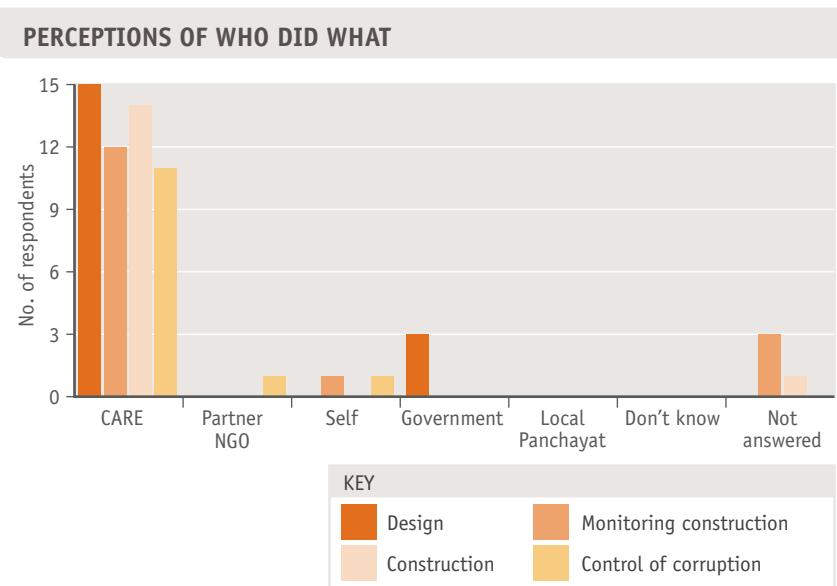
Figure 12: Left: Plaque & village plan at Sunkesula Village. Right: Schematic drawn with the women's focus group in Sunkesula showing how the different groups were arranged in the village (numbers of households are shown in each area)

9.2.3 ACCOUNTABILITY & PARTICIPATION

The women's focus group discussion in Sunkesula discussed the settlement planning process and how the different groups were accommodated in the settlement plan. The 100 households included 44 Other Backwards Caste, 26 Scheduled Caste, 23 Bommalatta (puppeteers) and 7 Muslim families, and after community planning meetings it was decided to arrange the village with four different areas for the different groups, each of which would receive a communal water supply.

Overall the women in the Sunkesula focus group discussion said they were satisfied with the process adopted to implement the shelter project in their location. They said their involvement in the process was right from the beginning and they were even part of monitoring and procurement team. They expressed pride in the fact that they had made suggestions about the construction work and these had been incorporated. They also noted their role in monitoring construction because they were at the site all day.

In the mixed focus group in Sunkesula, which included members of the project monitoring committee, it was discussed how the villagers felt they had been promised roads, a school, a temple, a water supply and more. Indeed, the site plan at the centre of the village (see Figure 11) shows the ambition of the scheme, with the houses actually built shaded according to the different groups. The FGD participants said that these further developments had been blocked by a local politician.



89% of those surveyed felt their household was adequately involved in the planning of the project and the houses. Most said they were consulted from the beginning of the project until the end. The mixed focus group discussion in Sunkesula said that there had been no consultation on the house design, and that they had just been told what the house would be. One man interviewed individually in Sunkesula said they were told ‘this is what we have, take it or leave it’. This was different in Amaragiri, where people had been able to make small amendments to the design. The men’s focus group in Amaragiri also recalled discussions with CARE about whether they wanted to relocate or not, and that the relocation was what they asked for.

The majority of the socio-economic survey respondents (83%) felt that women were adequately involved in decision making and planning for the project. However, for the same question in the technical survey only 67% felt this was the case. Just over half of respondents (54%) said that women had provided feedback and suggestions as part of the house design process. 60% agreed that feedback from women had been incorporated in the design of the house. Examples given included a request for shelving from women in Amaragiri which was incorporated in the house (notably this was not included in Sunkesula, leading to complaints about a lack of storage space). It was also explained that a request had been made for stairs to access the roof but that this had been deemed too expensive. However, CARE had provided ladders after construction instead.

All survey respondents, from both villages, felt that sufficient information was shared by CARE and partner NGO APARD about the project. All but one of the respondents were aware of the village level committee which was formed for monitoring the progress of the project. However, the focus group participants in Amaragiri clearly remembered the monitoring committees and knew who was on them and what they were for, explaining that the committee included SVK Head Lakshman Rao, a women and four men from their community, an engineer and a representative

from CARE. When asked which vulnerable groups were represented on the monitoring committees the only groups mentioned by survey respondents were elderly people and members of scheduled tribes (all beneficiaries in Amaragiri are from a scheduled tribe). Respondents also noted that the committees included at least one woman.

86% of survey respondents either said there had been no complaints and feedback mechanism or didn’t know if there had been one. Those few who said there had been a mechanism explained it had been a phone number they could use to raise concerns and give feedback. Despite this, 83% of respondents said they had given feedback during the project. Three-quarters of respondents said their feedback had not been acted upon, or they didn’t know if their feedback had been acted upon. Only one respondent felt that feedback and complaints from vulnerable beneficiaries had been enabled.

9.2.4 OWNERSHIP

91% of socio-economic survey respondents said that the legal house title was held by a woman, while 6% (2 people) said it was held by a man and 3% (1 person) didn’t know who held the title. The same question on the technical survey resulted in 100% of respondents saying that the land title was owned by men and the house title owned by women. All said they had title papers.

One family from Sunkesula interviewed by the study team said they had lost their papers for their original land in the floods and have been waiting since 2009 for new papers to be issued, despite a formal application being made.

Female participants of the focus group in Amaragiri shared that all houses were constructed on land allocated by the Government and that land titles were distributed. As most were not literate most didn’t know whose names were on the titles. Six women said the land was in their name (and had their documents safely stored), but one household which was interviewed had no memory of being given paperwork for the house.

Case study: Bismilla



Photo credit: CARE/Lata Krishnan

Bismilla, 20, lives in Sunkesula with her family. Bismilla has been undertaking a degree in nursing, and is due to complete it in three months' time. On the day of the study team visit she was waiting to meet her fiancé and his family for the first time.

The shelter has been instrumental in allowing her to complete her studies, compared to her old shelter where snakes and scorpions made studying at night difficult and frightening.

"Due to this shelter my late night studies were ensured and I was able to prepare for my exams so far. I admit that if I had discontinued my studies my father would have got me married by now."

Bismilla explained that education for girls is a problem in her community because of the distance of the village from schools and colleges. Parents do not want to send their girls to school because they don't think it is safe.

"I was fortunate, I got my father's permission to continue my higher studies and could go to Kurnool and I am really very happy about it. Though I want to pursue my Master of Science I can understand the money problems my parents are facing. Now I am preparing myself for the wedding... let's see what happens next".

9.3 Project conclusions

9.3.1 PROGRAMME DESIGN & DELIVERY

Both projects studied were relocation projects. The design of both projects was significantly affected by government decisions to relocate, although the community participation in decision making was significantly more effective and meaningful in Amaragiri than in Sunkesula. The ambition of the project in Sunkesula was significant, involving the establishment of a large new village. The actual achievement of the project fell well short of this ambition, not least because the political will was not there to provide the necessary government investment. This resulted in fragmenting the community and isolating its most vulnerable people, and in limited satisfaction with the project. In contrast, the project in Amaragiri had limited ambition and involved only adding to an existing village, but managed to contribute greatly to the community and had significant positive effects, leading to significant satisfaction with the project.

Engagement and coordination with government was effective in both projects during the lifetime of the project, but in Sunkesula this ended with the construction of the houses. CARE and partner had no on-going involvement with the community and local government has not delivered the roads, water and services promised. Despite attempts (largely led by women) in the community to get the government to live up to these commitments made during the project, they have not been able to make progress without support. In Amaragiri the local partner has continuing programming addressing early marriage, and the relationship with local government and the community remains strong.

Both projects met people's basic needs for shelter, but due to the different circumstances in which they took place the project in Sunkesula cannot

be said to have met any of the wider needs of women, girls, men or boys. The project in Amaragiri in contrast has empowered women in the community and provided access to essential services, including education. Neither project has any specific provision for elderly people, disabled people or other particular vulnerable groups. In neither project was WASH adequately addressed.

The project in Sunkesula, because of its greater ambition, took a more holistic approach in programme design to the interconnected needs of men, women, girls and boys, but failed to deliver the access to services, water, education and other things needed to do this. The project in Amaragiri, which included a livelihoods component, more successfully addressed such needs, although did not do so comprehensively. In both projects the outcomes can be ascribed more to the community's own actions and the physical and political context than the project design itself.

Both projects were contractor-built and agency-driven. Communities were involved as paid labour and through various participative processes, but had little control or choice. Beneficiaries were consulted and able to affect the delivery of the project, but only within very narrow parameters. In Amaragiri there was more meaningful involvement and choice, but it is difficult to conclude whether this would still be the case had the community not preferred what CARE & SVK had to offer. Nonetheless, the community involvement in Amaragiri had very positive effects and has led to a more cohesive and supportive community, and women in Sunkesula felt empowered by their involvement. In both communities there are examples of women who were able to play a leading role in consultations during the project and in representing their community in the years since.

Both communities have been relocated to higher, safer ground, so are less at risk of flooding in the future, and live in houses which are significantly stronger and safer than their previous homes. Both projects have met their intended DRR targets in this respect. The effect of the project in engendering community cohesion and cooperation in Amaragiri is significant, and has led to a more resilient community. In contrast the project in Sunkesula has moved three vulnerable groups of people to a new site where they effectively live as separate communities, but now further away from essential services and livelihoods opportunities. Vulnerability to natural hazards has been reduced, but vulnerability to other harm has possibly been increased in Sunkesula.

Housing, land and property rights were considered in the design of both programmes, with an intention that tenure is secure and women are given title over the land and houses. Both projects have provided secure tenure in the name of women, and in both projects there are examples of women who feel this has empowered them. However, this is not universal and it is doubtful that power relations have significantly changed for the majority of women.

In Sunkesula households were also provided with insurance, valid for 10 years. However, although households understand this should pay out in the case of future disasters, they don't know how to claim and the paperwork is in English.

9.3.1.1 RECOMMENDATIONS



1. Participation of affected men and women in design and construction of projects should be increased in future programmes to allow communities real control and choice over their own recovery.
2. Relocation projects should be a last resort and agencies should do their utmost to identify viable alternatives to relocation and allow affected people real choices. This should recognise that relocation very often increases the overall vulnerability of a community.
3. Where relocation is unavoidable or is the actual choice of the affected people:
 - a. Relocation sites should be selected which have existing access to essential services and livelihoods.
 - b. Inputs into projects from government or other agencies should be secured at the onset of the programme, and it should never be assumed they will appear later. Contracts with all partners to the project should be agreed at the outset.
 - c. Projects should work with the community to address governance and train and enable them to effectively represent themselves and access effective representation by others. This should include women on an equal basis with men.
4. Where possible CARE should work with partner NGOs with existing relationships and on-going commitment to the communities affected by a project.
5. Title deeds and other documentation must be translated into the appropriate language and all members of the community should receive clear explanations of the meaning and use of the documentation.

9.3.2 TECHNICAL DESIGN & CONSTRUCTION OF SHELTERS

The main structure and fabric of the houses built is high quality and has lasted well since construction. All those spoken to praised the quality of the buildings, and many noted good quality of construction supervision and materials. Lighting and ventilation were appropriate for the climate. The provision of ceiling fans was particularly popular.

No special provision for elderly or disabled people was evident, and all houses had steps at the doorways. Although no specific examples were found of this negatively affecting disabled or elderly people it is likely this will have occurred.

None of the buildings have experienced significant natural hazards since construction. This is likely

to be due to the relocation to safer, higher land. Houses have survived the annual rains well.

The toilets in Sunkesula had significant design flaws as they were built without adequate foundations. This has led to significant damage to the toilets in some houses where the ground has subsided. Toilets are not in use because of this, but also because of significant cultural and social reasons.

The reduction in costs to maintain buildings, or in the case of the Chenchu in Amaragiri, to frequently re-build huts, has improved people's ability to save money for other needs. Houses are generally well-maintained and painted, but households have little awareness of costs or requirements of maintenance of concrete houses (particularly roofs) in the longer term.

9.3.2.1 RECOMMENDATIONS



1. Future programmes involving construction of houses should pay much more attention to maintenance requirements as reduced maintenance costs can have significant positive long-term outcomes but changing the building typology means people may not be prepared for costs or requirements of maintenance of buildings.
2. Future programmes should have the flexibility to provide accessible and inclusive features to ensure the needs of disabled and elderly people are met.

9.3.3 HABITABILITY & RELEVANCE OF SHELTERS

The houses built provided safe and dignified homes for disaster-affected people, but were considered to be too small for their needs by a majority of people in Sunkesula. Whether houses met people's need for space, lay-out and for socialising depends largely on their expectations and aspirations, and on the size of the houses they had before.

Both settlements developed as part of the project failed to provide adequate water supplies and failed to prevent open defecation. The sanitation aspects

of the programme, implemented as part of a shelter response, focussed on the infrastructure but not on the hygiene promotion, and women were not adequately consulted or involved in WASH programming.

Sunkesula did not provide adequate access to livelihoods, education, markets, public transport, health services or perhaps most importantly, effective representation. In contrast, Amaragiri improved the community's access to education, markets, public transport, health services and representation, and slightly improved access to livelihoods.

9.3.3.1 RECOMMENDATIONS



1. Design and provision of post-disaster shelter programmes must take the expectations and aspirations of beneficiaries into account very strongly to ensure that expectations are effectively managed and addressed. Beneficiaries' perceptions of the value and success of shelter projects depends largely on their expectations and aspirations.
2. Shelter programmes which include WASH interventions must have access to sufficient WASH expertise and resources to ensure the investment in infrastructure is supported by appropriate hygiene promotion and behaviour change programming. Women and girls, especially adolescent girls, should be actively engaged in this programming.
3. Also see 9.3.1.1 recommendation 3

9.3.4 SIGNIFICANCE & LONG-TERM IMPACT

The Andhra Pradesh shelter projects have both had significant long-term impact upon their respective communities. The programmes have supported further recovery, but as both communities are very poor and disadvantaged this is a very slow process.

The project in Sunkesula did not live up to its ambition and did not deliver a fully sustainable settlement. Despite the fact that it does allow a gradual recovery to take place, the limited access to livelihoods and services, and the separation of vulnerable groups from the more prosperous original village, has left the community facing more challenges than they had to face before the disaster. The project in Sunkesula would have been more cost effective had it built houses on people's existing land and not relocated people.

The project in Amaragiri has transformed the community into a more cohesive, confident society with aspiration to continually improve, and has

placed it nearer to services and new livelihoods. The project in Amaragiri was exceptionally cost effective, and the impact has been much greater than anticipated at the onset of the project.

Both communities however are safe and are able to mobilise some resources to improve their situation, such as by upgrading their houses with patios, adding kitchens or buying consumer goods.

Both communities show strong ownership over their new settlements (although in Sunkesula this is affected by the community being made of three distinct groups), and both had notable examples of women, empowered by their involvement in the project, attempting to organise and represent their communities to those with greater power. However, neither attempt was successful. Greater attention on strong governance and building community structures during the projects could have made communities to overcome some of the challenges they face.

9.3.4.1 RECOMMENDATIONS



1. Relocation projects should relocate the entire community and not parts of the community only. Resilient and cohesive communities are more likely to be created if communities are not fragmented.
2. Community engagement in future projects should be strengthened and aim to lead to lasting community structures to allow effective representation and community voice.

9.3.5 ACCOUNTABILITY

Both projects studies had similar accountability procedures and processes during the project implementation, but the outcomes of the projects were considerably different. In Amaragiri the project was largely in line with the wishes of the community and led to stronger community cooperation and voice. The partner NGO has to this day got on-going programming in the community, and the community is more able than before to hold government accountable and access support.

In Sunkesula there is currently no NGO programming and the government has not provided the services critical to a sustainable settlement. The ambition of the new settlement has not been realised. The community has not been able to hold CARE, its local partner or the government accountable for any of the problems they face. The partnership of NGOs and government which delivered the relocation no longer exists, and without further project funding no changes are likely.

9.3.5.1 RECOMMENDATIONS



1. If engaging in relocation projects the implementing partners should agree a long-term partnership and presence, of at least 3 years, to be able to support the lengthy process of establishing new settlements. A programme approach is needed rather than a single project, and the government must be involved throughout and must commit to the new settlement.
2. Including women on an equal basis with men, projects should address governance and enable communities to effectively represent themselves and access effective representation by others.



10. TAMIL NADU 2004 TSUNAMI RESPONSE

On the 26th of December 2004 the Sumatra-Andaman earthquake caused a major tsunami in the Indian Ocean which caused devastation in many of the countries around the Indian Ocean, including Southern India.

In India over 10,000 people were reported killed and coastal communities were destroyed. In Tamil Nadu around 190,000 homes and 52,638 fishing boats were destroyed, and thousands of acres of agricultural land were inundated by saltwater. In areas of Tamil Nadu not shielded by Sri Lanka the tsunami run-up elevation was 4-5m, destroying fishing villages up to 200m inland. Nagapattinam, Kanyakumari, Cuddalore and Chennai districts were particularly badly affected. Over 6000 people died and 38 villages were destroyed in Nagapattinam alone, which takes up 15% of the Tamil Nadu coastline⁵. Nearly 75% of those killed were women and children, and 87% of those affected were from fishing communities.

In keeping with its policy to actively engage with and enlist the support of civil society organisations for tsunami relief and rehabilitation, the Government of Tamil Nadu (GoTN) decided to undertake tsunami-related housing rehabilitation through public-private partnerships with corporate bodies, non-governmental organisations, religious

trusts, etc. This involved the compulsory relocation of villages in the coastal zone further inland, by means of notices under the legislation covering Coastal Regulation Zones⁶. The government typically provided land, infrastructure and services and partner organisations managed community engagement and participation and construction of housing. The Government of Tamil Nadu however retained control of beneficiary selection and allocation of houses.

