



GRM FUTURES GROUP COMPANIES



Impact Evaluation of Swiss Solidarity Asian Tsunami Programme

4th December 2014

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ABBREVIATIONS AND ACRONYMS

NGO	Non-Governmental Organisation
SwS	Swiss Solidarity/ Chaîne du Bonheur
TOR	Terms of Reference
ADRA	Adventist Development and Relief Agency
HEKS	Hilfswerk der evangelischen Kirchen Schweiz
SRC	Swiss Red Cross
SOLIDAR	Swiss Labour Assistance SLA

PREFACE

Evaluations that assess the impacts of humanitarian responses a few years after completion of the intervention are unfortunately rare. Many relevant questions cannot be answered at the end of the intervention such as: Were the observed outcomes sustainable? How have the beneficiaries used the support provided? How did it impact on their and their families' lives? And on the wider context they live in? Impact evaluations can provide answers to these questions and these answers might give important lessons for the design of future response interventions. The decision to conduct an impact evaluation by SwS is therefore important and the findings might well provide lessons that go beyond the organization itself and its partners.

To conduct the evaluation was certainly a challenge in many ways, methodological, organizational and time wise. The efforts made to meet all these challenges were certainly worthwhile, and the team felt that it was a privilege to be part of it. Without the support and the generosity of many people we could not have conducted the evaluation.

We are first of all deeply grateful to local communities, particularly the families and individuals who generously shared with us their time, experience, ideas and feedback on SwS projects and received us so well in their houses and gardens. Thanks to their essential insights we derived an organic understanding of the long-term impacts of the recovery process.

We are also grateful to the government officials and other key resource persons who took the time to share their feedback and comments with us in the various locations visited by the project.

We would like to acknowledge SwS for sharing all the necessary information and documentation, facilitating the logistics and always providing constructive feedback on our reports and notes. In particular, sincere thanks go to Mr Manolo Caviezel, Ms Priska Spörri, Mr Tony Burgener, Mr Ernst Lueber and Ms Rahel Bucher.

We are also grateful to the reference group and all Swiss NGOs and SDC and their representatives who shared information, facilitated our visits and patiently answered all of our many questions. Particular thanks to: Ms Annina Feller (CARITAS), Ms Annika Klotz (HEKS), Mr Florian Meister (Swisscontact), Mr Alexandre Gasser (ADRA), Mr Helmut Rählmann (Solidar), Mr Juerg Frei (SRC), Ms Rahel Pema (SDC).

We are profoundly indebted to all the people who supported us in securing the visas for our field visits: Ms Anuja Nugegoda (SOLIDAR), Mr Helmut Rählmann, (SOLIDAR), Ms Annina Feller (CARITAS), Mr Prashant Rana (Swisscontact), Ms Sinta Olivia Ruch (SOLIDAR).

In the countries we visited, we were supported by many committed and knowledgeable people of all involved stakeholders and NGO partners, translators, logistical support staff, etc. We also thank the staff of Channel Research and GRM Futures for their continual support, particularly Anne Julian and Ami Reza.

This evaluation could only be possible with the cooperation of all of the above.

Adriaan Ferf
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EXECUTIVE SUMMARY

Introduction

This evaluation was commissioned by Swiss Solidarity (SwS) to review the impact of projects funded in India, Indonesia and Sri Lanka in the aftermath of the devastating 2004 Indian Ocean tsunami.

SwS raised more than 227 million Swiss Francs (approximately 233 million US\$) from the general public to support the affected population. These funds were disbursed by SwS to its partners, namely Swiss NGO's implementing relief and rehabilitation projects in the affected countries. The aim of this evaluation is to account for the use of the funds and identify useful lessons for future disaster responses.

Evaluation process: The study was conducted in 2014 in the three countries by a team of five consultants (two core team members and three national experts), supported by Team C Voter, a consultancy firm, which conducted a beneficiary survey.

The evaluation focused on 29¹ of the largest projects² implemented by 6 different partner organisations in three sectors of activity:

- 1) Housing repair and construction and the related infrastructure;
- 2) Livelihood support; and
- 3) Construction of three large schools and a hospital.

The **evaluation** addresses the following three **questions**:

- 1) What long term impacts has the SwS funded assistance had on the lives of the assisted population?
- 2) To what extent did the assistance from SwS respond to the priority needs of the assisted population?
- 3) To what extent did the targeting approach contribute to poverty reduction and to the reduction of social inequalities?