CARE constructed 1713 houses on 9 sites in four different districts affected by the tsunami in the states of Tamil Nadu. In one of these sites, Palayar in Nagapattinam District, CARE had a direct agreement with the Government of Tamil Nadu, while in the other 8 sites the agreement was between a local partner NGO and the government. Design of houses and the exact project design varied between the sites and the different local partner organisations. Most of the project beneficiaries were from fishing villages, although in Cuddalore some were from the Irula Schedule Tribe. The government provided 7 different house designs, which were used and adapted for the projects. Notably in Madavamedu the community refused to relocate and following negotiations with the government was able to remain, so this project re-constructed the village in-situ.

5. Karan, Pradyumna Prasad; P, Shanmugam Subbiah (2011), The Indian Ocean Tsunami: The Global Response to a Natural Disaster, USA: University Press of Kentucky, ISBN 978-0-8131-2653-1.

6. Sridhar, A., 2005. Statement on the CRZ Notification and Post-tsunami Rehabilitation in Tamil Nadu. UNDP, Chennai, India. http://www.tn.gov.in/tsunami/digitallibrary/ebooks-web/64%20Statement%20_on%20_the_%20CRZ%20_Notification_%20and%20_Post-Tsunami.pdf

Table 5: Tamil Nadu project locations

Village	No. of Houses	Partner NGO
Madavamedu	190 (out of 361 reconstructed in village)	Voice Trust
Palayar	725	SEVAI & CREED
Kalaingar Nagar & Creed Nagar	165	CREED
Pandagasalai	80	MATA
Keelapattinacherry	200	MATA
Neerody 1	87	SOSOD
Neerody 2	39	SOSOD
Pillimedu	81	CREED
Pudukuppam	146	MATA
Total: 1713		

10.1 Studies undertaken

The study team visited the villages of Madavamedu and Palayar in Nagapattinam District, and Creed Nagar and Kalaingar Nagar in Cuddalore District.

The sample size for socio-economic survey in Tamil Nadu was 206, of which 30% respondents were women and 70% men. 60% of respondents were in Palayar, 20% in Madavamedu and 20% in Kalaingar Nagar. All were over 18 years old and were beneficiaries of the project.

For the technical survey 195 households were surveyed in three villages (Madavamedu, Palayar and Kalaingar Nagar), out of 1713 households which received houses (11% of recipients). 61% of respondents were male and 34% female, and for 5% it was not recorded.

Table 6: Focus Group Discussions & interviews undertaken in Tamil Nadu

Type	Location	Date
Key informant interview with CARE – Regional Programme Director	Chennai	22/07/15
Key informant interview with CREED director	Chidambaram	22/07/15
Household interviews x3	Madavamedu	23/07/15
Focus group discussion – women	Madavamedu	23/07/15
Focus group discussion – women	Palayar	24/07/15
Focus group discussion – women	Palayar	24/07/15
Focus group discussion – mixed	Palayar	24/07/15
Household interview x3	Palayar	25/07/15
Focus group discussion – women	Kalaingar Nagar	26/07/15
Focus group discussion – mixed	Creed Nagar	26/07/15
Household interview x2	Kalaingar Nagar & Creed Nagar	26/07/15
Key Informant Interview with then ADM	Chennai	27/07/15



Figure 13: Houses built in Madavamedu, Tamil Nadu



Figure 14: Houses built & typical street in Palayar, Tamil Nadu



Figure 15: Houses built in Kalaingar Nagar (left) and Creed Nagar (right), Tamil Nadu

Vulnerable groups

IRULA TRIBE

The Irula area Scheduled Tribe living in Tamil Nadu and Kerala. In Tamil Nadu they live in the Nilgiris, Coimbatore and Erode Districts. They have a total population of around 25,000. The Irula traditionally make their living as rat and snake catchers, but those included in this project typically worked as (bonded) labourers and fishermen. They speak the Irula language. Before the tsunami they typically lived in small huts.

10.2 Findings

Survey respondents (all beneficiaries of the project) reported that they relied upon NGOs, government agencies, Panchayat Raj Institutions and some other organisations for support after the tsunami. 50% of respondents named NGOs as their primary source of support.

After the tsunami the majority of survey respondents took refuge in neighbouring villages, but some went to Panchayat buildings and a small number took refuge in schools or other places. Over half the respondents were displaced for more than one month. Focus group participants in Palayar said that CARE gave them tents within 15 days, but they then lived in those tents for 2 years.

As the land for resettlement projects was provided by government, NGOs such as CARE had limited say in the type of land being provided. In some cases the land provided was low-lying and flood-prone, resulting in a need for significant enabling works to make the land suitable for construction.

The IAS Deputy Works Commissioner in Tamil Nadu at the time, Mr Kandasamy, gave a very insightful overview of the reconstruction efforts, and in particular the role of NGOs, after the tsunami. He said that NGOs had proved to be unable to manage large-scale construction adequately, were not technically strong enough and couldn't provide enough supervision. He also raised the difficulties of coordinating and ensuring coherence in the work of so many different organisations, saying the government never negotiated the value of support with NGOs, resulting in a wide variation in levels of support. In contrast to the difficulties of NGO-led housing construction projects, he highlighted the owner-driven approach of a project in Karakal, where beneficiaries built their own houses and received staged cash grants from NGO money that had been deposited with government. Although at the time the project had been seen as too slow, and unsuccessful, he said that the longer term results were much better, with higher levels of ownership and occupants maintaining their houses well and showing much more attachment to the settlement.

Palayar

Palayar is an important fishing village in the district of Nagapattinam, with its own fishing port. It is essentially the “head village” for the eight surrounding villages, and shelters a number of powerful community members and wealthy operators of large fishing boats.

After the tsunami the inequality in the community became very evident, as the owners of large mechanized fishing boats were generally insured and able to reclaim their losses. They were generally able to re-build shelters in the original locations. Labourers and artisanal fisher folk were not so resilient and were largely displaced to temporary settlements for some time and were eventually required to relocate to a large new site 1km inland, behind mangroves.

With this situation at the onset of the project, CARE was given a beneficiary list of over 900 households. CARE undertook its own verification of this list and found that only 725 were eligible as others had already repaired their shelters and were living in the old settlement with no intention to relocate. Concluding that it was not acceptable to provide high value assets to those who didn't need them and had no intention of living in them, the beneficiary list was reduced in consultation with the government.

The resulting reduction in the number of households receiving shelters challenged some of the more powerful parts of the community and led to significant tensions between CARE, SEVAI, CREED and the members of Panchayati Raj Institutions and parts of the community. There were threats of violence, protests and at one point in time a boycott was organised, described by one government representative as “the Panchayat forming a cartel and organising people to not take up shelters”.

According to participants of one group discussion because the wealthier people did not receive shelters they stayed in the original village. It was explained that Rs 4,000,000/- (40 lakhs) were collected from those who did receive shelters, subsequent to the project and apparently by the Panchayat, to purchase land to build shelters for those who didn't. How this was arranged was not clear, with some describing the money as a community donation for those in need but others implying they had no choice but to contribute.

In the original village a small group discussion was held with several men, some from the Panchayat. They said that they had spent Rs 10,000,000/- (1 crore) on land for the 250 shelters they were promised but were still waiting for them to be built. They also said that “money should go directly to the Panchayat and not to NGOs”.

The tensions were never fully resolved and were evident during the study team visits. The team was unable to clarify all the facts, but it was clear that the project took place in challenging circumstances with a number of competing and vested interests at stake.

10.2.1 BENEFICIARY SELECTION & PLANNING

Beneficiary lists were drawn up and provided to NGOs by the government. CARE undertook verification and reviews of the beneficiary lists, but project staff from the time of the response felt that the government-led process caused tensions and conflict in communities and with NGOs, and resulted in the breaking-up of communities. It was noted by an NGO staff-member from the time that “some undeserving people got houses, but all deserving people were included”.

Mr Kandasamy explained the difficulties of drawing up the beneficiary lists. They were based on assessments with insufficient detail and no sex and age disaggregated data, and he and his colleagues were faced with the choice between delaying housing projects for further assessment and moving quickly with imperfect lists. Additional complications were caused by inter-state rivalry for resources and upcoming elections. A key consideration was the availability of funding, which was there early on but would likely not be available if the process had been delayed. From his experience of all the reconstruction projects after the tsunami, and given the difficulties involved, he felt an 80% success rate was the best achieved by anyone:

“If I’d aimed for 100% perfection in beneficiary lists I would have failed.”

Mr Kandasamy, IAS Deputy Works Commissioner, Tamil Nadu

Upon completion of the houses they would be turned over to the government who would allot them to beneficiaries.

When asked who selected the beneficiaries, 11% of respondents said it was just NGOs, 26% said it was the Panchayat Raj Institutions & local leaders, 55% said it was NGOs together with the Panchayat Raj Institutions and 8% said it was others. Asked which criteria were used to select beneficiaries, 50% said that houses had to be fully damaged. Some also remembered criteria including women headed-households and elderly people. 92% of survey respondents, who were all beneficiaries, had their house completely destroyed (“fully damaged”) in the tsunami, 1% had partially damaged houses and 7% did not answer the question.

7% of respondents expressed dissatisfaction with the beneficiary selection process (in both the technical and socio-economic surveys), with some raising

issues with the allotment of houses. The remaining 93% expressed no dissatisfaction. One reason given for dissatisfaction was that those who owned boats before “received money” while labourers did not.

In Palayar the study team found considerable dis-satisfaction with the beneficiary selection process, and also visited the previous village at the sea-shore and spoke to non-beneficiaries. See the info box on page 58 for details.

Focus group discussions in Kalaingar Nagar and Creed Nagar, with beneficiaries, found no significant concerns from participants about the beneficiary selection processes, although it was noted that only 165 of the 200 households from the community received a house.

10.2.2 SHELTER & SETTLEMENT

Just over half (53%) of socio-economic survey respondents said their family’s needs had been met by the house provided, while 42% said this was not the case and 5% did not know.

50% of technical survey respondents did not answer the questions about whether the houses provided adequate space, although 48% said there was adequate space in general and 47% said there was sufficient space to provide adequate privacy. It’s not clear if so many did not answer because the enumerators did not correctly record the answers or because people chose not to answer. As such, the focus group discussions and socio-economic survey provide better evidence of people’s feelings about the size and arrangement of the houses.

In Palayar and Madavamedu’s women’s focus groups there was a consensus that the houses have been a great support for the community, and that the houses are a big improvement on the kutcha coconut thatch houses they had prior to the tsunami. In particular, they commented upon the reduced maintenance costs and savings in having to replace the thatch annually. Women also noted that the back door to the back yard is valued. The women typically clean clothes, prepare fish and bathe at the back of the house, and the door allows them to do this easily.

When socio-economic survey respondents were asked specifically about social and cultural needs 82% said they had been met, versus 18% who said they had not. Only 3% of respondents felt the house design addressed any specific special needs, and half the respondents didn’t know.

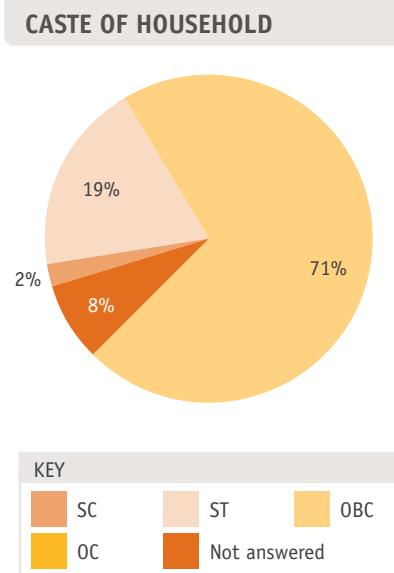


Figure 16: Weathering course added to roof of a house in Madavamedu (with some damage)

In the technical survey results were similar, with 94% of respondents saying the houses met their social needs and 90% that they met their religious and cultural needs. 98% said they felt compensated for their losses, 96% said they felt safe in and around their houses and 97% said the houses provided comfortable lighting and ventilation. Focus group participants in Palayar said being further from the sea made them feel safer, as did good lighting, closer clustering of houses and being familiar with most of their neighbours.

Some Irula people interviewed in Kalaingar Nagar and Creed Nagar explained they didn't feel compensation was the right word because they didn't have houses before. One woman said she led an itinerant lifestyle before and slept in a hut built against a tree.

In Palayar most people interviewed and most participants in focus group discussions felt that the houses were too small for larger families and meant they could not accommodate guests. Several said they used to have thatched houses but they were twice the size. Many said separate kitchens and toilets would have been better. Most people in all four locations said that the houses were too small to accommodate guests, and some highlighted this was a serious problem in arranging marriages.

One-third of respondents said there was no kitchen, despite space for one being incorporated in the house. Many had decided to use the kitchen for other uses, including religious worship, and chosen to cook outside. Women in Palayar noted that most cooking still takes place in wood stoves

which are housed behind the houses, because the kitchen is devoid of a chimney. They now have to walk longer distances to collect firewood from the casuarina grove which is closer to the old village.

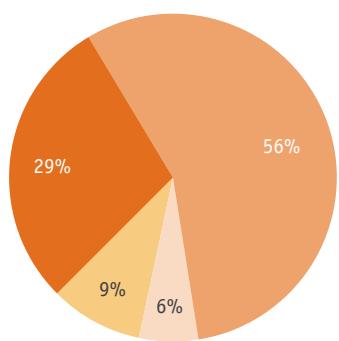
In contrast, in Kalaingar Nagar and Creed Nagar women said they used to cook on a firewood stove but now they have an LPG stove in the kitchen they can cook inside and don't have to collect firewood. This, coupled with having a nearby river for washing, saves them a lot of time compared to their previous situation.

It is notable that a significant minority (29%) of survey respondents said their previous house was larger than the one provided as part of this project. Many focus group participants in Palayar did say their new house was larger than the old one and this is why they bear the inconvenience of being further from the shore.

In Madavamedu and Palayar villages local people were not directly involved in construction (see 10.2.3). In Creed Nagar and Kalaingar Nagar local tradespeople were employed in the construction and community members also donated labour. However, only 27% of survey respondents felt that local people had been involved in the construction of houses.

Material quality and construction quality were felt to be good by 97% and 96% of technical survey respondents respectively. 97% also thought that the technical supervision of construction was good. However, a number of interviewees in Palayar said that the quality was not high because salt-water was used for the concrete (one interviewee said

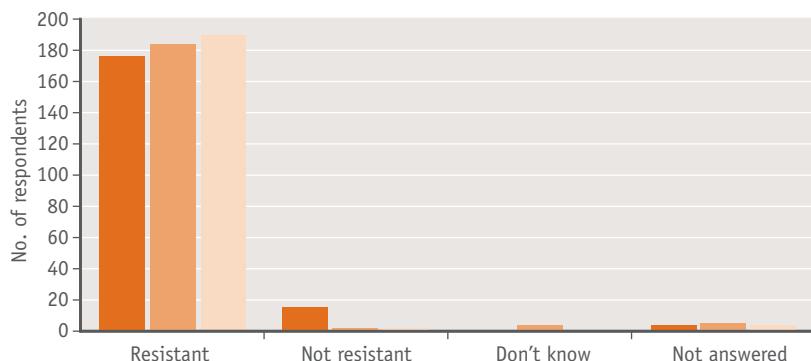
SIZE OF PRE-DISASTER HOUSE



KEY

■	Bigger	■	Smaller
■	Same size	■	Not answered

PERCEPTIONS OF RESISTANCE TO HAZARDS



KEY

■	Wind/cyclones	■	Earthquakes
■	Floods		

this was only in the SEVAI houses). One person also said concrete on the ceilings was spalling in some houses. The study team did not see this themselves, but it is a common problem if the reinforcement in roof slabs has not been raised sufficiently above the formwork during construction, so is plausible. If it is the case, it can be expensive to correct if not done very quickly after onset of spalling.

Durability of materials was questioned in the focus group discussions, with one women's focus group noting that materials generally suited the local climate but that in coastal areas concrete structures become weak due to salty air. They noted that there has already been corrosion to the structure and that the plywood doors in particular are rotting. It was also noted that the corrosion can be prevented with maintenance and is easy to repair though. In Madavamedu it was also noted that the plywood doors were poor quality and not suitable to the climate.

It was particularly noticeable on the field visits that those houses which are not being actively maintained and regularly painted are showing signs of damaged due to corrosion, with some spalling of concrete. While this is to be expected in a coastal environment, there was also some evidence of poor concrete cover and detailing. In Kalaingar Nagar, where the very poor population were less able to maintain the houses (in fact only two houses had been repainted since the tsunami), the concrete shades over the windows were all spalling due to insufficient cover to the steel. The primary structure was generally in good

condition. Participants in the women's focus group discussion in Kalaingar Nagar said that women were more proactive about maintenance and making decisions about their housing, but that they also carried much more of the burden of housework.

98% of technical survey respondents said that their house was maintainable, and 95% of households had upgraded their house or its surroundings and 40% had extended the house. From the field visit it was clear that the great majority of households had added a wall or fence around their plot.

In Madavamedu one woman explained that with their previous, thatched, houses it would cost around Rs 10,000/- per year to re-do the thatch. Now she only had to spend Rs 10,000/- every four years to re-paint the house. In Palayar, one household interviewee explained that people who lived in their houses only seasonally (see 10.2.2.2) could not afford to maintain their houses because they had kutcha houses in the old village which took all their resources to maintain.

It was noted by some that the roofs to the houses leaked during the rainy season, and several people said that it had been incorrect not to include a weathering course on the roof (this is a tiled surface to improve waterproofing on a flat roof). The government had in fact added the weathering course several years after initial construction because of persistent problems, and in general this had solved the problems, although a small number of households still had problems with leaking as the quality of the weathering course was not high.