Evaluation methodology

The evaluation team defined the *'sustainable recovery of the tsunami affected households and communities'* as the *de facto* objective of the activities by which to assess performance. Recovery was viewed as a broad social process affected by multiple factors often beyond the influence of SwS's partners. This required the identification of the drivers of change, and the ways in which these different drivers interact with the SwS intervention. These include the interventions of other donors, the efforts of the communities themselves, and social, economic and political developments.

The study started with an initial desk review to examine project documentation and literature review. It then moved through a phase of qualitative research, which informed the beneficiary survey questionnaire and the data collection methods. The survey firm Team C Voter conducted a phase of quantitative research. The survey reached 729 households across the three countries. Follow on qualitative research was conducted in the three countries over a two months period.

¹ One project in Killinochi could not be visited and de facto the evaluation covers 28 projects.

² The projects were selected on the base of the largest investments and ensuring the inclusion of a sufficient numbers of livelihood assistance projects.

The project outcomes were assessed according to the four criteria: relevance, coverage, effectiveness, and sustainability³ to determine their relative importance to the recovery process in relation to other contributing drivers.

Main findings

Housing, settlements, connectivity and social services

With almost 80 million CHF⁴ invested in housing reconstruction projects, this constituted the main area of investments for SwS. This programme was successful in reconstructing almost 18,000 houses in newly established or rehabilitated settlements. Only a minor component of these projects, the construction and reconstruction of community buildings and public spaces such as community halls, disasters shelters, playgrounds, and public gardens did not meet expectations.

The overwhelming majority of beneficiaries indicated the donation of the house as one of the main factors that precipitated their recovery. **The effects of the physical reconstruction of houses were extremely significant for the affected households and communities, and go beyond the mere provision of good quality shelter and infrastructure.** The new houses provided the beneficiaries with stability and safety, and created a real starting point for the recovery of their communities at all levels.

SwS and its partners played an important role in the overall construction process, including building design and construction quality, which was instrumental in the shaping of the communities. They provided a platform on which the communities could build, thus allowing them to focus on other important aspects of their recovery.

The beneficiaries and present occupants contributed with their own capacities and resources. Some contributed directly to the construction process by building houses according to their own designs and needs. Others made adaptations and improvements to the houses after they were handed over, often profoundly changing the appearance of the settlements.

Drivers of change and their interplay in relation to housing

The degree of recovery is often not dependent on the performance of one actor but on the interplay of many actors and drivers. From the analysis of the results in different countries and at different locations, the evaluation identified the main drivers of change affecting this process. While some were largely under the control of SwS's partners, on many others they had little or no influence.

With Government playing the main role in the recovery process, many drivers were within the domain of the different levels of government. They provided the legal framework, policies, and infrastructure support and the resources for the implementation of the programmes. Policies and regulations determined the limit of access to the coastal areas, the right of use of previous plots, the identification and if needed acquisition of land for the resettlement, the individual plot sizes, identification of beneficiaries, allocation of houses, and provision of infrastructure. Present policies and practices further impose severe limitations on house-owners mobility, and the mobilisation of the asset value for their own development. These factors were all crucial in shaping the reconstruction process. In addition there were other factors playing an important role such as the efforts and resources of the beneficiaries, other intervening agencies and the contextual factors.

³ From: ALNAP 2006 Evaluating humanitarian action using OECD- DAC criteria.

⁴ This refers to the investments in housing in the evaluated projects.

The interplay of this environment with the project outputs produced positive results in most of the (re)settlement areas, creating lively communities with development opportunities for its residents.

In some sub-locations the team found examples of lower sustainability. As indicated in the case studies, in one site in India, low construction quality combined with a small plot size, and the availability of a second house in the vicinity, led to more empty houses, weaker maintenance and some level of deterioration. A similar process took place in Indonesia as a consequence of insufficient protection against flooding, and in Sri Lanka as a consequence of a lack of economic and development opportunities in a post war context. Construction deficiencies, unclear policies, and a lack of trust in the handing over of the deeds on the house were also intervening factors.