Figure 17: Houses in Palayar. Left: Unextended house with adjacent kutcha structure and significantly extended house in the background. Right: House with additional storey and rooms.

When asked whether houses were resistant to various hazards almost all those surveyed demonstrated a lot of confidence in the houses' ability to resist cyclones, earthquakes and floods (it should be noted earthquakes are not a significant hazard in Tamil Nadu). In recent years very severe Cyclone Thane and Cyclone Nilam both made landfall in Tamil Nadu but caused no damage to the houses built as part of this project. Some survey respondents did report damage to doors and windows due to wear and tear and 10% of respondents said the houses had some leaks during the rainy season.

Women participating in focus groups in Madavamedu said that they and their children feel less vulnerable during the rainy season and that water used to inundate the old village every year. They also said they felt that the solidity of the new houses would help them to withstand disasters like the tsunami.

Several people noted that the stairs were very important because in a tsunami they could escape to the roof.

96% of technical survey respondents said that they had plans to (further) upgrade or extend their houses, but 23% said that necessary building materials were not available locally.

In Palayar and Madavamedu a significant proportion of households had made extensions to their houses, some of them on a grand scale. Many houses have had rooms, verandas and other aspects added, with a small number expanded to fill the plot and rise to two storeys. Almost all plots have been enclosed with walls for privacy reasons. Many houses have been lovingly decorated and customised.

In contrast, in Kalaingar Nagar and Creed Nagar none of the houses have been extended, and only a very small number have been repainted.

Most of those who participated in focus groups or were interviewed aspired to upgrade their houses, whichever community they were from. However, the financial capacity to save and extend varied considerably and was the main factor in determining people's ability to customise their houses to suit their needs.

One woman in Madavamedu (see Figure 18, top left) explained that she was extending because she had two sons nearing marriageable age and extra space was essential to achieve a good marriage. She had borrowed money from a money-lender (at equivalent of 36% APR) because accessing bank loans was too difficult. She explained that she understood how to monitor the works because of the original construction, and insisted that the workmen used enough water and cured the concrete.

It was noted in focus group discussions with women in Palayar that domestic violence has increased due to alcohol consumption, and that there is a particular problem with teenage boys working as labourers (from as young as 10) and becoming addicted to alcohol. It was unclear if this is linked to the tsunami and subsequent recovery process or not. Conversely, in Madavamedu, women said that alcohol consumption is similarly a problem but that this has reduced because the government has regulated the selling of liquor, resulting in a reduction in domestic violence.



Figure 18: Houses in Madavamedu. Clockwise from top left: A woman shows the works she is having done. Unaltered house with a house with major extensions in the background. House with enclosed front area. House with extensions and decorations.

The study team found no evidence of any special measures being adopted to address access or inclusivity for disabled people or elderly people. In Kalaingar Nagar discussion group participants said it was not considered in the project. One attendee at a focus group discussion in Palayar highlighted the case of a woman who has lost the use of her legs due to polio who cannot reach the light switches and finds it extremely difficult to get up the steps to the house. Given the size of this project it must be assumed that this is just one of many cases of disabled people's needs not being adequately addressed.

CARE and its partner NGOs were not the only organisations to build houses in the settlements studied. In Palayar Lutheran World Service India built a number of houses for people from a more disadvantaged caste. Similarly, in Kalaingar Nagar another organisation builds houses for a group other than the Irula. The study team did not interview any of the occupants of these houses, but it was clear that these communities were separate and had been less able to develop or upgrade their houses or surroundings.



Figure 19: Houses in Kalaingar Nagar. Clockwise from top left: Street showing with a few re-painted houses. Small extension to serve as a shop. Small hut for additional space, similar Irula huts before the tsunami. Bricks stockpiled for future extension.

10.2.2.1 WASH

73% of survey respondents felt that the project addressed the WASH needs of women and girls, while 20% felt the project didn't and the remainder didn't answer or didn't know.

The vast majority of respondents said that before the tsunami they had no toilet at all, although 27 respondents had outside toilets and 5 had inside toilets.

In Palayar many of the women attending focus group discussions said that as the toilet was constructed outside the house (it is in fact integral, but has its own entrance) beneficiaries are using it. In Kalaingar Nagar the women's discussion group participants said they use the toilet as it saves them time compared to the previous practice of open defecation. In Madavamedu in contrast women said they did not have a traditional practice of using indoor toilets

so most used the toilet as a pooja room instead and resumed the practice of open defecation. They said that had they been given an outside toilet it would have benefited them. They also noted that they received no education or support on using the toilets as part of the project (and also noted this was also the case for the remainder of the houses in the village which were constructed by a different agency). One woman interviewed in Madavamedu explained that she changed the kitchen to a pooja room and the toilet to a kitchen and now had no toilet, while another explained that there were walled empty plots in the village which she could use privately for open defecation.

In Creed Nagar one widow explained that her elder son had told her not to use the toilet, and that she was used to open defecation, but she did use the toilet at night. She also said that adolescent girls used the toilets during menstruation.



Figure 20: Houses built by other organisations in Palayar (left) & Kalaingar Nagar (right)



Figure 21: Woman in Madavamedu (centre) with her kitchen changed to a pooja room and toilet changed to a kitchen.

In Palayar there are some public taps and hand pumps, but the water is saline, so obtaining water for drinking and cooking is challenging. The government water towers cannot meet demand and only serve those who live near them. The government has (recently) installed a reverse osmosis treatment plant in the village, at a cost of Rs 2/- per pot and Rs 6/- for a 25 litre can of water, but it is only open every other day. Women have to collect the water, and it can be a significant distance given the size of the village.

In Madavamedu most people had their own hand-pumps and no shortage of water, but since the tsunami the water was saline. As a result, people had to buy drinking water from a reverse osmosis plant. In Kalaingar Nagar and Creed Nagar every house had its own hand pump, and although some were saline people seemed happy that they could easily access water.



Case study: making a shelter a home



Mr K Mani lives with his wife and three sons in Palayar. He is a graduate in commerce and a fisherman and works on someone else's boat, earning about Rs 1,000/- per day. His old shelter was a thatched kutcha shelter, but was twice the size of the one CARE provided. After the tsunami his middle son spent 1 week in hospital, and the whole family spent 2 years living under plastic sheeting. They lost around Rs 20,000/- and all his wife's jewellery in the tsunami.

He recollects that shelters in Palayar were allocated on a lottery, and doesn't remember being consulted. He thinks that around 20 shelters were eventually given to non-affected people by the Panchayat, but that apart from this the allocation was fair and went to those most in need. He explained that having joint title with his wife was a positive thing and bound them together more closely. Neither party would remove the other.

Since the shelter was handed over they have added a covered veranda, a large kitchen at the back, another bedroom and a boundary wall. They've also replaced the toilet with an outside one alongside the shelter. Although the shelter was too small originally, the family is comfortable here now and doesn't want to move. Receiving the shelter has allowed him to avoid paying rent and save maintenance costs. He estimates the reduced maintenance costs have saved him 3 lakhs since moving in. Mr K Mani and his sons are extremely proud of what they have achieved, and have put huge care into making their shelter their own. The beautifully carved door, costing Rs 70,000/-, is an example of the investment they have made.

The elder son wants to be a policeman and the middle son wants to move to Singapore to work and says that the support provided by CARE, SEVAI and CREED was "wonderful".



10.2.2.2 LIVELIHOODS & SERVICES

When asked whether the location of their houses was acceptable, 96% said it was and the same number said they could easily access their livelihoods. However, in group discussions in Palayar it was highlighted that the distance from the shore was a problem for many, as this is where their livelihoods are. From the visits, and particularly from interviews with households and occupants of the original seaside settlement, it was evident that a significant number of the occupants of Palayar only lived there seasonally, during the rainy season, and moved back to their original land and reconstructed kutcha houses by the sea at other times to be closer to their livelihoods.

In Kalaingar Nagar and Creed Nagar focus group participants discussed the effect of changing from a semi-nomadic lifestyle to settling in one location. Interest in other livelihoods has increased, as has confidence in getting recognition from the government by receiving voter ID cards and enrolling in public distribution systems. However, despite greater aspirations there have been few significant changes in their economic situation. Men mainly work as paid labour in larger fishing boats and face significant discrimination, being paid less than others from other backgrounds. Both men and women have to engage in livelihoods activities to survive, and women are typically paid less than men, but are still responsible for all household work, including cooking, washing, cleaning and childcare. Women participants said this meant they carried a disproportionate burden. One elderly woman in Creed Nagar said that she was much happier and more secure now, but that her earlier itinerant lifestyle had provided more opportunities to earn money.

Women in Palayar explained that the PDS shop had not shifted to the new site and they had to go the old village on days when they had to buy their PDS supplies. Access to health and education services in Madavamedu has not significantly changed since the tsunami. There is a primary school in the village, and most focus group participants agreed that both boys and girls are able to attend this school. However, it was noted that the nearest secondary school is 3km away in Pudupattinam, which results in many girls dropping out of school due to concerns about transportation and safety. Further education is only available much further away, and generally families are only willing to



Figure 22: Top: The reverse osmosis water treatment plant.
Bottom: A toilet used as bathing area and storage.



Figure 23: Left: The fishing port in the original village. Right: typical re-built kutch houses in the original village

fund the further education of boys. The situation in Kalaingar Nagar and Palayar was very similar. Nonetheless in Madavamedu the women's focus group estimated that around 100 girls have been able to complete education to graduation, but noted that after this they will immediately marry.

In Kalaingar Nagar discussion group participants felt that the area is safe and easily accessible because it is on a good road. They also highlighted that a primary health centre has just been opened adjacent to the villages. In general access to services has improved in this community because of settling in one location.

62% of survey respondents remembered some kind of skills training being offered, with most saying this was construction skills training, but other examples being given as tailoring training and "pickle training". Many of the survey respondents reported that the training provided as part of the projects was not of use to them because they had no interest in livelihoods other than fishing. A significant minority however said that skills training in livelihoods activities other than fishing had been of use to them in the longer term. Examples given included people who could obtain income during the rainy season or could engage in other income activities outside their normal fishing season (there is restriction from fisheries for fishing for 3 months). Some stated that when women have free time they engage in this additional work (although the survey did not enquire whether this represented an additional burden for women). 12 individuals had set up residential tailoring shops. Although not conclusive, it appears from the survey that the training was of more use to those who worked as labourers or employees of boat owners than it was to boat owners.

Women's discussions in Palayar and Madavamedu highlighted that since the tsunami women have set up self-help groups and accessed credit, including from banks, to generate income. Some have started shops in their houses and set up tailoring businesses (supporting findings from the survey). It was suggested that men have been more willing to support women to set up enterprises than before the tsunami.

In Creed Nagar, but not in Kalaingar Nagar, a foundation separate from CARE provided five palm trees for each household. This has made the community a beautiful, shady place, and has provided some income to each of the households from coconuts. Additionally, it is very clear that the protection from the trees has reduced the weathering of the houses; the original paintwork is still in place, while in Kalaingar Nagar on the other side of the road the original paints has completely worn off.



Figure 24: Small shop adjacent to house in Palayar

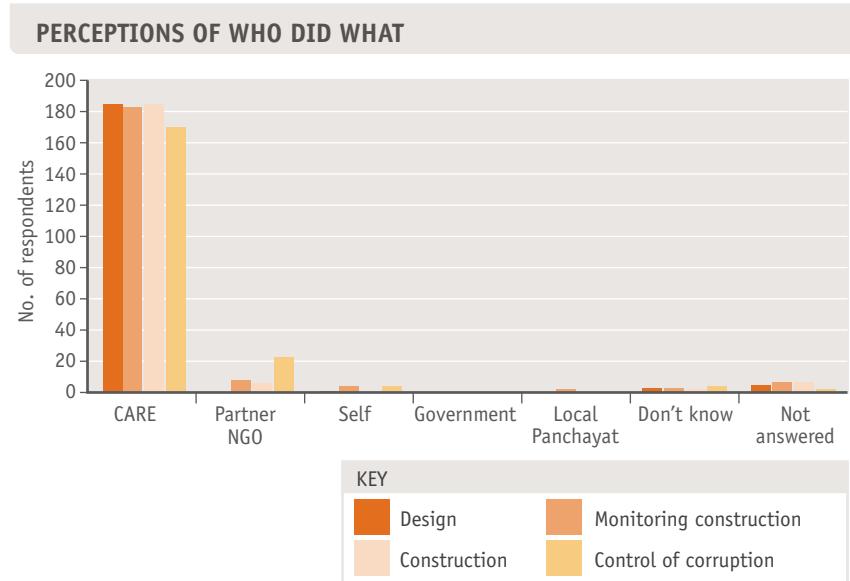
10.2.3

ACCOUNTABILITY & PARTICIPATION

When asked who did what in the project the great majority of respondents thought that CARE was responsible for design, monitoring, construction and corruption control. A very small minority identified the partner NGOs as playing a role, and even fewer considered that they themselves had played a role.

Only 28% of socio-economic survey respondents felt that they and their family had been involved in the planning of the shelter project or the design of the houses, but in the technical survey 83% said they had been consulted. Although there were significant problems with beneficiary selection in Palayar (here only 18% of respondents felt involved in planning, see section 10.2.1), only a minority of respondents felt adequately involved in planning in Madavamedu (46%) and Kalaingar Nagar (39%). 58% of respondents felt that women were able to be involved in project decisions and planning (although in Kalaingar Nagar the figure is lower, at 32%). It should be noted that the majority of survey respondents were men.

Only 35% of respondents recalled a formal complaints and feedback mechanism being set up. 62% of respondents said they had been able to provide feedback on the design of the house, and 52% said they had given feedback during the project, with the mechanism for feedback being given as direct feedback to NGO staff face-to-face or by phone. Only 8% said they had feedback they had been unable to give. Just over half the respondents said their feedback had been incorporated. Those who said their feedback had not been incorporated gave examples of having requested toilets to be separate from the houses (they were constructed integral to the house, but with a separate external door). Feedback that had been incorporated included provision of stairs to access the roof and provision of a back door. It is notable that in Kalaingar Nagar none of the survey respondents recollect providing feedback during the project, but this does not agree with the focus group discussions (see below).



CREED, CARE's local partner NGO in Kalaingar Nagar & Creed Nagar, used scale models of the 7 government house designs to consult with communities on which houses they would prefer. Similar measures were not used in any of the other projects studied by the team.

As a result of consultations on house designs each community selected a preferred design (in Palayar and Madavamedu two different designs were available for households to choose). Also it was decided to add a staircase to the roof of the houses, a back door, and that toilets should have a separate, external entrance.

Despite CARE having established village level institutions for monitoring the construction activity, few Palayar residents seem to recollect this. Most community members do not remember being part of the design finalization process. In women's focus group discussions in Palayar and Madavamedu it was clear that much of the community participation and consultation was undertaken through the traditional Panchayat Raj Institutions and the village level committee set up, in which women are expected to be represented by their husbands or other male representatives. Women generally felt that they were not adequately consulted, giving examples of the kitchen design, lack of prayer room and toilet design not being in line with what they would have asked for.

In Kalaingar Nagar and Creed Nagar focus group participants recollect significant participation in both planning and construction, and also the formation of a village level committee involving



Figure 25: Consultations using scale models of different house designs in Kalaingar Nagar & Creed Nagar
Photo credit: CREED

both men and women. The participants explained that as housing was an important issue for them they wanted to ensure good participation. Women explained that they were involved in the planning of the houses and that major requests about sanitation and installation of water pumps were addressed, although they were disappointed that a separate pooja room could not be included. Women explained that they felt they had ownership of the process as they were involved in supporting the construction while men were away working.

In Madavamedu women at the group discussions felt they were able to influence some aspects of the house designs, such as getting a back door, but that other requests were ignored. In particular, having the toilet inside was something they wanted to avoid. In household interviews in Madavamedu one woman said she had not been consulted at all, saying that all decisions were taken by the Panchayat, while another remembered choosing a house plan.

92% of socio-economic survey respondents felt that CARE and its partner NGOs shared adequate information about the project with them in order to give them clarity on what the project was and what they would receive, and in the technical survey 83% of respondents said they had been consulted.

92% of technical survey respondents said they had made no contribution to the house construction whatsoever, although 7% said they provided unpaid labour. 61% of survey respondents remembered the formation of village level committees to monitor the project, with 18% saying they were not formed and 19% not knowing. Only 36% felt that these

committees had included vulnerable members such as elderly people or people from scheduled tribes (note that none of the beneficiaries of this project were scheduled caste). Some respondents from Palayar thought that committees were men only, although most said there had been some female representation on the committees. The overall impression gained in Palayar was that due to tensions with the community and the Panchayat Raj Institution widespread community consultation and participation was very limited and most decisions were taken with the village level committee only. In Madavamedu women at group discussions said they were not involved in village level committees.

From focus group discussions in Madavamedu it was apparent that there was limited interest from men to take part in construction work on the houses, even if paid, as they prioritised resumption of their normal fishing activities. In Palayar the community was largely unable to take part in construction activities because they were not present during construction, although some women in Palayar did recall receiving some training and taking part in construction work. In Madavamedu focus groups recollect women taking a more traditional role of providing water for concrete and providing food & tea for workers.

The investigations into participation of affected people paint a mixed picture which appears to show that CARE and its partners did communicate with beneficiaries and provided information, but many of the beneficiaries, at least in hindsight, felt they didn't have meaningful input into the project.

10.2.4 OWNERSHIP

The land for the post-tsunami reconstruction projects was provided by the Government of India, and it was mandated that the legal title should be jointly in the name of men and women. Houses were also given to affected people with the restriction that they cannot be sold for 10 years.

78% of socio-economic survey respondents said the legal title of their house was in the name of a woman, but 35% still said it was in the name of a man. This conflicts with the technical survey, where 65% of respondents said that the land and house titles were in the name of a man, 35% said in the name of a woman and 1% did not know. 97% said they had title papers, but because the Tamil Nadu technical survey was undertaken by enumerators this could not be verified directly by the study team.

Interestingly at one focus group, with only women present, women said that debts were always in their names because they were typically for loans for healthcare or education of children, but assets were always in men's names.

Focus group discussions with women revealed that most new of their rights and that having legal title over land and houses has increased their confidence and they feel more recognised and proud to own an asset. They felt that it has led to some 're-organisation' in society, and has protected them from the houses being sold or mortgaged without their permission. However, most said it had not fundamentally changed anything about their position or roles in the household, and it was specifically said that it had not reduced domestic violence. When asked if they would allow their daughters or daughters-in-law to inherit the title to the houses women said no, and that houses would go to sons. This was the case despite women recognising that female ownership of assets was a positive thing and not allowing female inheritance would revert to traditional male-dominated ownership of land and assets.

The IAS Deputy Works Commissioner in Tamil Nadu, Mr Kandasamy, noted that the intention of the government had been to empower women by giving joint title to them, but that this hadn't been effective, and in fact had been a "bitter experience". He noted it is necessary to give sole title to women otherwise they are still unable to exercise any control.

The study team undertook a visual survey of three blocks of Palayar village to estimate the occupancy rate of the houses. The three blocks were on the edge of the village where there was a noticeably lower occupancy rate than in the central areas. It was estimated that around 10% of the houses were completely abandoned and a further 15% were locked and secure but not currently occupied. It being the rainy season, it is likely that many of these are seasonally occupied (see 10.2.2.2) but it is clear that some people have moved back to the original village permanently or left for other reasons. One interviewee said that generally people who have motorbikes have stayed in the new Palayar, while those without have moved back as it is too difficult to get to work and back.

One household interview in Palayar was with someone who was renting the house from the owner who moved back to the original village when he finished a pukka house there one year ago. Rather than maintaining the CARE house, the recipient lived there while he save money to build a new house in the original village. The tenant moved to the village because of the work opportunities for her husband (who works on the ship belonging to the owner of the house).

Another interviewee said that he thought around 50 houses in Palayar have been sold to new owners since the end of the project, mainly because occupants needed to be elsewhere for their work or because they just didn't like it in the village. He also said many people only lived in Palayar seasonally. According to him, the price of a house was originally Rs 200,000/- (2 lakhs), but rapidly increased to Rs 400,000/- (4 lakhs) during the first two years. Now a house will change hands for Rs 600,000/- (6 lakhs), he says.

Case study: investing in business

Sonia Indrani is a widow who lives with her son and daughter in Palayar. She lost her shelter and all her possessions in the tsunami. Ms Indrani's family used to rely on fishing before her husband died, and was very poor, but now she has her own prawn business, cleaning, packing and selling prawns. She borrowed Rs 100,000/- (1 lakh) to set up this business, by mortgaging her gold ornaments. She now has a healthy income, and her son is studying for a Bachelor of Engineering in Chennai and her daughter attends school in Cuddalore.

Ms Indrani said that due to the shelter she could keep whatever she earned after the tsunami, and could invest this in her prawn business and grow it. Indrani said things were changing for the community, and within a decade it would be difficult to find a traditional fisherman. All families were prioritising education for their children and did not want to send their children to the sea.

Case study: equity release

Regina, 40, is a widow who lives with her husband 's sister Kupamal, 50. Her husband died four years before.

Her husband was a fisherman and Regina used to support him with preparation of dried fish to sell. Regina now suffers from arthritis and is unable work. However, she gets Rs.1000/- per month in widow's pension from government, as does Kupamal. The Rs 2,000/- per month isn't really enough to live on, so they have made an arrangement with Regina's niece Jayanthiran that she will supplement their income with Rs 1,500/- to Rs 2,000/- per month for medical and food costs, and will pay for their water at Rs 2/- per bucket. Jayanthiran also paid Rs 9,000/- to build a compound wall for privacy. In return there is an understanding that Jayanthiran will get the shelter after Regina's departure or death. The arrangement is an informal equity release agreement.

Regina explained that it was due to the shelter that their life is easy and they can get support from relatives.

Case study: inheritance



A newly married couple have recently moved into the shelter that was given to the husband's parents. He was away, working in Qatar, at the time of tsunami and has been back only occasionally since, although he returned for 1 month immediately after the tsunami. His father, a fisherman, works in the port and his parents only lived in the shelter occasionally, during the rainy season.

The title for the shelter and land has been transferred from his parents to him. His wife has no title. The shelter has not been maintained since construction and leaks through the roof, but he says construction was well supervised. He is about to return to Qatar to work for a further 4 months, which will raise money to repair and upgrade the shelter.

Case study: disputed inheritance

One widow interviewed in Kalaingar Nagar lived in the shelter with her two daughters and two sons. She works as a construction labourer and her elder son works as a fisherman, giving them an income of Rs 800/- per day but only when they have work. They have no bank account and no savings.

The original recipients of the shelter were her father- and mother-in-law, and although she lived in the shelter with her husband, they still have the title to the shelter. Now her husband is dead, her parents-in-law want her to vacate the shelter. She is not originally from this community, and isolated without support, so thinks she will have no choice but to return, with her family, to her earlier itinerant lifestyle.

10.3 Project conclusions

10.3.1 PROGRAMME DESIGN & IMPLEMENTATION

Three of the four projects were relocations. Where those relocations moved only part of a community there were much more significant problems in the longer-term. None of the projects fully disconnected people from their livelihoods, but they did negatively affect some people's ability to access livelihoods. However, for some the projects improved people's access to education and other services.

Community control and choice, and meaningful participation in the projects, was limited, although CARE's partner NGOs did implement systems and make serious efforts to do so within the constraints of the government rules, scale and funding of the projects and agency-driven approach. The limitations on effective participation in Palayar had a significant effect on acceptance and community understanding of the project, but the project also managed to meet the housing needs of the most vulnerable in the community despite the considerable difficulties.

The relocations to safer ground reduced the risk of coastal flooding causing future disasters, although the new sites are themselves not entirely free of flood-risk. The houses have successfully resisted some major storms since they were built, and the occupants generally feel much safer than before. The poorest beneficiaries struggle to maintain their houses, which over the longer-term will degrade the robustness of the buildings. Strong livelihoods are needed to make strong houses truly sustainable.

Giving land and house title jointly to men and women has in itself not had any significant effect upon the standing of women in society, and because daughters are very unlikely to inherit title it is likely will not address women's unequal ownership of assets in the longer term. However, the joint title has given some women more confidence and raised awareness of women's rights, and has given some women much greater independence and the ability to undertake their own economic activities. Giving land and house titles to women is a positive thing to do and can contribute to women's economic empowerment, agency and independence. However, it is not a solution in itself to gender inequality, and can only ever be part of a wider movement of social change.

The programme was closely coordinated with government and delivered in cooperation with government. This helped ensure that the project was fairly similar to most other agency projects and hence that support received by affected people was fairly equitable in value. However, projects were not integrated with neighbouring agency projects, even within the same villages, so missed opportunities to address inequality and isolation of different social and ethnic groups.

Working with partner NGOs was a positive approach which strengthened community engagement and quality of delivery, but also led to inconsistencies of delivery across the projects. The partner NGOs, despite being closer to the communities, received less visibility in the projects.

The projects and house designs ignored, and have not adequately met, the particular needs of people with access and mobility difficulties.



10.3.1.1 RECOMMENDATIONS

1. Where women are disempowered in society and lack agency, future programmes should give title to land and houses solely to women if they wish to make a significant contribution to empowering women. Programmes should also ensure that both men and women understand the context of this and understand women's rights. Programmes should consider giving joint title to women and their daughters, or otherwise addressing issues of unequal inheritance of assets.
2. The needs of those with reduced mobility or other specific needs must be addressed in future projects. The capacity must be put in place to modify individual shelters to address access requirements and ensure communities and settlements are inclusive for disabled people and the elderly. Specific budget provision should be made to ensure this can happen.

3. Relocation projects should be a last resort, and priority should be given to allowing people to remain on their land and to mitigate risks in-situ. Where relocation is unavoidable the project should include the entire community and not be targeted at only a portion of the community.
4. Inputs into relocation projects from government or other agencies should be secured at the onset of the programme, and it should never be assumed they will appear later. Contracts with all partners to the project should be agreed at the outset.
5. Future projects should aim to give much more control and choice to beneficiaries and donors and agencies should consider more owner-driven project designs. Despite this generally being slower, the outcomes are usually significantly better.

10.3.2 TECHNICAL DESIGN & CONSTRUCTION OF SHELTERS

The design of the houses was good and appropriate, although there was insufficient opportunity for affected people to influence the design. The structural design and use of materials was appropriate to the climate, location and likely hazards, and the houses have resisted significant storms without damage.

The construction quality was generally good, although there is evidence of insufficient cover to the concrete and use of salt water in concrete in some cases, which will both affect durability and maintenance requirements. Houses are generally in good condition, although where maintenance has been inadequate there is spalling to concrete.

Although technical supervision was considered good by most house recipients, government representatives felt it was not sufficient.

Houses are relatively easy to maintain, and most occupants feel they understand maintenance requirements. Maintenance is cheaper than for kutcha houses, and this has led to economic opportunities for many. The poorest still cannot afford even this maintenance and their houses will deteriorate more quickly as a result.

In Palayar a minority of the houses are either unoccupied or only seasonally occupied. In Madavamedu, Kalaingar Nagar and Creed Nagar all houses appear to be occupied. Unoccupied houses are generally poorly maintained, although very few are actually completely abandoned.



10.3.2.1 RECOMMENDATIONS

1. Where CARE or other large NGOs undertake construction on a large scale they should ensure recruitment of significant technical capacity in construction and procurement of construction services in order to manage cost, speed and quality of delivery. Technical oversight should not be left to partner NGOs who do not specialise in construction.

10.3.3 HABITABILITY & RELEVANCE OF SHELTERS

The shelters and settlements built in Tamil Nadu met the primary needs for safe shelter of women, girls, men and boys. The agency-driven and contractor-built approach delivered good, consistent quality houses which provide dignity and safety and were generally higher quality and more robust than houses people lived in before. The same approach also meant that whether the houses have met the needs of particular women, girls, men or boys depends more upon their and their household's circumstances than upon the houses themselves, and in particular their household size and economic situation. The size and arrangement of the houses was seen by many as too small, but was appropriate to balance the competing demands of quality and reach of the projects. There are examples of highly vulnerable people having their lives transformed for the better and examples of people finding that the projects did not meet their wider social & cultural needs. There are examples of women being empowered and granted independence and also examples of women remaining in a powerless and unequal position.

The reduced maintenance costs and secure tenure and ownership was a significant economic benefit to the recipients, even where they don't occupy them. Where projects were coupled with appropriate livelihoods support they had a more transformative effect. Even small interventions like providing coconut palms had a positive impact. Water and sanitation was generally poorly addressed in the projects, with some exceptions. Toilets were provided with all houses, and they have provided dignified and safe facilities for women and for adolescent girls in particular. However, there was insufficient meaningful consultation and hygiene promotion to make these universally successful. In most cases water supply was (largely correctly) seen as the responsibility of the government, but when this was not adequately delivered by government there was no alternative option.

The projects have generally had either no effect or a positive effect on access to health and education services. Access to livelihoods has been reduced for some in the projects involving relocation, although others have seen new livelihoods opportunities arising as a result of the projects.



10.3.3.1 RECOMMENDATIONS

- 1. Where relocation is unavoidable or is the actual choice of the affected people inputs into projects from government or other agencies should be secured at the onset of the programme, and it should never be assumed they will appear later. Contracts with all partners to the project should be agreed at the outset and mechanisms agreed to ensure communities can hold parties accountable.**

10.3.4 SIGNIFICANCE & LONG-TERM IMPACT

The response project constructed 1713 houses. The tsunami destroyed or damaged around 150,000 houses in India.⁷ The projects were part of a government-led reconstruction effort with unprecedented funding, involving large numbers of agencies and giving very high coverage of needs. It was therefore a highly appropriate level of assistance to give. A number of affected people were excluded from the projects because they had the capacity to recover without humanitarian assistance. This is in line with normal humanitarian practice, but due to the comprehensive levels of support given to many communities was divisive in some communities. Where there is sufficient funding available for projects to provide assistance to whole communities these are more likely to build cohesive and resilient societies than projects which relocate only the most vulnerable, leaving wealthier people where they are.

The programme was cost-effective and allowed those with the ability to mobilise the necessary economic resources (sustainable incomes, debt, savings, remittances etc.) to build upon the assistance given, invest in their houses, families and businesses and significantly improve their situation. For those who could not mobilise such resources the programme provided essential safe and dignified housing and a degree of economic stability but did not create a basis for further improvement in their situation or to adapt their houses to meet their particular household needs. As such, a programme with the flexibility to deliver additional support to the more vulnerable could have delivered a more equitable recovery.

Disaster risk reduction measures applied have been effective, and the buildings have significantly reduced vulnerability to natural hazards.

Houses are largely being extended with similar concrete framed approaches, which will be resistant to flooding and high winds. Earthquakes are not a risk in Southern India.

Overall, the programme has been a significant catalyst for the recovery of individual households and the community. It has created some new economic opportunities and by significantly reducing the maintenance burden on households has increased economic resources. The majority of buildings have been extended and upgraded in some way, and ownership is high. Where communities have been relocated some houses are only seasonally occupied or are not occupied, but there is clear evidence of the houses being desirable assets and they appear to be unoccupied because people haven't decided what to do with them, or have been waiting until they are allowed to sell them.

There is evidence of the projects contributing to women's empowerment, in particular by giving women some control over house titles and making it more acceptable for women to engage in and own their own income generation. This is not universally the case, but is a positive part of a wider movement to empower women.

The projects have provided safe and sustainable settlements, but where adequate water supply has not been provided this has a disproportionate effect on women and girls. Unlike in most of the other projects studied, provision of toilets has led to many people, especially women and girls, using the toilets. The lack of a complementary hygiene promotion project has meant that some households, and many men, do not use the toilets as toilets.

10.3.4.1 RECOMMENDATIONS



- 1. Where sufficient funding is available to achieve sufficient coverage of needs it is entirely appropriate to construct permanent, durable houses. However, projects should seek to ensure that more vulnerable people are able to adapt their house to suit their particular needs. This will require dedicated budgets to provide assistance tailored to people's needs.**
- 2. Relocation projects should relocate the entire community and not parts of the community only. Resilient, cohesive communities are more likely to be created if communities are not fragmented.**

7. Preliminary Damage & Needs Assessment Report, World Bank, <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/0,,contentMDK:20750779~pagePK:146736~piPK:146830~theSitePK:223547,00.html>

10.3.5 ACCOUNTABILITY

The scale of the projects in Tamil Nadu placed strain on standard accountability mechanisms. In Palayar troubled community relations made effective accountability even more difficult. Some feel they weren't able to hold CARE, its partners or the government accountable for what they believe they were promised. However, the selection of beneficiaries was in accordance with humanitarian principles and requirements for accountability to donors, highlighting the potential conflict between accountability to affected people and to mandates or donors.

Increased, earlier community engagement and meaningful involvement in decision could have strengthened accountability. Strong partnership of government and NGOs, with local partners who have longer-term presence, can also do so. However, ultimately projects end and it is local governance and representation that enables communities to hold their own government and NGOs accountable.



10.3.5.1 RECOMMENDATIONS

- 1. Including women on an equal basis with men, projects should address governance and enable communities to effectively represent themselves and access effective representation by others.**



11. ODISHA 2011 FLOODS RESPONSE

Odisha has a 480km coastline and 11 major river systems, so is vulnerable to multiple natural hazards, including frequent tropical cyclones and both coastal and river flooding.

In 2011 the disaster-prone State of Odisha was repeatedly hit by serious flooding in June, August and September, affecting 21 of the 30 districts in Odisha. In September there were two major floods, the first one being caused by heavy rains in the Mahanadi catchment and release of huge discharges from Hirakud dam and the second by heavy rains and flooding of Brahmani, Baitarani and Budhabalanga rivers, amongst others. Nineteen of the state's 30 districts were affected, with the government estimating that 4.5million people were directly and significantly affected.⁸ The Water Initiatives Odisha estimated that over 2600 villages were affected and over 990 were 'marooned'.⁹

Puri, Kendrapura, Cuttack, Jajpur, Jagatsinghpur, Sambalpur, Boudh and Sonepur Districts were worst affected. CARE responded in Kendrapura and Jajpur, in 31 villages in 10 Panchayats with a range of disaster response and recovery programming, including shelter, livelihoods and WASH activities. The areas of intervention are extremely remote and during much of the year can be very difficult to access. CARE worked with local NGO Gram-Utthan, funded by ECHO.

200 one-room houses were built on people's existing land, without any relocations, at a final cost of Rs 77,000/- each. They were described as temporary, but included durable precast concrete cantilevered posts, timber roofs with corrugated galvanised iron sheets and mud-rendered bamboo matting for walls. Houses were raised on a mud plinth, built by households themselves prior to construction, to increase flood resistance. The intention was that the occupants would upgrade the walling but had a strong permanent concrete frame which would survive any future floods and provide a basis for reconstruction. It was expected that beneficiaries would upgrade the walling over time to form a permanent durable house.

No toilet was provided with the house, but flood resistant elevated water pumps were built in the villages. Construction was done by locally hired labour, including the beneficiaries, with equal payment to men and women. Construction materials were provided and delivered to the villages by CARE and Gram-Utthan.