Findings related to livelihoods

SwS total investment in livelihood support/economic recovery was 17 million Swiss Francs (15 percent of the evaluated investment). While other donors provided large-scale support to the fishing sector, SwS limited itself to occasional and small-scale support to this sector⁵ and concentrated its support at the household level and on micro- and small entrepreneurs.

The recovery of family income has largely been successful. Most of the affected families supported by SwS have an equal or better income than before the Tsunami and can meet their basic needs again.

Most respondents had returned to their former employment or restored their former income generation activities. The fishing sector, providing over half of the families with a primary income, recovered through the efforts of the fishermen themselves⁶ along with substantial external support. After casual labour, self-employment is the third main source of income and is also the primary focus of livelihood support of humanitarian NGOs. Only a small number⁷ of small businesses generate net profit sufficient to maintain a family, while the great majority of small businesses consist of marginal self-employed activities subsidiary to the main family income. In many of the visited villages in India and Sri Lanka, foreign employment is an important source of alternative income.

With the recovery of the households, the new settlements have developed a small local economy made of local retail shops, small workshops, saloons, coffee shops, restaurants, pre-schools and other small businesses. The local economy is largely integrated in the broader regional economy.

Drivers of recovery related to livelihood

The capacities and efforts of the affected population were the main drivers of livelihood recovery. However, they were **assisted by the support of SwS and the humanitarian community**, and operated within a **context of recovery of markets and infrastructure and overall economic growth, peace or conflict.**

SwS contribution to the recovery of households' livelihood stems from both housing and livelihood programs. As mentioned above, **the provision of a house was a major support to the recovery**

⁵ A few boat engines and nets, training in engine repair and fishing technologies and occasional support to the fishing sector infrastructure.

⁶ In the early days after the Tsunami fishermen in India constructed primitive canoes to return to fishing. After they received assistance, they actively exchanged and sold boats, nets, etc. appropriate for them until they had acquired the equipment suited to the type of coast and fishing they engage in.

⁷ 17% quoted in Shaw, pg. 23.

of household's income. Having received a house, families could devote time and resources to recover their livelihood and invest their savings in business, education, health, and related activities.

SwS livelihood support focused on three distinct target groups and attained varying levels of success:

- a) **Micro- and small-scale entrepreneurs with previous experience living outside the resettlement areas.** This was the single largest investment made in asset replacement and was very successful. With the replacement of assets, the entrepreneurs re-started their businesses in various ways and could expand production. This improved the incomes of nearly 9000 families.
- b) **Micro- and home-based entrepreneurs who already had businesses before the tsunami in the resettlement areas.** This was similarly successful when supporting entrepreneurs with previous experience. These activities were mainly managed by women and in most cases provided subsidiary incomes, an often small but important contribution to low family incomes.
- c) **Start-up entrepreneurs without prior experience, recruited among the whole population or exclusively from vulnerable groups in resettlement areas.** They were generally supported with training, equipment, materials and/or working capital, and sometimes business development coaching. Most of these activities had stopped and very few start-ups continue their new businesses. Many projects also supported savings and loans groups. These were only successful when part of an existing and wider program rooted on a profound understanding of the context in which they operated.

Local and contextual drivers provided an enabling environment for livelihood recovery. In most cases, the location of the new resettlement sites allowed households to continue accessing former workplaces and markets. These markets continued to function, ensuring supply and demand of goods and labor. Therefore, most people could, after a certain period, go back to their previous employment and jobs, or reassume their pre-tsunami income generating activities. With the majority of beneficiaries incomes earned in the fishing sector, the abundant humanitarian assistance to this sector was extremely important for the recovery of household and village economies. **Governance policies** were instrumental in the provision of infrastructures and for the regulation of access to the coastal areas, which can have severe implications for the livelihood of many families. In spite of the damages caused by the disaster, the **national and regional economies and markets** continued to function and benefitted from strong economic growth in the initial years after the Tsunami. This was a basic condition for recovery. In Aceh, the newly established **peace** created new opportunities for local trade and exchange. In contrast, the **conflict** in most of eastern Sri Lanka from 2005 until 2009, followed by the post-conflict restrictions, slowed and still suppresses the recovery and development opportunities of local communities.

Findings related to community infrastructures

The evaluation covered three large schools (two in Aceh and one Sri Lanka) and one hospital in Aceh, the third largest component of the program with a total investment of just over 16 million CHF

The two **schools in Banda Aceh** became “unggalan” or model schools in 2010. These **are part of the national educational strategy**, and are expected to guide other schools in raising the general level of education in the district. The 2 schools supported by SwS are in high demand with students coming from all over the province and from other provinces⁸. The strict selection system and the low number of scholarships limit the access of lower income groups. **Over 90 percent of the students continue their education at provincial and national universities. The impact of the two schools in raising the general level of education could not be assessed.** **The school in Sri Lanka is a public day school offering free education. It recruits lower income students from the surrounding neighborhood.** Due to the isolated location and the high student drop-out rate in the area, the school **operates below the full capacity of 1430 students.**

Prior to the construction of the new hospital in Nanga Raya district in Aceh, people could obtain hospital treatment only in Meulaboh town, a distance of approximately 40 minutes by car. Statistics from the new hospital indicate a strong growth in the number of treatments and patients, hospital staffing level, income, expenditures and profits. However, the buildings showed signs of insufficient care and maintenance and **the overwhelming majority of the respondents** in the area indicated that they go only for minor treatments to the new hospital in Nanga Raya. They still **prefer going to the hospital in Meulaboh for more serious health problems.**

All four **projects are relevant to national and sector policies and strategic priorities.** However **coverage⁹ of the schools remains low** with two out of the three schools functioning below capacity. The maintenance of large buildings not fully utilized can pose **problems of sustainability** in the coming years and the **impacts on the capacities of the sectors are limited.**

Conclusions and learning

Drawing from an analysis of the findings, the evaluation concluded that the support of SwS effectively contributed to the recovery of the livelihoods of the supported families and communities. The beneficiaries have taken ownership of the support, and have used it to shape their lives and communities in their own way according to their own priorities.

The impact of the support provided by SwS was especially felt by beneficiaries of the funding of construction and repair of housing. The effects of new homes went beyond the mere provision of a living space and the physical reconstruction of settlements, infrastructures and communities. It also made a major contribution to the livelihood recovery at household level as families could devote their time and resources to the recovery of other livelihood functions, such as the household economy.

The impact of the livelihood programs was particularly felt by many small, micro and home based entrepreneurs who with the provision of equipment, stocks, and working capital could successfully re-start or accelerate the development of their businesses. The support to the ‘start up’, often vulnerable household, and to the formation of savings and loan groups was largely not sustainable and had minimum long term impact. Addressing these issues require an in-depth understanding of economic development, the creation of strong linkages with policy frameworks and governance structures, and a long-term commitment that cannot be provided by humanitarian assistance.

⁸ Aceh families living outside the Province send their children to these schools as they provide good education and as they are boarding schools with strict rules, provide protected environment.

⁹ Defined as actual number of students accommodated compared to the installed capacity.

The impact of the construction of schools and a hospital was difficult to establish. The projects were all operational and in line with the district and national sector strategies. However, some operated below maximum capacity, served a different target group from that envisaged by the project, and their contribution to the capacity of the sector was difficult to establish within the scope of this evaluation.

The SwS support undoubtedly responded to the needs of the affected people as the overwhelming majority of beneficiaries consistently indicated that the single most important external support to their recovery was the provision of housing.

Reducing poverty and reduction of social inequalities was not an objective of most of the Swiss Solidarity funded projects. Nonetheless, without external support it is most likely that at least a portion of the target group would have fallen into poverty. On the other hand, the specific activities to reduce poverty and vulnerability had scarce impact. With the provision of identical plots and houses, social differences were initially levelled. However, those that were better established before the tsunami, recovered faster and differences were re-establishing.

The funds provided by the Swiss public and organisations have made a significant contribution to the success of the recovery process. However, this success can't be attributed solely to SwS funding as it was the result of the interplay of many drivers, some under direct control of SwS partners, while on others they had limited or no influence.

The findings of this evaluation provide important insights on the influence that some key drivers, such as location or allocation of housing, have on the recovery process. A reflection on how to take these factors into account can ensure that the support provides enough flexibility for the beneficiaries to use the support according to their own needs. Additional examination of sectorial policies and dynamics may help determine the suitability of investments in support of the sector performance before deciding on investments in social infrastructure. This also applies to economic recovery projects that require a good understanding of the functioning of markets and the institutional frameworks in which they function. With its partners, SwS can explore new approaches and strategies to support the most vulnerable. Finally, as impact evaluations can identify the factors that determine success or failure and especially long term viability that would otherwise go unnoticed, we recommend to conduct more impact evaluations in the future.