8. Bhaduri, Amita. Man-made floods in Orissa in September 2011- Key issues raised by Water Initiatives Orissa. 6th October 2011. India Water Portal. <http://www.indiawaterportal.org/articles/man-made-floods-orissa-september-2011-key-issues-raised-water-initiatives-orissa>

9. Flood Update IX. 25th September 2011. Water Initiatives Odisha. http://www.indiawaterportal.org/sites/indiawaterportal.org/files/Flood_Update_IX%20from_WIO_2011.pdf

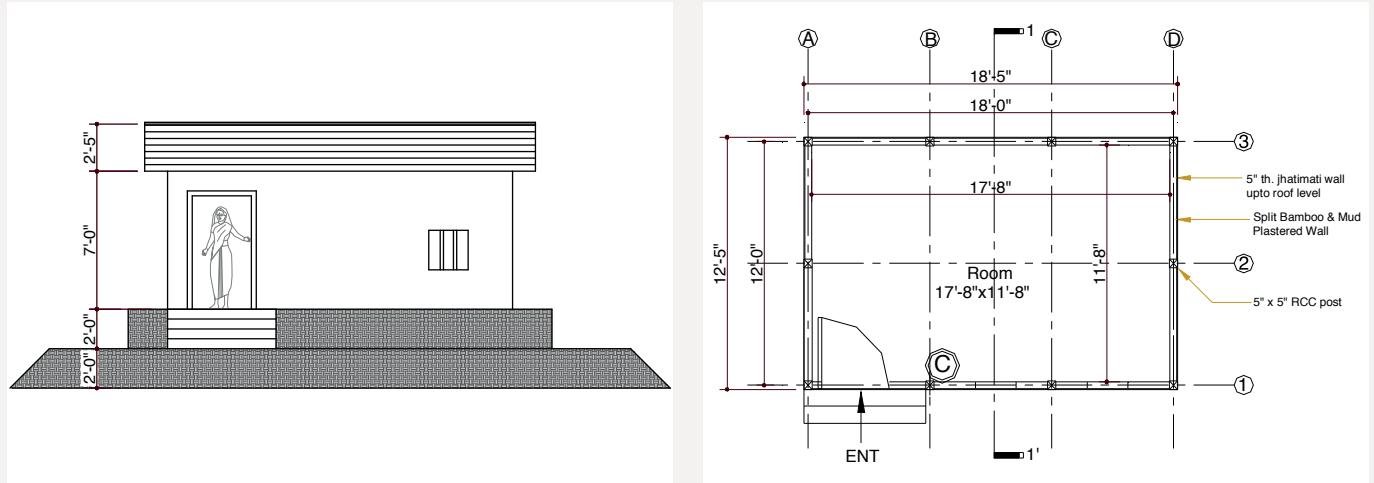


Figure 26: Odisha house design



Figure 27: Houses built in Berhampur & Ujanga. Note that the plinth level varies because the plinth was built by the household themselves. The house on the top-left has been re-rendered using cement mortar. The bottom-left photo shows the wooden plaque with the donor & NGO logos and the owner's name.

Table 7: Focus Group Discussions & interviews undertaken in Odisha

Type	Location	Date
Interview with Gram-Utthan staff	Bhubaneswar	28/07/2015
Focus group discussion – women	Mandari, Berhampur	29/07/2015
Focus group discussion – mixed	Mandari, Berhampur	29/07/2015
Focus group discussion – women	Ujanga, Berhampur	30/07/2015

11.1 Studies undertaken

The sample size for socio-economic survey in Odisha was 24, all of which were female and from the village of Berhampur. For the technical survey 31 households were surveyed in two hamlets of Berhampur village (Mandari and Ujanga), out of 200 households which received houses (16% of recipients). 39% of respondents were male and 61% female.

11.2 Findings

As the flood inundated the village over half of the respondents reported seeking shelter on higher ground nearby, with the remainder fleeing to neighbouring villages and only one taking refuge in the Panchayat building. Half of the survey respondents said they were displaced for 8-14 days and the other half for more than a month. Focus group participants explained that it took over a month for waters to recede, and that many children suffered from diarrhoea and fever due to the poor sanitation. NGOs were the only source of post-disaster support named by survey respondents.

11.2.1 WORKING IN PARTNERSHIP

The interview with the director and staff from the local partner NGO, Gram-Utthan, was both frank and enlightening, discussing the nature and power imbalances of INGO and local partner NGO partnerships. CARE and Gram-Utthan have collaborated on a variety of projects since the super-cyclone in 1999, and the director of Gram-Utthan said that the organisation had come to be where it was now because of CARE. However, the response in 2011 had severely damaged the relationship and Gram-Utthan now has lasting problems with community relations because of the nature of the response.

It was explained that the scale of the project, with 200 houses, was dwarfed by the need, and that the houses built did not come close to meeting expectations of the communities, who wanted permanent houses. They said that Gram-Utthan now has to deal with complaints from the community every year when the walls are damaged in annual rains.

Furthermore, the support from CARE for Gram-Utthan was inadequate. From Gram-Utthan's point of view, CARE, and all INGOs, just gave targets and didn't help enough with how to actually deliver. There was a lot of pressure to meet deadlines, without any explanation of why. As a field NGO Gram-Utthan staff felt they knew the local context and realities of what was needed, but the project was designed without their input and budgets were unrealistic. The director explained that they had to subsidise the project with Rs 120-150,000/- (12-15 lakhs) to meet the personnel requirements for the project to be delivered on time. The budget allowed for 12 people, but they had to employ 30. When asked if

they ever had direct contact with ECHO, they said they did not and everything happened through CARE.

The Gram-Utthan director explained that the project was not done truly in partnership, and that what they really needed as a partner was capacity building around community engagement and programme quality systems, procurement HR and finance capacity, and gave further examples of needing support on managing community expectations and how to do good distributions. He also said that community leaders needed training on disaster preparedness.

It should be noted that Gram-Utthan staff were very reluctant to engage with this study because they wanted to avoid raising community expectations of further assistance. However, after the discussions and understanding that the aim of the study is to learn and improve in future they supported the field visits. Significant time was taken at the start of each field visit to explain the reason for the visit to the community.

11.2.2 BENEFICIARY SELECTION

All of the beneficiaries were Schedule Caste, as is the entire population in the villages in which CARE implemented the project.

40 houses were constructed in Mandari hamlet, selected from around 300 households. In Ujanga 21 houses were built, selected from around 150 households.

88% of survey respondents said that beneficiary selection was done by the partner NGO and the village Panchayat Raj Institution together, while 13% thought it was done by just the partner NGO. All respondents named having fully damaged houses as the only criterion used for beneficiary selection. However, according to the survey 7% of beneficiaries had an only partially damaged house.

Participants in the group discussions in Mandari explained that the houses were allocated by forming village level committees which selected the households with the most severely damaged houses.

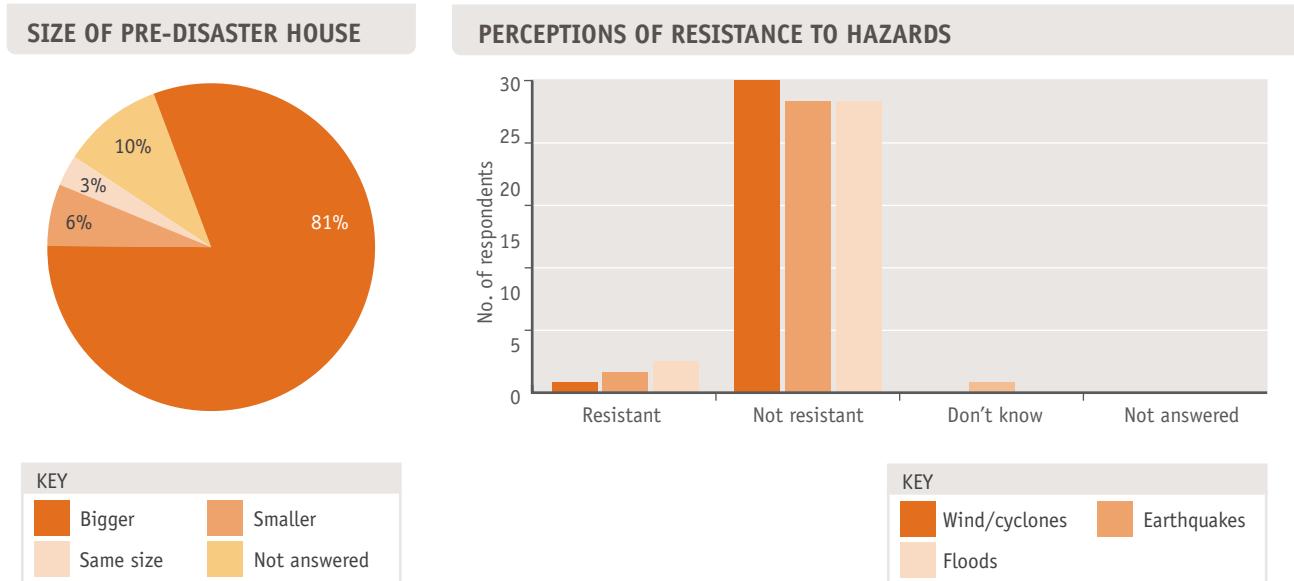
In Ujanga the discussion participants said that there were 60 fully damaged houses, and that a committee was formed to select the 21 households who would receive a house. Partially damaged houses were not considered at all. They said that those who were not selected refused to cooperate further and applied considerable pressure on Gram-Utthan because they had not been selected. There was evident dis-satisfaction with the fact that only 21 households were selected.

No respondents to the socio-economic survey expressed any dissatisfaction with the beneficiary selection process (but all respondents were beneficiaries). 97% of respondents to the technical survey felt that the beneficiary selection process was fair.

Focus group discussions included both beneficiaries and non-beneficiaries. A small number of the non-beneficiaries were unhappy about not having received houses and felt the process had been unfair. Following one of the group discussions the team visited the houses of two of the dis-satisfied non-beneficiaries. In both cases the non-beneficiaries had existing pukka houses (provided under the Indira Awas scheme) which had survived the floods, and in one case had two additional kutcha houses.

One person, understood to be a local politician, took the study team to one side at the field visit and raised concerns about irregularities in the beneficiary selection process, claiming that a small number of names had been added to the beneficiary list outside the formal process. With the very limited time available the study team was unable to further investigate these allegations.

The field visits found no concrete evidence of the beneficiary selection process being unfair or inadequate, but did find there was a perception of unfairness in the wider community.



11.2.3 SHELTER & SETTLEMENT

100% of socio-economic survey respondents said that the houses did not meet their needs. Reasons given were primarily that their previous houses had been bigger and they wanted pukka houses not kutcha houses. Similarly all respondents said they were not adequately involved in the planning of the shelter programme.

Socio-economic survey respondents also unanimously agreed that the social and cultural needs of the community were not adequately addressed by the project. The reasons given for this were that the houses were too small, did not have partitions, and that mud walls needed replacing every year after the rains. It was noted that women in particular needed to do extra work to repair the mud walls. Respondents said that they expected to receive pukka houses and that the houses they'd received were temporary and were as prone to damage as their old houses. It was also noted that the design did not have a kitchen in the house causing more hardship for women. Most respondents also noted that there was no toilet provided with the house.

In focus group discussions beneficiaries also noted that the absence of a partition in the house meant that it did not provide privacy, and that they couldn't even change clothes in private. A number of households had added partitions, most in mud but some in brick (see Figure 29). One woman has partitioned the house and used one half to shelter her cow, which is critical to her livelihood.

From the technical survey, 10% of respondents did say that their social needs and 6% that their

religious and cultural needs were met by the houses; but still the great majority felt their needs were not met. 81% of respondents said that there was inadequate space in the house, and 90% said the house did not provide their household with sufficient privacy. Particularly notable is that 81% of respondents said their pre-flood house was bigger than the house they have now, with only 9% saying their old house was the same size or smaller (10% did not answer this question).

Despite general dissatisfaction with the size of the houses, focus group participants felt that the houses had benefited their recipients. It was commented that children found it easier to study because the CGI roofs were less leaky than before, and that "people who received houses are doing well".

Focus group discussion participants in Mandari said that all their prior houses were constructed with mud walls and with a thatched roof. They said that their village is prone to annual flooding as it is located directly alongside the river. (After the floods in 2011 the government constructed a raised embankment, around 5 high, alongside the river, but only immediately adjacent to the village, so it is unlikely to be effective at preventing future flooding).

All survey respondents did feel that the project was completed in a timely fashion. 94% of respondents said they felt compensated for their losses while 6% said they did not. All survey respondents said the location of their houses was acceptable, and no respondents said they had any trouble accessing their livelihoods. Some focus group participants said that livelihoods opportunities locally were



Figure 28: Many households use their house to store produce, reducing the useable living space.

few, so they migrated seasonally to find work. Support from CARE was considered good by 84% of respondents, satisfactory by 13% and poor by 3%.

When asked about the material quality of the houses in the technical survey, 94% responded that the quality of materials used was good, 90% that the construction quality was good and 94% that the construction supervision was good. 87% of respondents said they had no kitchen. 94% of respondents said the house provided comfortable lighting and ventilation, with 6% saying it did not.

74% of survey respondents said they felt safe in and around their house, but 19% said they did not feel safe, while 7% did not answer. Most respondents had little confidence in the ability of their houses to resist natural hazards, with almost all respondents feeling the houses were not resistant to wind storms, earthquakes or floods; all of which are significant hazards in the area.

Despite this, it was clear from the household interviews and field visits that there have been several minor floods since the project was completed which the houses have survived without structural damage. Additionally, in 2013 Cyclone Phailin affected the area and although one interviewee reported damage to roof trusses, the study team found no cases of roofs not surviving the high winds.

Focus group participants said that most recipients of houses continued to live in the 'temporary' houses as they couldn't afford to upgrade them or replace them with a pukka house. The houses had been described as temporary by CARE and Gram-Utthan when

constructed, despite having robust and durable concrete columns and a CGI roof. There was considerable concern about the mud walling to the houses; participants said it fell off each year in the rains. Because of this they felt the houses would not resist flooding.

When asked about the concrete columns it became apparent that the reason for providing concrete columns, and the durability of the columns, had not been explained. When asked about the CGI roofs people generally preferred CGI over thatch, even though it made the houses hotter, because it was

more durable. They said the CGI was lasting well and surviving all the seasons. It was noted by some that the roofs leaked at the bolt holes, suggesting holes may have been made in troughs instead of on ridges.

Although from the focus group discussions and other survey questions it is clear that the maintenance requirements of the house are seen as a significant burden, 87% of respondents did feel that the house was maintainable, versus 13% who did not. 68% of respondents had upgraded the house or its surroundings, with the most common upgrades being the addition of an internal partition. 87% said they had extended the house, with the most common extension being the addition of a kitchen or a patio/veranda area. 55% said they had plans to (further) extend their houses, and 97% of respondents said that building materials were locally available.

No respondents were aware of anyone replicating the house designs in subsequently built houses. However, several households have added verandas and some of these have used precast concrete columns like those used for the main structure, and some had extended the houses using a similar structural framing. One discussion group participant said they had spent Rs 10,000/- on a veranda.

Survey respondents all said that no local tradespeople were employed in the construction of the houses and all but one agreed there had been no skills training in the communities. Focus group participants were not aware of how they could upgrade the houses, for example by replacing the walling with brick or other materials. There was evidently little understanding of the houses

and a general feeling that they were temporary but they had no choice but to make them last.

All respondents to the socio-economic survey said that monsoon rains have caused cracks in the walls and frequently caused the mud render to fall off the walls. Replacing it was a significant burden that they didn't have before because their previous houses had big overhanging thatched roofs which protected the walls from rain. While the small roof overhanging used in this project reduced the risk of wind damaging the roof, it has led to walls being less durable. A small number of households had replaced the mud render with a cement-based render, making them much more resistant to rain.

When discussing maintenance with focus groups it was explained that the CGI sheet roofing meant that there was no need to re-thatch annually. In Mandari participants estimated that this saved them approximately Rs 4-5,000/- per year, while in Ujanga the saving was estimated as Rs 1-2,000/-.

Discussion participants in Ujanga, however, explained that they used to spend 2 days per month repairing walls (mud pasting) during the 4 months of the rainy season, but now they had to spend only 5-7 days in the entire rainy season. The mud pasting work of houses is undertaken mainly by women. At local wage rates of Rs 200/- per day (often Rs 190/- for women) this represents an opportunity cost of Rs 600-1000/- per month for four months, completely wiping out the saving from not having to replace the thatch.

Discussion group participants in Ujanga explained that those who did not receive houses had to borrow to re-build. The cost of a kutch house was put at Rs 10,000/-, which most would have taken 2-3 years to repay at 5% interest per month (60% Interest rate). They said loans were mostly in men's names.



Figure 29: Clockwise from top left: House with added veranda using precast concrete columns (note the rain damage to the mud render on the end wall, and also that this household built the plinth using local bricks). House with added extension for kitchen. House with cement render applied. House with significant extension, more than doubling the size, and a veranda.



Figure 30: Left: Shelving added internally. Right: Internal partition and a simple loom for weaving mats added.

Case study: “I can catch fish in my shelter”

One woman in Mandari, who lives with her husband and daughter and did not receive a shelter, was interviewed. She explained that she did not understand why she didn't receive a shelter but that she thought the right people were selected. She explained that her shelter was badly damaged, and because she didn't receive a shelter from CARE she had to borrow Rs 5,000/-, in her name, to repair it, at an interest rate of 5% per month, which she repaid in 6 months. She felt that if she had received a shelter she would be much better off, and that her shelter still regularly floods, saying:

“I can catch fish in my shelter”



Figure 31: Elevated water pump built by CARE & Gram-Utthan

11.2.3.1 WASH

All respondents agreed that WASH needs of women and girls had not been addressed in the project because no toilet had been provided. None of the respondents had a toilet before the floods and open defecation was the norm in the communities. Only one example was found of a household who had built their own toilet.

In Mandari an elevated hand pump was built to ensure access to safe drinking water even if there is flooding in future, to avoid repeated disease outbreaks. The hand pump was clearly in frequent use.

There were wall paintings promoting the practice of boiling drinking water, painted by CARE India, in Mandari hamlet. When asked, none of the focus group participants knew what the paintings meant.