1. INTRODUCTION

1.1 Introduction

On 26 December 2004, one of the largest natural disasters in recent times occurred in Southeast Asia. A series of tsunamis caused by an undersea earthquake devastated large coastal areas in 14 countries, and caused the deaths of 215,000 people. The hardest hit areas were Indonesia, followed by Sri Lanka and southern India.

In support of the affected communities, SwS raised more than 233 million Swiss Francs¹⁰ from the general public. This was complemented by donations from public bodies and the private sector.

To account to the general public in Switzerland for the use of the funds provided, SwS commissioned a 10-year impact evaluation covering Indonesia, India and Sri Lanka. The main objective of this evaluation is therefore public accountability, but it is also intended to identify lessons for future SwS operations.

The evaluation focuses on 29¹¹ of the largest projects in three areas:

- Housing repair and construction and the related infrastructure,
- Livelihood support,
- Construction of three large schools and a hospital.

Impact evaluations of humanitarian interventions are subject to particular challenges, among others¹²:

- The importance of the overall social, economic and institutional context in which the response and the development thereafter are realized determines to a large extent the success or failure of the interventions. The more time has passed, the more difficult it is to identify the many factors that shaped the final impacts in the different phases of the recovery and the specific contribution of the activities funded by SwS.
- Because of the pressure to assist the affected communities as quickly as possible and the often rapidly changing context, documentation of humanitarian projects rarely provides baseline data, contains minimal information on the (social, political and institutional) context in which the intervention is implemented, often does not specify objectives, elaborate strategies to achieve the objectives and indicators to measure success.
- In (post)conflict contexts, there are additional challenges. In (post)conflict areas data collection should not create risks for the interviewees, not all issues can be addressed in interviews and the context influences the results and perceptions reducing the objectivity of the data.

These challenges demanded, among others, a broad evaluative scope and a methodology that allowed going beyond the immediate and narrow parameters of the interventions, a variation in data collection methods to capture the complexity, sufficient variation in contexts to understand the influence of the different factors and sufficient time in the field to collect the data.

A reference group consisting of the six partners who were responsible for the projects mentioned above was established to facilitate the evaluation and provide feedback on the different deliverables. They provided comments and recommendations on the inception report, the intermediate and survey reports and the final draft report. Their comments and recommendations

¹⁰ Over 233 million US\$.

¹¹ A project in Killinochi could not be visited and de facto the evaluation covers 28 projects

¹² Freerks, G. Hilhorst, D. (2002) Evaluation of humanitarian assistance in emergency situations.

have been fully taken into consideration, while still preserving the independence of the team in terms of choice of methods and identification of findings.

A steering committee formed by the staff of SwS's program function managed the evaluation project and provided detailed feedback to the evaluation team on all deliverables before these were approved.

To effectively inform the Swiss public of the evaluation findings, SwS designed an extensive information campaign for radio, TV and written media. The evaluation team was invited to participate in this campaign and shared the methodology and findings with the Swiss press on several occasions.

1.2 Methodology

This evaluation seeks to respond to three evaluation questions:

1. What longer term impacts has the assistance funded by SwS had on the lives of the assisted population?
2. To what extent did the assistance from SwS respond to the priority needs of the assisted population?
3. To what extent did the targeting approach contribute to poverty reduction and to the reduction of social inequalities?

The evaluation defines recovery as a process where men, women and their children use their capacities and desires to re-shape their personal environment, livelihoods and relations in the society after an exceptional and destructive event, and where the communities themselves are able to rebuild their functions. In fact, recent discussions¹³ around recovery indicate that recovery should be interpreted as a process leading to a 'new normality'. "This is partly because 'building back' may rebuild the vulnerability which caused the disaster but also because it's not possible to return to the pre-disaster situation: the disaster itself will have caused irreversible changes within the affected area. Disaster recovery takes place within a wider context of social, political and economic changes at various scales that occurred in the timespan of 10 years" (Chang, 2010)¹⁴.

The degree of recovery is therefore defined as the extent to which the households have recovered their economic assets and to which social structures continue to perform their essential functions, but in a manner that reflects the changes of the context or in the 'new normality' that has emerged. It is important to note that this so-called 'new normality' might not be 'better' – it is an adaptation to a new situation (Chang, 2010).

In the recovery efforts, the beneficiaries were assisted by their families and community members, the state, national and international NGOs. The utilisation of this support reflects what was most appropriate to them, given their skills and competences and the contextual opportunities and constraints. As often happens in the case of humanitarian responses, the project outputs might have assumed a different utilisation than that which was originally intended. In other words, the way in which people used the resources provided by SwS might well be different from the intentions of the original donors, and may have achieved different impacts from those which were expected by the partners funded by SwS. This does not mean that the impact was reduced, but rather that it reflected local reality to a greater extent.

¹³ Maynard V. (2013), What do we mean by recovery? <http://resilienturbanism.org/vmaynard/recovery-theory>

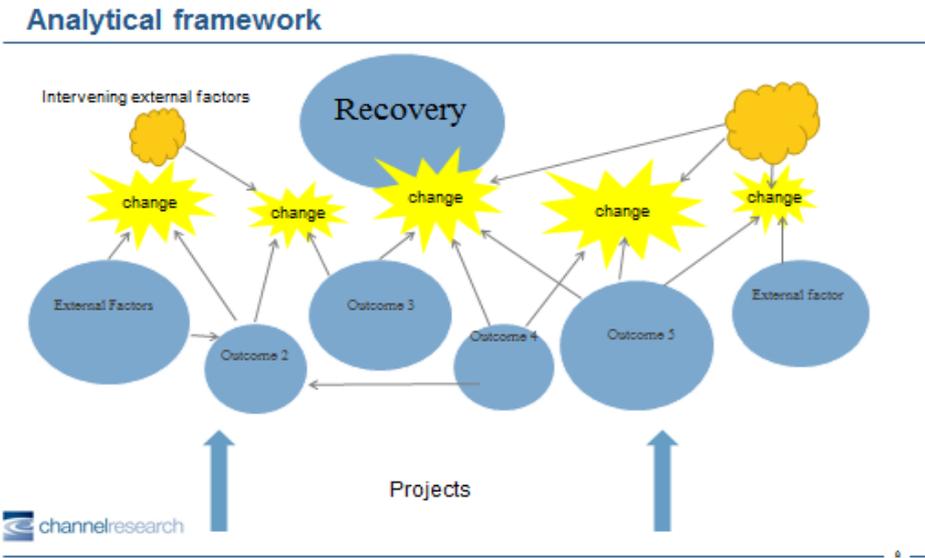
¹⁴ Chang (2010), Urban disaster recovery: a measurement framework and its application to the 1995 Kobe earthquake, *Disasters*, Volume 34 Issue 2

The evaluation set out to identify the impact of the projects funded by SwS on the recovery process. Impact is defined as all lasting positive or negative, intended and unintended changes that occurred in the life of the beneficiaries, to which the projects funded by SwS directly or indirectly contributed. Considering the definition of recovery, impact refers to the new living conditions achieved by the target populations.

Recovery is a complex, multi-dimensional and non-linear process. To capture the full scope of recovery required that the evaluation take a broad perspective. It was important in the first stage to identify the multiple drivers influencing the recovery process, and the way in which these different drivers interact with each other to create the current reality. The outcomes of the SwS support are drivers of change, which occur amidst other external drivers, such as the interventions of other donors, the efforts of the communities themselves, and social, economic or political developments. Had the analysis been limited to the outcomes and impacts of projects funded by SwS, it would not have allowed for capturing the richness, complexity, and the dynamics of the recovery process.

The following figure sketches the evaluation’s understanding of the relations between outcomes, external and contextual drivers, changes and recovery.

Analytical framework



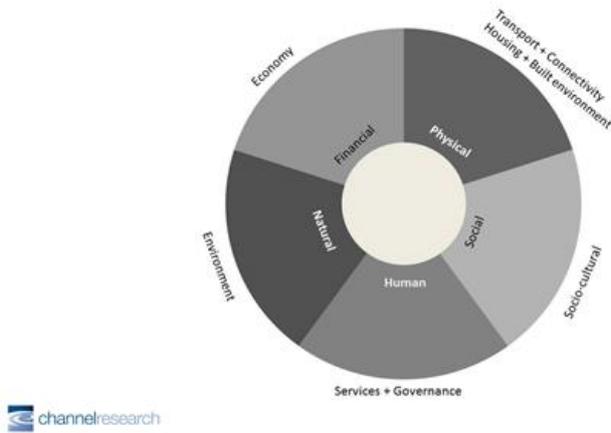
1.2.1 Identification of changes

The starting point of the research was the identification of the most significant changes in the lives of the affected communities. The evaluation used a combination of the Sustainable Livelihoods¹⁵ and Sustainable Cities¹⁶ frameworks to identify changes in the different domains of change relevant to recovery at the household and community level.