11.2.4 ACCOUNTABILITY & PARTICIPATION

20 respondents to the socio-economic survey said that women were adequately involved in decision making and planning for the project, while two of them said they weren't and two didn't know (note all respondents were women). When asked if women were adequately involved in the project in the technical survey, 90% of said they were not.

65% of respondents did feel that their household had been consulted about the project, versus 35% who did not. All respondents agreed that information about the project had been shared by CARE and the partner NGO, but only one respondent felt this was sufficient. The remainder said it was only adequate 'to some extent'.

It was explained by Gram-Utthan (partner NGO) staff that households could adjust the locations of doors, the height of the plinth and could choose to add a partition if they wanted one. They said that after discussion with the community a bamboo ceiling had been added at eaves level to help control temperatures in the house, which due to the CGI roof were very high. Discussion group participants in Ujanga said that since something was being given to them free of cost they didn't want to propose changes, and they hadn't understood that they could.

One woman interviewed in Mandari recollected that she had been told she and her family would receive a temporary house which would later be converted to a concrete house. It is likely this is a result of an attempt to explain that the house could be upgraded, which was misunderstood as a commitment that this would be done as part of the project.

Of the four shelter projects studied in depth, survey respondents to this project were most informed about which organisation did what in the project. Respondents largely said that CARE was responsible for the design of the project and houses while Gram-Utthan undertook the construction, monitoring and the control of corruption. Only a very small number (<5) said that CARE had played a role in any of these, and even fewer said they had themselves been actively involved in any of the parts of the project.

When asked about the community contribution to the project, 96% of respondents said there had been no community contribution, with the remaining 4% saying they had contributed unpaid labour. 97% said they had provided paid labour for the house construction. Focus group participants in Mandari explained that both men and women contributed paid work and received equal wages even though this is not usual. Women typically had a greater workload, with responsibility for childcare, food preparation and labour for the construction, while men would undertake their normal work or collect the construction materials.

Most respondents (20) recalled the formation of a village committee to monitor the project, with 8 men and 3 women, all Scheduled Caste. Only 8 respondents said a formal complaints mechanism had been set up, by means of a complaints box, with 2 saying it hadn't and 14 who didn't know. All but two didn't know if feedback and complaints had been incorporated in the project, and none of the respondents said they had given any feedback. All agreed that the way to give feedback was through meetings with Gram-Utthan staff, but 15 respondents said that vulnerable members of the community were not able to give feedback.

11.2.5 OWNERSHIP

100% of technical survey respondents said that the title of the land they lived on was in the name of a man. 90% said that the title of the house was in the name of a woman while 7% said it was in the name of a man and 3% didn't know. 90% said they held title papers for the land.

Upon investigation on the field visit it became clear that no households had title papers for the house, and that the only evidence of women's ownership was on a wooden plaque hung on the house (which could be easily removed and damaged). Some households could not read this, and others had lost or removed it.

When asked about ownership many focus group participants knew that the house title was in the name of the woman in the household, and that this was a good thing, but most also said that it made no difference. Most agreed that the land was owned by men. The reasons for putting the house title in the name of women had not been explained.



Figure 32: The bamboo ceiling provided at eaves level



Figure 33: Wooden plaque confirming ownership of the house

Case study: Odisha

Sumitra Dalai lives in the Mandari hamlet of Berhampur village with her husband, Amar Singh Dalai, son and two daughters. Their shelter was completely destroyed in the floods, after which they lived in a government-supplied tent for 2 months, relying on support from the Block Development Officer and CARE.

They belong to the Scheduled Caste and rely on Amar Singh Dalai's income as a labourer, but they don't have a 'Below Poverty Line' (BPL) card, so don't qualify for government support schemes. They received a "temporary" shelter from CARE & Gram-Utthan after the floods.

Sumitra recollects that NGO personnel came and told her that she would receive a temporary shelter which would later be converted to a concrete shelter. She and her family cooperated fully, but she said communication was not good. Since then they have added a veranda and a cowshed. However, they still have no toilet and the walls and roof trusses were damaged by Cyclone Phailin in 2013 and she has not been able to repair them.

Sumitra's family is currently struggling to survive and her daughter has had to drop out of her studies for a degree. They have a small patch of land on which her daughter grows vegetables for their sustenance.

11.3 Project conclusions

11.3.1 PROGRAMME DESIGN

The houses built by CARE and Gram-Utthan have met the primary needs for shelter for the most vulnerable people in villages in which the project was implemented. As an emergency response project it has therefore been successful for its beneficiaries. While the most vulnerable have been selected, the project has not supported all vulnerable people due to the limited numbers supported, and hence has caused some divisions in communities. Houses built have reduced disaster risk and there is clear evidence that households can gradually upgrade them. The houses are typically not large enough to meet all the social and cultural needs of households. The absence of internal partitions compromises privacy and dignity.

No special measures were adopted to meet specific needs of disabled people or others with particular needs. The lack of livelihoods assistance to complement the shelter assistance has slowed the pace of recovery and upgrading and hence contributed to dis-satisfaction with the houses. Although there was no sanitation intervention as part of the shelter project, the provision of safe water supply through hand pump on raised platform and has contributed to the resilience of communities.

The community was involved in the project and made a positive contribution, but due to the difficulties in accessing communities, in staffing the project sufficiently and in supporting Gram Utthan. The community engagement was weak, understanding of the project by the community was limited and the project has resulted in lasting resentment amongst those not assisted. Using local paid labour contributed to the local economy and recovery and had a positive effect.

The tight deadline for spending emergency funds and the requirement to provide only urgent

emergency assistance had a significant influence on the project, both in how it was presented and delivered. This limited the ability of the shelter project to maximise its positive influence on the longer-term recovery of the affected people.

Use of the word temporary, and transitional, which do not necessarily translate as different things, both devalues the assistance in the eyes of the beneficiaries and risks raising expectations of there being further assistance to come. In this case, houses which were partly durable construction with high quality materials and partly non-durable construction, are seen by the occupants as sub-standard because they have been described as temporary throughout the project. Although those who designed the project and the houses may understand the nuances of what is intended, these nuances are lost in translation to the partner NGO staff and the beneficiaries.

Housing, land and property rights were only superficially addressed by the project and there has been no noticeable effect from designating women as owners of the houses.

CARE and Gram-Utthan were the only agencies working in these areas, so there was no need for coordination with other agencies. The programme was coordinated with and agreed by government.

The arrangement between CARE and Gram-Utthan was seen by CARE as one of contractor-subcontractor while Gram-Utthan expected a more meaningful partnership with greater input and support. This led to tension and misunderstanding. Because Gram-Utthan had a lasting relationship with the communities they were well placed to support planning and to deliver the project, but the arrangement missed opportunities to benefit from this. Since this project CARE India has significantly changed its approach to partnerships, seeking to have long-term relationships with strategically identified organisations and partnerships of equals.¹⁰

10. Aspiration & Realities, Partner Approaches to Emergency Response within the context of Lighter Footprints, Jude Rand, 2014
Missed Opportunities: The case for strengthening national and local partnership-based humanitarian responses, Ramalingam,Ben;
Gray, Bill; Cerruti, Giorgia, 2013



11.3.1.1 RECOMMENDATIONS

1. Where it can be done without significantly delaying delivery of assistance, humanitarian donors should not insist on the provision of temporary shelters where more durable buildings can be provided, because temporary shelter very rarely is temporary in reality. More nuanced criteria and contextual understanding is needed to assess whether humanitarian shelter assistance is appropriate and meets the urgent needs of disaster-affected populations.
2. Projects and shelter designs should be explained and discussed in-depth with communities so they are able to understand the intentions, do not have unreasonable expectations and can give meaningful input and make choices. Short-hand descriptors such as 'temporary', 'semi-permanent' and 'transitional' should be used with great care. They are easy to misinterpret, difficult to translate and are not a replacement for clear in-depth descriptions of meaning.
3. Future programmes involving construction of houses should pay much more attention to maintenance requirements and options for upgrading. Recipients should be given clear instructions on how to maintain each part of their homes, with anticipated durability (life to first maintenance) of all key parts and estimates of maintenance costs. This should apply whether houses or parts of houses are intended to be permanent or temporary. Recipients should be given clear explanations of which parts they are expected to replace, what the options for this may be and when it is likely to be needed.
4. INGOs working with local partners must include partners in the project design at the earliest possible stage and must identify what support partners need to deliver projects effectively, and should ensure that communities can hold them as well as local partners accountable for projects.

11.3.2 TECHNICAL DESIGN & CONSTRUCTION OF SHELTERS

The houses built have plinths and appropriately robust frames and have reduced the vulnerability of the occupants to flooding and wind storms.

The precast concrete columns are good quality and are well installed. The roofs are non-engineered but well constructed.

The smaller roof overhangs, which have successfully reduced risk of damage in high winds, have led to mud-walling being serviceable but less durable, which represents a significant maintenance burden, especially for women. This is not necessarily the wrong thing to do, but the significant dissatisfaction it caused could have been avoided with better community explanations and consultation.

With explanation of the design choices to be made the community would likely have made the same choices with the understanding that in time they can upgrade the walling materials.

The needs of disabled people or others with particular access needs have not been addressed by the project.

All houses appear to still be in use and most are in a good state of repair. Despite the maintenance burden occupants are maintaining the houses. A number have been upgraded and many have been extended in some way.

Houses have resisted a number of minor floods and a major storm (Cyclone Phailin) since completion with no significant structural damage.



11.3.2.1 RECOMMENDATIONS

1. Future projects which use mud-rendered walls but reduced roof overhangs should ensure this is discussed with communities so they understand the impact and can make a choice about what is preferred.
2. It is appropriate in many cases to provide hybrid structures with some permanent, durable components and some less durable components which are within the capacity of occupants to upgrade or replace, and this is an effective way to balance important improvements in robustness of houses with cost and reach of projects.

11.3.3 HABITABILITY & RELEVANCE OF SHELTERS

The project was very relevant to the needs of the affected people although the reach and scale of the project was limited compared to the needs.

The houses are significantly smaller than the houses people in the area are accustomed to, and do not have internal partitions. The buildings are therefore not culturally or socially appropriate. Funding constraints mean it would not have been possible to build larger houses, but the communities' expectations were not well managed and they were not effectively consulted on how to mitigate the effect of the smaller houses.

The houses built are relatively easy to adapt to different needs using locally available materials and technology, but the economic circumstances of the communities means this is a slow process. The poorest are unable to change the houses at all. The project has provided for the resumption of essential livelihoods activities, such as storage

of perishable goods, cottage industry and housing livestock. In some cases, this has come at the expense of living space and does not provide much privacy or dignity. The project would have been significantly strengthened if delivered in combination with livelihoods assistance, as this would enable affected people to recover and to upgrade and adapt their houses to meet their needs more cost effectively than providing larger houses.

The provision of safe and resilient water supply in some villages has made those communities more resilient to flooding and reduced the likelihood of disease, but the project was otherwise purely one of constructing houses and did not seek to address wider settlement issues such as access to land and property, sanitation or access to livelihoods and services. The project has had minimal effect on access to markets, health and education and other services. Some settlement-wide activities to benefit all may have greatly improved community relations.



11.3.3.1 RECOMMENDATIONS

1. The process for designing houses or shelters, where permanent or temporary, should be as inclusive and iterative as possible. Difficult decisions made by agencies alone will cause resentment, but made collaboratively with the community can strengthen community and relationships with agencies. It is vital that agencies have technical design staff available to engage with communities and individuals and to support and empower them to make design decisions about their own homes.
2. Shelter projects should wherever possible be delivered in combination with appropriate complementary programming. In particular livelihoods support can allow the most vulnerable to make effective use of and unlock the value of shelter assistance where they otherwise would not be able to.

11.3.4 SIGNIFICANCE & LONG-TERM IMPACT

The project constructed 200 transitional shelters. Reliable estimates for the number of shelters destroyed could not be found, but 4.5 million people were affected by the flooding and over 990 villages were severely flooded. The project was small-scale compared to the need, but also took place in a disaster which had very little international attention or funding. Given the limitations on available funding the project design and beneficiary selection criteria used were appropriate to balance reach with providing effective assistance to those most in need. However, the community engagement was insufficient to prevent the beneficiary selection causing lasting resentment in the communities.

The project managed to minimise the cost yet still build houses which increase the resilience of their occupants to disaster, and will increase their ability to re-build should disaster occur because the columns are likely to survive. As an agency-driven project the project was cost-effective as reducing costs further would likely lead to poor construction and failure to deliver any disaster risk reduction.

It may be that similar responses in future could be more cost effective by combining technical support with limited cash assistance and complementary livelihoods support. With sufficient technical capacity such projects can deliver stronger buildings which are more likely to meet the cultural and social needs of their occupants more cheaply than agency-driven construction projects.

There is evidence of the construction methods, and in particular the use of precast concrete columns and plinths, being replicated on extensions and new buildings. The materials used are familiar, locally available and largely affordable.

Overall the project has supported the recovery of those who received houses, and with the reduced costs of roof maintenance has led to a modest improvement in the cash flow of households, although at the expense of a greater burden of maintenance work on women. The poorest recipients will be able to maintain the houses but are unlikely to be able to extend or upgrade them.



11.3.4.1 RECOMMENDATIONS

1. Shelter programmes should aim to meet a larger proportion of the need without compromising on the inclusion of key DRR features in houses. Future programmes should consider approaches which empower more disaster-affected people to build dignified houses incorporating features to make them safer and more robust.

11.3.5 ACCOUNTABILITY

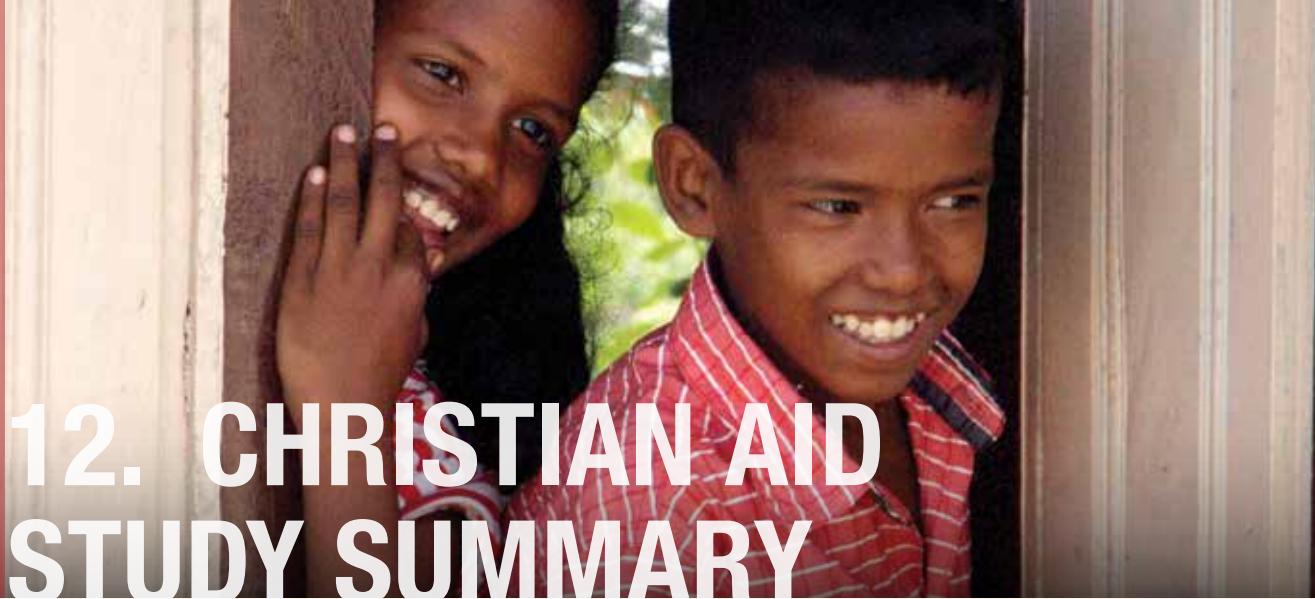
There were feedback and complaints mechanisms put in place for this project, and communities were able to access information and Gram Utthan, CARE's partner in the response, with relative ease. However, in what was a difficult project due to time constraints, funding constraints and remote locations, the project was not very responsive to such feedback. Community engagement was under-resourced by both CARE and Gram-Utthan given the difficulties of the context.

Additionally, due to the project being in a remote location and the form of partnership being one of contractor and sub-contractor than equal partnership, CARE's visibility in the project areas was low. Priority was given to the accountability to the donor, ECHO, to deliver the project on time, and accountability to the partner NGO to share an equal part of the burden of the project was not there.



11.3.5.1 RECOMMENDATIONS

- 1. Post-disaster shelter programmes which involve construction of houses (rather than emergency or makeshift shelters) with very tight deadlines for completion must budget for greater resources for community engagement in order to ensure sufficient accountability and effective choice from disaster-affected people.**
- 2. Working in partnership with local organisations is a positive approach and allows stronger community engagement, partnerships must be set up in a way to allow the smaller local NGO to hold the INGO accountable, affected communities must be given sufficient information to understand who is working on their behalf and must be able to directly access INGOs rather than only go through local partners.**



12. CHRISTIAN AID STUDY SUMMARY

Christian Aid, with SEEDS India, has undertaken a parallel study of past projects and has provided initial input for inclusion in this report. These high-level conclusions and recommendations have been carefully considered in drawing conclusions and making recommendations in this report. Case studies of the three projects studied are included in Annex 3.

12.1 Conclusions

The literature review of a range of post-disaster shelter projects demonstrates a people centric, inclusive and process-based approach. This sets a clear agenda to look at shelter as a process and not a product. Having set this framework, the challenge faced in most projects has been to find the right technological solutions.

Solutions that offer sufficient flexibility and yet are grounded in safety, cultural appropriateness and environmental sustainability.