Livelihood and community functions framework

¹⁵ DFID, Sustainable livelihoods Guidance Sheet, <http://www.livelihoodscentre.org>
¹⁶[http://computingforsustainability.com/2009/03/15/visualising-sustainability/30Sustainable Communities Wheel](http://computingforsustainability.com/2009/03/15/visualising-sustainability/30Sustainable%20Communities%20Wheel)

Sustainable livelihoods and communities framework



The evaluation set out to identify the changes in the five (5) main livelihood areas: the natural, physical, economic, social, and human realm; and the five (5) main community functions: housing, built environment and connectivity, social-cultural, services and governance, environment and economy. This was done for each location through open-ended individual and group interviews with community members and direct on-site observation at the inception and field visit stages. The purpose of the first step was to create an interview that was as open as possible, avoiding pre-conceived expectations on results, and affording opportunities to capture the unexpected as much as possible. Thereafter, the focus of the research narrowed to the issues that were identified as most relevant to the recovery of the beneficiaries.

1.2.2 Identification of drivers of change: external drivers and project outcomes

The inception phase of the evaluation included field visits, review of documentation and in-depth interviews. Changes in living conditions within the target population were outlined, and some areas were identified for further exploration. The next phase of the evaluation defined how these changes had occurred and which drivers affected change. From various sources, the following factors were observed as drivers of change across the various locations and countries: a) project outcomes; b) external drivers such as the activities of the beneficiaries, the state and other organisations; and c) contextual drivers such as economic development and policies.

1.2.3 Assessing project outcomes

The project outcomes were assessed against the following four criteria: relevance, coverage, effectiveness and sustainability¹⁷. Relevance refers to the responsiveness to local needs, coverage to the extent to which the targeted communities benefit from assistance proportionate to their needs¹⁸, effectiveness to the extent to which the objectives are met, and sustainability to the continuation of project benefits after the assistance is completed¹⁹.

¹⁷ From: Evaluating humanitarian action using OECD- DAC criteria. ALNAP 2006

¹⁸ This refers to the ALNAP definition of coverage as: “The need to reach major population groups facing life-threatening risk wherever they are, providing them with assistance and protection proportionate to their need and devoid of extraneous political agendas”

¹⁹Glossary of Key Terms in evaluation and result based management, OECD-DAC 2022

1.2.4 Assessing contribution

Among evaluation specialists there is currently a lively debate on the concepts of contribution and attribution. In the literature, attribution is often used to identify a cause/effect relation of a result in correlation to the intervention and to estimate quantitatively how much of the effect is due to the intervention. For various practical and ethical reasons, experimental or quasi-experimental designs that compare situations with and without an intervention and might answer the attribution question are rare in humanitarian programmes, and could not be applied in this evaluation²⁰.

As attribution was not possible, this evaluation focused on contribution. In this report, contribution refers to what outcomes of the interventions have added to the achievement of the observed changes and in what way.

After determining the changes that were influenced by projects funded by SwS and any other factors that contributed to change, the evaluation assessed the relative importance of project outcomes in relation to other contributing drivers. The contribution question was regularly addressed in interviews, and the assessment is based to a large extent on information the beneficiaries and key informants provided to the evaluation team.

1.3 Data Collection and validation

1.3.1 Literature review

A review of project proposals, final reports and project evaluation reports, which were included in the project list for this evaluation, was conducted prior to the beginning of the evaluation.

A significant number of studies have analysed similar programmes in the affected regions. These provide a frame of reference for the key notions of recovery assistance. The design of the initial questionnaires was based on information abstracted from the review of key tsunami impact studies.