All projects demonstrate high relevance in terms of needs, deliverables and beneficiaries. However, the house packages, sizes and timelines varied very widely. SASY houses were the smallest, SEEDS houses being part (core) shelters and CASA houses being largest. There was a long delay in SASY houses due to the complexity of the situation. There is a need for an agreed relevance framework and degree of compromises normally to be allowed.

While 'standards' are often irrelevant in humanitarian work situations, more thought is needed on an acceptable bandwidth of house sizes, designs, materials and construction. Participation can sometimes be difficult to invoke, and familiarity with participatory tools and options is needed for the implementation teams. The larger aim should be of permanence in housing rather than interim solutions.

There is a strong need across the board to look beyond shelter as shells and consider the entire housing ecosystem, with WASH, DRR, CCA, livelihood spaces, social interaction and recreational spaces, women and child friendly spaces, and green areas. Shelter programmes need to be based on processes that start from the context. Project teams need to have the complete range of skill sets.

Very strong emphasis needs to be laid on use of only local materials and skills. Shelter needs to be seen as a process and not a product, giving importance to participation through empowered instruments such as procurement committees. Economising should not be done in DRR at any cost, and in shelter ecosystem issues to the extent possible.

Efficiency is generally observed to be at high levels in terms of product delivery within given time and resources. There is scope for improvement in efficiency as a process keeping in mind the larger goals of inclusion, appropriateness, future safety, overall development and long-term impacts.

From a project perspective, highly effective in terms of shelters delivered on time and within cost in most cases. Effectiveness in secondary areas and in meeting long term needs requires attention. A larger initiative of repositioning shelter aid in itself as a process needs to be looked at collectively.

Short term impacts are largely positive, but long term impacts need to be worked upon. For this, shelter needs to be seen as a process. Significant emphasis needs to be put on educating the local communities, involving them in all stages of the process, training masons and construction workers and advocating with local governments. While the jargon exists at all levels, effective communication strategies and tools need to be deployed to have a deeper impact resulting in action.

12.2 Recommendations

The recommendations below emerged from the conclusions drawn after the literature review and field research across India; and from a national-level workshop on improving shelter response. This brought together shelter experts, field workers, donors, government representatives, architects and communication professionals.

The discussion at the workshop threw up three broad areas that needed attention. The first was the creation of a sectoral strategy; including private sector participation, Memoranda of Understanding with the government and looking at transitional shelter (where used) in a stage-wise manner. The second was looking at larger climate-resilient habitat – including water management training and using infrastructure as a backbone for long-term sustainability. The third was the capacity issue; including the need to educate donors, build project management capacities, enhance education and technical training and to use media as an integral part of this work. It ended with a firm commitment to creating an India Shelter Forum.

The broad line recommendations for future shelter projects state that these must be inclusive, participatory, local, permanent, ecosystem-driven, efficient and advocacy-led. These are further broken down into action points to be undertaken at a strategic level by international/national aid agencies and donors; and at a ground level by implementing local partners. An 8th recommendation elaborates on possible further research that would help improve shelter response and address new and critical challenges.

RECOMMENDATION 1: INCLUSIVE

Ensure coverage of the most vulnerable including socially excluded groups and persons with special needs.

International and national aid agencies and donors

- Facilitate nuanced understanding and sensitisation among partners and other stakeholders on inclusion in shelter programmes through specific documentation and communication of issues of inclusion on shelter.

Local implementing partners

- Conduct mapping and power analysis to identify the most vulnerable including socially excluded groups, PWD, elders, women, children, the landless, the displaced and others.
- Familiarise field staff with tools to help drive inclusive processes.

RECOMMENDATION 2: PARTICIPATORY

Ensure participation and increased choices of families in all stages of the rehabilitation process.

International and national aid agencies and donors

- Simplify strategic approaches such as Participatory Vulnerability Capacity Assessment (PVCA) and Value for Money (VfM) to make them more accessible to partners and field staff.

Local implementing partners

- Be flexible with the design, technology and materials and allow communities to modify where appropriate; while ensuring structural safety and sustainability.
- Create community based institutions like VDCs and procurement committees to drive the shelter process.
- Ensure representation in participation of the families, specifically of women members.

RECOMMENDATION 3: LOCAL

Develop and integrate locally appropriate designs, technology and materials in shelter programmes.

International and national aid agencies and donors

- Create linkages with regional and national technical institutions to encourage identification and refinement of locally appropriate shelter solutions.

Local implementing partners

- Consult with and strengthen skill sets of local construction workers as part of all shelter interventions.
- Establish links with local technical institutions to pre-identify appropriate technology and materials for the area, with specific reference to indigenous knowledge.

RECOMMENDATION 4: PERMANENT

Promote permanence in housing rather than focussing on immediate and intermediate needs.

International and national aid agencies and donors

- Treat shelter interventions as a developmental programme rather than emergency response.
- Move away from temporary and intermediate shelter approaches.
- Educate back donors on the need for a developmental approach with permanent shelters.

Local implementing partners

- Carry out long-term shelter needs assessments and don't look at it as just immediate relief.
- If transitional shelter is the only option, then carefully plan what it will transition into and how.

RECOMMENDATION 5: ECOSYSTEM-DRIVEN

Address the entire shelter ecosystem and approach shelter rehabilitation as a process; incorporating safety and sustainability principles in their entirety.

International and national aid agencies and donors

- Avoid looking at shelter rehabilitation projects in isolation and seek comprehensive proposals.

Local implementing partners

- Carry out detailed risk assessments and comprehensive habitat planning; including DRR, WASH, environment and livelihoods.
- Do not use principles selectively and mainstream DRR into every element.
- Opt for local, enterprise-based solutions to ensure sustainability and support to local livelihoods.
- Create safety nets through mediums such as micro-insurance for the most vulnerable.

RECOMMENDATION 6: EFFICIENT

Build shelter-specific capacity and skill sets across all levels.

International and national aid agencies and donors

- Facilitate increased capacity building and cross-learning among partner organisations.
- Invest in research, learning and partnerships with regional and national institutions to create databases of available appropriate options and map resources.
- Develop a strategy for the shelter sector and a rehabilitation framework.
- Work with back-donors to ensure adequate funding flexibility to adapt to the local challenges and context.

Local implementing partners

- Inculcate project management and shelter-specific skills.
- Ensure comprehensive damage and loss assessments using available standard tools.
- Adequately document initiatives for cross learning; and use communication tools and media to reach out and educate communities.
- Ensure compliance with recognised standards and facilitate skill building of field staff in this area.

RECOMMENDATION 7: ADVOCACY-LED

Engage and work through multi-stakeholder institutions including governments, civil society and the private sector to influence shelter policies and practices.

International and national aid agencies and donors

- Engage in advocacy and strategic partnerships to influence shelter sector policies; including government programmes.

Local implementing partners

- Engage and work through local government structures and civil societies.
- Build partnerships with the local private sector to ensure that shelter programmes activities do not compete with the local enterprises.
- Advocate with the government on issues of land rights and relocation; as well as on long-term risk and developmental issues.
- Take an active role in inter-agency groups and influence thinking in the larger humanitarian sector.

RECOMMENDATION 8: FURTHER RESEARCH

Shelter after disaster is an often talked about but grossly under-researched subject. This is true particularly in the non-engineered aspects, wherein ways can be found by humanitarian agencies to implement better programmes. Some of the key areas requiring urgent research attention are:

SOCIAL INCLUSION IN POST-DISASTER SHELTER

Social exclusion is an underlying risk that often marginalises and excludes the most vulnerable during periods of post-disaster assistance. Shelter assistance may be narrower in breadth and coverage, but is one of the most expensive and critical components of aid for long term recovery and resilience. While there have been pieces of research on social exclusion and post-disaster shelter separately, the point of connect between these two needs to be studied to unravel the nuances and to find ways to address this invisible gap. Suggested research approaches may include a longitudinal study of ten prominent post-disaster shelter responses, diverse in their scale, hazard, shelter typology, geo-climate setting and socio-economic context. The study can lead to an advocacy pack, a learning module and a field operators' guide on ensuring an inclusive approach that reduces long term resilience. Learning from the current research, this study must also document and learn from the negative long-term impact that a short sighted approach of inclusion may pose.

GREEN REHAB: SUSTAINABILITY IN SHELTER PROGRAMMES

Shelter programmes have usually used materials, equipment and skills imported from outside the work location; without consideration to the ecological footprint of the production and transportation. A case in point is of Corrugated Galvanised Iron sheets which are used extensively; and sometimes, as in the case of Bangladesh, imported from other countries! Not only is a bulk of the aid money going to commercial producers, traders and transporters outside the target community, but the carbon footprint is huge. Worse, the risk of the emissions is put elsewhere, in some other unrelated community. Research needs to first establish the size of the carbon footprints of existing shelter initiatives and accordingly find ways of reducing it, so that shelter programmes are greener.

BALANCING VERNACULAR AND MODERN TECHNOLOGIES

Vernacular technologies need to be looked at since they are time tested, culturally suitable, environment friendly and cost effective. At the same time, it needs to be kept in mind that they may not be able to offer a desirable level of disaster resistance; particularly in the face of climate change and unprecedented risks. The example of flash floods in the deserts of Rajasthan and Ladakh poses such challenges. A research initiative can document prominent vernacular shelter technologies for the main geo-climatic regions and assess them against possible future disaster risks. A well considered menu of what modern technologies can fill specific gaps could subsequently be drawn and made available to shelter aid agencies.

CLIMATE AND DISASTER RESILIENT HOUSING

Climate resilient housing implies features that will withstand hazards that were so far not considered real risks in a specific geographic area; as they have not occurred in living memory or recorded history. For example, houses in hot deserts were traditionally built at the base of trough-like topographic formations so that surrounding dunes offered protection from hot winds and sand storms. Now the new threat of flash floods exposes these houses to inundation risk. Since they are built of mud, this is a significant threat. There are similar new threats being faced in mountain regions, river basins, coastal areas and small islands. Research needs to look at the threat of climate change on current housing practices in different geo-climatic regions and propose ways of adapting shelter designs.

SHELTER IN URBAN DISASTER RESPONSE

Half of India will soon be living in cities, with over half of these urban dwellers living in sub-standard housing with very high levels of risk. While there have fortunately been no large urban disasters in the region so far; there is a need to learn from global experiences like the Haiti Earthquake of 2010. This fast growing risk needs to be urgently addressed. There is hardly any available knowledge on post-disaster shelter aid in the urban context in the region. What is available, mostly from Gujarat where four towns were affected by the 2001 earthquake, projects a very scary picture of challenges ranging from land rights, migrants and rehabilitation of multi-storied housing to informal sector livelihoods, density and conflicts. Research is urgently required to map the urban risk with a focus on the urban poor. A set of principles, practice guides and options are required for shelter assistance in urban disasters.

SHELTER GUIDANCE FOR AID WORKERS, HOMEOWNERS AND CONSTRUCTION WORKERS

Vision documents, lessons learnt reports and organisational policy notes are of little use in changing behaviour unless there are simple practice tools targeted at the workers on the ground; and communicated in a language that works at that level. User friendly guidance material is required for field practitioners and end users in the shelter assistance domain. This could use various media for different audiences. Research could look at the current perceptions and behaviours in these sets of audiences and guidance kits created accordingly to meet specific needs.



13. STUDY CONCLUSIONS

This extensive study has looked at a wide range of different shelter interventions in different communities and situations. If there is one, clear lesson from the findings it is that every shelter intervention must be unique in order to adequately respond to the needs of the disaster-affected people and the situation they find themselves in. However, a number of broad themes and overarching lessons can be drawn from the study.

13.1 Impact: The significance of shelter

Shelter is a basic human need, and people's houses are most often their largest and most valued asset. This is because a house is not just a shelter, but is also a home, a place of safety and often something of both great economic value and cost.

This study has examined a series of shelter recovery projects which vary in scale and scope, but which have all delivered both essential safe and dignified shelter and a valuable asset to their beneficiaries. This has given beneficiaries the security to focus on other urgent priorities and prevented any of the falling into destitution. It has increased the robustness of houses and successfully reduced risk of future natural disasters.

It has successfully met humanitarian needs and protected the vulnerable after disasters.

In each of the projects studied the savings made in rent and costs of maintenance have been repeatedly raised as something which gives people the ability to invest in their lives and the lives of their loved ones. Where outcomes have varied this has depended more on the economic circumstances of the disaster-affected people than on the shelter

projects themselves. Those who can mobilise the economic resources have built upon the asset they have been given (often literally) to make their house provide for all their needs and to grow their income. The shelter assistance they have received has both protected them and given them the opportunity to improve their lives and reduce their poverty.

Those who cannot mobilise economic resources – the very poorest, most vulnerable people in society – have been unable use their housing in this way. Secure shelter has allowed them to use their economic resources to survive, to meet food and healthcare costs. It has given a level of economic stability. The shelter assistance they have received has protected them and met their urgent needs, but it has not led to a reduction in their poverty and the risks and vulnerabilities that come with this.

The scale and reach of the projects studied varies significantly. Some projects met a significant portion of the need in the context of a disaster where in many actors coverage of assistance was very good. Others met a very small proportion of the need in a context where there were no other actors. Inevitably in the projects with fewer resources the value of assistance must be reduced and the resources must be focussed on the most vulnerable. However, decisions about the value and quality of shelter assistance cannot be taken in isolation from the capacity of beneficiaries to effectively use and maintain their houses. Projects have perhaps focussed too much on the shelter product to be delivered and not enough on building capacity and agency of the beneficiaries.

13.2 Shelter and settlements: complementary support

It is clear from all the projects studied that those with sustainable livelihoods and sufficient household income can maintain, upgrade and extend their houses, while those who cannot are unable to do so. In some cases, those who cannot remain trapped in what they consider unsuitable housing which provides basic shelter but little else.

Where projects have provided effective livelihoods assistance alongside shelter assistance there are examples of people transforming their lives, or those of their children. Combined shelter and livelihoods interventions can lead to empowerment, belief in the future and higher aspiration. Where livelihoods have been inadequately addressed in projects, especially relocation projects, people's incomes have fallen. Effects of this include migration and fragmentation of families and lower enrolment of girls in schools.

Too many shelter projects have inadequately addressed WASH. Inadequate water supply in communities leads to significant burden on all members of society, but particularly on women and girls. Apart from the considerable time spent collecting water for household needs, a lack of water also makes toilets provided as part of projects unusable, forcing women and girls to return to open defecation.

Toilets were provided with all but one of the projects, and apart from a few exceptions most beneficiaries are not using them. Without adequate water supply, and above all without complementary hygiene promotion and behaviour change programmes, the construction of toilets has been a wasted opportunity. Avoiding open defecation is not a priority of the majority of communities visited. It is a priority of government, of NGOs, and importantly, of many women and in particular of adolescent girls. Women and adolescent girls have insufficient voice and influence in their communities to change the status quo by themselves.

It is widely accepted that shelter projects will not be successful without addressing settlement issues. This study supports that, but furthermore highlights that from the point of view of most disaster-affected people in the locations studied it is livelihoods and water supply that most affect the wider success of projects.

13.3 Accountability: Whose choices? Whose risk?

All the projects studied were agency-driven and largely contractor-built, although in some communities' beneficiaries did participate in construction. The form projects and shelters took was driven by donors, government and agencies and not by disaster-affected people. This was the case both for rapid post-disaster projects with purely humanitarian funding and later reconstruction/recovery projects. The funding available per household varies significantly and leads to great variation in the assistance delivered.

Projects generally reflect the priorities of donors, government and NGOs and generally do not take sufficient account of the priorities of disaster-affected people.

Robustness of buildings or speed of delivery has generally been prioritised over beneficiary choice and participation. This has generally led to reasonably high and consistent construction quality but also to a reduction in ownership and suitability of houses built to the needs of particular households. Physical risk of future natural disasters has been successfully reduced, but other vulnerabilities have not been so well addressed. For example, houses may not provide appropriate space for households with adolescent boys and girls, and relocations may have reduced access to education or sustainable livelihoods. The long-term risks faced as a result can be significant. While the Christian Aid study concluded that "economising should not be done in DRR at any cost, and in shelter ecosystem issues to the extent possible", this study has found that this is unavoidable with current levels of funding for most responses.

Donor mandates and priorities, coupled with insufficient technical understanding in agency programme teams, can lead to the almost arbitrary designation of houses as 'temporary', 'permanent' or even the highly confusing phrase 'semi-permanent'. These have the effect of obfuscating the true value and nature of what is being delivered. The fact is, and must be acknowledged, that temporary shelters are almost never temporary (whether in India, sub-Saharan Africa, the west or anywhere else). Similarly, no building is ever entirely permanent, as without maintenance any structure will degrade and eventually fail. Approaches that sought to



maximise cost efficiency by designing buildings with durable primary structures and less durable cladding were lost in translation and not sufficiently understood, or agreed to, by beneficiaries. **It is not reasonable, or ethical, to deliver 'temporary' buildings to vulnerable people in the knowledge that they will never be able to replace them.**

Projects have generally not led to significant skills transfer or been able to embed more resilient construction techniques in general practice, largely due to the agency-led and contractor-built approaches.

There were examples of meaningful participation processes in which affected people felt able to significantly influence projects. Despite years having passed it was clear that there were opportunities for feedback and complaints. Where even minor changes were made to projects at the request of beneficiaries that has left a lasting and positive impression. Changes to the toilet design and addition of stairs or provision of ladders to the roof in some projects are examples of this. In most cases communities are grateful for the significant support they have received, but do not remember being able to greatly influence the form it took. Some of the projects did not effectively manage expectations or provide sufficient time and resources for community engagement, leading to significant difficulties in some very challenging communities. In no projects were affected people able to significantly affect the design of houses, but in most relocation projects communities had significant say in the settlement planning. Largely due to the nature of post-disaster projects, but also due to insufficient consideration of how it could work, participation was less meaningful

in the project design and beneficiary selection and more meaningful in the project implementation.

Women's participation in projects has been somewhat formulaic, with women usually having minority representation on committees and undertaking some menial construction tasks but not being empowered to take a leading role if they should wish it. Some individual women highlighted the fact that they were present during much of the construction, while men were away at work, and hence supervised construction. None were trained for this however and hence weren't empowered to take ownership of this role. Construction supervision generally remained the responsibilities of partner NGOs, whose experience and capability to do so varied.

There were notable attempts, led by women, to deal with settlement-wide problems in an organised manner and to represent their largely disenfranchised communities to those in positions of power. However, these were largely unsuccessful. There was insufficient attention as part the shelter projects, especially the relocation projects, to institute good governance and representation for communities. Had this been in place communities, and women, would have been more able so solve some of their lasting problems.

Various documentation was provided to recipients of houses, including title deeds and in some cases insurance documents. This was too often provided in English, meaning recipients could not read the documents themselves. This disempowered people, and in the case of the insurance documents left people unable to claim.

13.4 Specific needs & capacities: women, girls, men & boys

The basic needs for safe shelter have been met for the most vulnerable people in all of the projects studied. In particular, there were efforts in all projects to involve women and to ensure their needs were addressed. All but one projects have provided housing with internal partitions and different internal and external spaces which allow the houses to meet some specific additional needs of women, girls, men and boys; although the degree to which they do this depends somewhat on the number of different people and needs in households.

As with other outcomes, the most effective meeting of specific needs has occurred where households have the capacity to adapt their houses and the assistance they've received to meet their needs. Families with adolescent boys and/or girls may further sub-divide the space so they can sleep separately. Families with sons nearing marriage may extend to accommodate a couple. Where households cannot adapt their houses they must make do with what they have received.

Provision of toilets is particularly important for women and girls, especially adolescent girls. During menstruation in particular, toilets can provide privacy and dignity as well as hygiene. However, the absence of hygiene promotion activities has meant this assistance has only been effective for a few.

None of the projects studied in detail involved specific consideration of the needs of disabled people, whether physically or mentally disabled. None of these projects involved specific consideration of the needs of elderly people. This has resulted in the needs of some of the more vulnerable people in society for safe shelter not being adequately met.

In general, the projects have improved the ability to study for both boys and girls; something that was brought up by beneficiaries of most projects.

Some of the projects have led opportunities for women, as the reduced burden of household work and maintenance has freed up their time to undertake income-generating activities, like running a shop, tailoring or starting a different business.

In most of the projects women raised the fact that alcohol abuse was a problem amongst men, older boys and also some women, and

that this led to an increase in domestic abuse. In some projects this had become worse and others better since the disaster, largely due to factors outside the control of the projects.

All projects attempted to empower women by ensuring they had sole or joint title to the houses that were provided (although not always to the land). How successful this was varied significantly. Projects where the ownership was discussed from the start, and where men and women were actively involved in those discussions and were encouraged to think about the meaning of ownership, led to women feeling more confident in their status and more aware of their rights. Projects where the title was represented by no more than a piece of paper or plaque had no effect upon women's empowerment. Very few women reported that power dynamics or their position in the household had fundamentally changed. Giving land or property title to women is not in and of itself something that will empower women, but if done in a meaningful way it is a positive part of a wider process of gender equality and women's empowerment.

A significant hurdle to achieving gender equality in property rights in the longer term is the fact that boys are almost always prioritised over girls when property is passed down to the next generation. Girls rarely inherit land or property title.

13.5 Relocation projects

It is well established that relocation of disaster-affected communities is very difficult to do successfully. This study generally supports that conclusion. It is clear that relocation projects are risky, with the risk primarily carried by the affected people. Creating new settlements is extremely complex and requires many resources and organisations to come together to make them a success.

Two relocation projects studied involved constructing entirely new settlements for only a portion of a disaster-affected community, and in both cases there were significant political issues and lasting problems with poor water supply and changed or reduced access to livelihoods and services. Both of these projects resulted from local government policy after the disaster, in an attempt to reduce risk to future disasters, and largely against the wishes of the communities. Promises of future development and future funding for new settlements have not materialised.

A third relocation project moved an entire community to a new site in an existing settlement, leading to a significant improvement in quality of housing and access to services without major adverse effects in other areas. This project was in line with the communities' wishes.

Relocation projects which prioritise reduction in vulnerability to particular natural hazards at the expense of increasing other vulnerabilities, and do so without sufficient input from affected people, are likely to cause lasting problems. Relocations that happen against the wish of the affected people are very unlikely to be successful.

Projects which reduce access to services, and in particular to education, negatively affect girls in particular.

13.6 The shelter sector in India

It is clear that the effectiveness and capacity of the humanitarian system in India has been greatly strengthened in recent years, as evidenced by the remarkable difference in the death toll from the extremely severe cyclones which hit Odisha in 1999 and 2013. However, funding for humanitarian response in India from international humanitarian donors is limited and reducing, and with it the role of NGOs is changing. It is clear from this study that the most vulnerable in society in India are frequently excluded from access to services and assistance, and humanitarian shelter actors have strong role to play in ensuring they are included in post disaster shelter and recovery programmes.

There is considerable experience and knowledge of post-disaster shelter within CARE and other actors in shelter in India, and there is a good level of collaboration between different shelter actors, including civil society, NGOs, private sector and government agencies. However, there is little active research or development of new approaches to shelter, and the shelter sector in India is only weakly linked to the global shelter sector. Indeed, some of the areas of future research highlighted by Christian Aid (see section 12.2) are the focus of sectoral initiatives elsewhere. There is a need and opportunity for the shelter sector in India to collaborate more closely to share knowledge both in India and globally, and to take a more leading role in the global shelter sector, which is currently too heavily concentrated in Europe and the US.



14. RECOMMENDATIONS

14.1 Impact: Scale and coverage

While the significance of shelter assistance for those who receive it cannot be doubted, the scale and coverage of shelter programmes varies greatly depending on resources available. The projects studied have a limited range of approaches to delivering shelter assistance, essentially contractor-built durable, pukka houses or contractor-built houses with a mixture of durable and temporary materials.

Where funding is limited, CARE India and other shelter actors need to develop ways to meet a larger proportion of the unmet needs without compromising on the inclusion of key disaster risk reduction features in shelters and projects.

Future programmes should consider approaches which empower more disaster-affected people to build dignified shelters incorporating features to make them safer and more robust:

- i. More use of technical assistance to people building their own houses, provision of key materials, conditional cash grants or vouchers in projects using an owner-built approach should be explored to increase relevance and coverage.
- ii. There should be an analysis of both physical and social hazards faced by disaster-affected people, leading to a clear prioritisation of disaster risk reduction measures to be included in buildings and projects. To do this agencies need to be able to draw on sufficient expertise.
- iii. Flexibility in levels of assistance to give minimum assistance to large numbers and more intensive assistance to the most vulnerable could also assist achieving greater relevance and coverage.

14.2 Shelter and settlements: Complementary programming

Shelter programmes should, wherever possible, be delivered with appropriate complementary programming which addresses the wider needs of the household and the settlement and ensures that the shelter recovery assistance given is effective in delivering lasting protection and resilience. For relocation projects it is essential that this complementary programming is delivered. This is very eloquently put in the Christian Aid conclusions:

“There is a strong need across the board to look beyond shelter as shells and consider the entire housing ecosystem, with WASH, DRR, CCA, livelihood spaces, social interaction and recreational spaces, women and child friendly spaces, and green areas. Shelter programmes need to be based on processes that start from the context. Project teams need to have the complete range of skill sets.”

While it is recognised that funding is rarely available for comprehensive programmes, and different actors and agencies provide different services to people in need, humanitarian actors have a responsibility to avoid harm, to meet unmet needs, and to empower disaster-affected people.

A. Actors working to support communities to recover shelter must ensure that they, or others working in partnership, provide sufficient support to enable sustainable settlements, including at least:

- i. Supporting and establishing good governance in settlements, with strong inclusion of women and disadvantaged groups, will both strengthen the direct outcomes of any shelter project, but also leave the community able to represent itself and work effectively to solve other problems. Addressing governance should be integrated into all projects as part of the standard community engagement and participation approaches.
- ii. Without water shelter projects and settlements will fail. It is critical that shelter project address water supply at a settlement and household level. All shelter projects must ensure adequate safe water supply.
- iii. Livelihoods support given in combination with shelter programming can increase the ability of households to adapt and upgrade their shelter to meet their needs, and ensure that households can meet the costs of maintenance. Without sustainable income beneficiaries of shelter programmes are likely to be forced to sell or move away in search of work. If they cannot maintain their houses, beneficiaries will see their asset whither in front of them. Where a house or shelter provides the secure, safe base for recovery after disasters, it is sustainable livelihoods that allow people to make the most of that house or shelter. Livelihoods support is particularly important to ensure shelter assistance given to the most vulnerable can lead to lasting recovery.

- iv. It is often stated that shelters should not be built without toilets, but the evidence from this study confirms something well understood in the WASH sector, which is that without hygiene promotion and behavioural change building toilets will not work. Toilets are vital for improved public health, but they are also a key issue for women and especially adolescent girls who can have their lives improved and can be empowered by having toilets. Shelter projects should build toilets. Shelter projects should not build toilets without a complementary hygiene promotion programme. This means that the personnel and expertise needed for delivering a shelter programme needs to widen, as shelter specialists delivering toilets has been shown not to work.
- v. Housing, land and property rights, in particular addressing the property rights of women and girls, must be more strongly addressed in shelter programmes, avoid continued marginalisation and increased vulnerability.

14.3 Accountability: Community & individual ownership

Delivering shelter recovery programmes is complex and often subject to significant competing interests and obstacles. The needs of women, girls, men and boys, and the needs of different households, can vary significantly. A one-size-fits-all shelter design has limited flexibility to meet these needs.

CARE India and other shelter actors should greatly strengthen their approaches to community engagement in shelter projects, with the aim to improve community ownership of projects and individual ownership of shelters.

In combination with implementing the recommendations in 14.1, future programmes should aim to empower people to take charge of their own shelter recovery, including giving them meaningful control and choices over shelter design and construction, hence leading to improved outcomes overall. To do so will require developing a communal understanding of the different risks disaster-affected people face and ensuring they have the knowledge to make choices about these risks for themselves. This will require strong community engagement and technical support capacity. As the Christian Aid study reported:

Significant emphasis needs to be put on educating the local communities, involving them in all stages of the process, training masons and construction workers and advocating with local governments. While the jargon exists at all levels, effective communication strategies and tools need to be deployed to have a deeper impact resulting in action.

A. CARE, together with other shelter actors in India, should develop a community engagement approach for shelter programming, incorporating rapid community assessment of shelter needs and capacities, project and shelter design, implementation and monitoring. This may use Participatory Approach to Safer Shelter Awareness (PASSA) and similar tools as a basis, and as suggested by Christian Aid it can include Participatory Vulnerability Capacity Assessment (PVCA) and Value for Money (VfM) tools, but it should

be contextualised for India. A standardised approach, with sufficient flexibility, could greatly increase community participation and ownership and hence outcomes of shelter programmes, and could address the large variation in community engagement approaches resulting from working with partners and with staff working remotely in different areas. The approach developed must comprehensively address women's and girls' participation and empowerment through community engagement processes, while recognising any additional burden this may place on women. All staff should be oriented on the approach at the onset of projects, including CARE's approaches to poverty, gender and diversity.

- B. CARE and other agencies should develop clearer language to describe what they deliver, and avoid the simplistic use of temporary and permanent.** The Christian Aid study recommends that the shelter sector in India should "promote permanence in housing rather than focussing on immediate and intermediate needs". This study prefers a more nuanced approach which can address immediate and intermediate needs but recognises that buildings are very rarely temporary, are always in some way transitional, and that this is largely outside the control of donors or implementing agencies. Rather, the nature of any shelters or buildings being delivered must be clearly and openly understood by donors, agencies, programme teams and most importantly, by beneficiaries. Beneficiaries can then understand what they are receiving, provide meaningful feedback as to its suitability and plan for the future. Shelters should be delivered with estimates of the durability of the main elements of the building (life to first maintenance, and maintenance period), which may be different depending on needs and budgets. In combination with this it is necessary that there are clear instructions on maintenance, and hence;
- C. CARE should develop a standard template for a maintenance manual, to be delivered with all shelters.** This will empower occupants to look after and maximise the value of their houses and additionally aid the transparent and clear hand over of responsibility, and risk, to beneficiaries. It is important to understand that this approach does not mean all shelters

must be pukka buildings, it just means that all parties must be clear and transparent about what is being delivered and what burden of risk and responsibility it places on beneficiaries.

- D. All documentation provided to beneficiaries and communities must be translated into their own language.** CARE should consider retrospectively distributing translations of insurance documents to those households in the projects studied for whom it is still in force.
- E. Projects must have adequate budget for adequate staffing and technical capacity to support partner NGOs and communities and hence to achieve consistent quality.**
When working with partners, partner capacity assessment must be carried out to ensure both CARE and the partner NGO have adequate capacity in place to meet their responsibilities. Donors & NGOs must understand and be accountable for the consequences of reducing personnel budgets on the capacity to deliver quality.

14.4 Specific needs & capacities: Women, girls, men & boys

Shelter projects should not be seen as the simple delivery of products, and their design must address the different needs of individuals.

- A. All shelter programming should be based on a gender analysis in addition to a more general needs analysis, and should include a gender action plan,** in order to ensure programmes meet the needs of women, girls, men and boys (including adolescent girls and boys), and opportunities to empower women are recognised and taken.
- B. Women should play a leading role** in community participation, in receiving assistance and in monitoring implementation of projects at a household level, recognising that women mostly lead on all household responsibilities and are therefore often well placed to take on these roles.
- All project planning and monitoring committees should be gender balanced (half women, half men).
 - Child care arrangements should be provided to ensure women are not prevented from participating because of their child care responsibilities.

- C. All shelter projects should have an integrated strategy for ensuring women have meaningful and equitable ownership of housing and land.** This should be coupled with discussions about the meaning and rights entailed with owning property, involving men and boys as well as women and girls. Wherever possible sole title for housing and land should be given to women. Women should be empowered to take a leading role in managing shelter projects to increase their meaningful ownership of assets.

CARE and other agencies should investigate ways to address inheritance of shelters they provide in future projects, and how they can encourage the inheritance of property by girls.

- D. Shelter project design and implementation should incorporate the IASC Global Protection Cluster Guidelines for Integrating Gender-Based Violence Interventions in Humanitarian Action¹⁰,** and in particular the Thematic Area Guides for Shelter, Settlement and Reconstruction and for Housing, Land and Property.

Violence against women and girls should be discussed with women, in women-only safe locations, early in the project design process, in order to incorporate measures to address gender-based violence in shelter and settlement design. (CARE and IOM are developing guidance on addressing GBV in shelter projects, and CARE India should use this to incorporate in their programming).

- E. All projects must have sufficiently flexibility to deliver shelter that meets the specific needs of older people or people with disabilities, whatever these may be.** Assessments should identify the proportion of people with disabilities and specific access needs and all projects should include a budget line to allow amendments to shelters and assistance for disabled people or elderly people who require it. Initial budgeting should assume 15% of people have specific access needs, but this figure must be verified by assessments as it can vary significantly.

14.5 Relocation projects

Relocation projects must be a last resort, and CARE and other agencies should fully explore all options that avoid relocation, together with the community, before proceeding with relocation projects. Communities being relocated must have a good understanding of the risks of relocation and what resources are available to support them.

- A. **Where relocation is clearly contrary to the wishes of the community concerned, CARE should not participate in the project and should instead concentrate on supporting them to access effective representation and supporting them in other ways.**
- B. Where relocation is unavoidable and is in line with community wishes:
 - i. **Relocation sites should be selected which have existing infrastructure and access to essential services.** Instating these later rarely happens. It is not acceptable for project lead agencies, whether governmental or NGO, to assume others will take responsibility for this or that resources will be identified later. Resources for critical infrastructure and services must be identified and committed at the onset of any relocation project.
 - ii. **The entire community should be included in the relocation project.** Projects which relocate only parts of communities lead to fragmentation of communities. Where only vulnerable groups are relocated it tends to further isolate and disadvantage those communities. Sustainable communities cannot be made up only of highly vulnerable people, so projects should promote integration. Targeting of support should consider the needs of the whole community and not just the needs and vulnerabilities of individuals.
 - iii. **Significant extra attention must be paid to developing good governance and access to representation for communities in new settlements.**

14.6 The shelter sector in India

- A. **CARE & other NGOs and civil society organisations must continue to work closely and effectively with government agencies, and where appropriate the private sector, to ensure effective response which reaches and meets the needs of the most vulnerable.** This will require strong cooperation and strong advocacy based on expert knowledge and experience:

Along with enhanced governance approaches in shelter responses, NGOs should strengthen their ability to be a voice for the most vulnerable after disasters and ensure strong advocacy capacity. See also Christian Aid's recommendation that humanitarian shelter should be advocacy-led (section 12.2).

- B. **A strong and sustainable India Shelter Forum should be formed** to foster discussion, learning and knowledge management amongst shelter actors in India in order to improve the relevance and effective of shelter responses and to allow the Indian shelter sector to engage in global discussions, access global research and learning and take a leading role in the global shelter sector. See also Christian Aid's recommended areas for research, which are endorsed by this report (section 12.2).



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CARE has been working in India for over 65 years, focusing on alleviating poverty and social injustice. We do this through well planned and comprehensive programmes in health, education, livelihoods and disaster preparedness and response. Our overall goal is the empowerment of women and girls from poor and marginalised communities leading to improvement in their lives and livelihoods. CARE India works in 126 districts, in a total of 11 states across India.. We are part of the CARE International Confederation working in more than 85 countries for a world where all people live with dignity and security.

CARE's emergency shelter team is hosted by CARE International UK in London and provides technical support and expertise around emergency shelter to the entire CARE International Confederation. The emergency shelter team can be contacted on emergencyshelter@careinternational.org.