1.3.2 Document study

An inception period of field research was included to allow for a more effective sequencing of qualitative and then quantitative methodologies than originally intended. Most of the tsunami evaluation studies and reports were based on fieldwork before 2009, and consequently did not cover the developments in the last five to seven years. Channel's experience demonstrates that important aspects of the recovery process will be overlooked if the survey questionnaire is not based on recent qualitative research. An initial period of field research was therefore added to the original plan. It was conducted in Indonesia from 23 to 31 May 2014 to identify issues and questions not mentioned in the literature or other evaluation reports, e.g. high levels of mobility. This initial qualitative research was also used to test the data collection methods and to refine the evaluation questions and survey questionnaire. This has increased the relevance of the data collected by the survey.

1.3.3 Quantitative data collection: the survey

The final questionnaire was piloted with 20 beneficiaries in Sri Lanka before being translated into the local language and administered in the field. In each country, between 15 and 25 field researchers (men and women) were given intensive one day training on the questionnaire and the field data collection method. The survey was conducted in June 2014. To ensure the quality of the data collection, three supervisors were employed in each country to conduct spot checks and quality

²⁰ There are no communities that have been excluded from assistance that could be used as control groups.

control. In the three countries, 729 households that were provided with or had constructed a new house responded to the questionnaire: 225 in Sri Lanka, 244 in Indonesia, and 260 in India.

The size of the sample was limited due to budget constraints and did not allow for comparison between projects. The size of the sample was, however, sufficient to allow for a statistically significant comparison between the three countries. As the context in the three countries varies importantly, a comparison between the countries could provide useful information, and in each country a roughly equal number of interviews were conducted. Within the countries the survey was spread over locations where houses had been built with SwS funding as much as possible, with a minimum of 25 interviews per location. A systematic random sampling technique was used to select the locations in each of the countries. In each location, the households to be interviewed were randomly selected among the houses constructed by SwS partners. The starting point was the available beneficiary list. The field investigators used the 'random walk' method to select the household and the 'last birthday method' to select another member of the household when the beneficiary named in the beneficiary list was not present.

The information from the completed forms was entered into a database. Following data cleaning and scrutiny, data analysis was performed using the Statistical Package for the Social Sciences (SPSS). The data were interpreted by the Team C-Voter survey team and discussed with the evaluation team.

The survey results offer a large amount of quantitative information and highlight key trends, project outcomes (house condition, ownership, occupancy, extensions and improvements, maintenance, perceived safety), to some extent impacts (changes in quality of life), and information on contribution (e.g. assistance that contributed most to the recovery). The survey provides one source of evidence for the tangible long-term results of the projects, including relevant issues in changes of professions, income sources, connectivity, access to services like education and health, and the perception of recovery.

1.3.4 Qualitative data collection

The qualitative part of the evaluation included 13 'housing' projects in 10 different locations²¹ supported by four different partners: four locations in India, two in Indonesia and four in Sri Lanka²² with a total of approximately 18,000 houses.

The qualitative research covered all locations where SwS funded the construction of houses. When a project covered more than one village (sub-location) in the same location, the research was conducted in the village with the largest number of supported households plus a randomly selected additional sub-location. In each sub-location, a mix of group interviews, household interviews, individual interviews and interviews with key informants were conducted. In two locations, focus group discussions were also conducted. The team used random sampling and snowball sampling, while ensuring that gender (minimum 40% men and 60% women²³) and youth (at least 10%) were represented in each village. In each country, different occupations (fishermen, casual workers, small and home-based entrepreneurs, government officials) were covered.

During the initial qualitative research, it was observed that formal and organised gatherings, such as focus group discussions and participatory rural appraisal (PRA) tools, did not always yield reliable data, as the communities had been over-researched in the years since the tsunami. The use of these

²¹ Some of these projects have two project numbers as they had a second phase with separate funding.

²² Due to political tensions it was not possible to evaluate the impact at the originally foreseen sixth project in Sri Lanka, as for security reasons it was not possible to visit Killinochi.

²³ During the day mainly women were at home and men either at work or recovering from night work.

methods was therefore limited to situations where the team felt that they could add value to the research and a more open ‘informal’ semi structured interview method was applied.

Open interviews with individuals or groups were used especially in the initial phases of the research in each location. These were instrumental to identify unintended and unexpected impacts, unknown contextual drivers and events, cultural habits, etc.

Semi-structured interviews were used to follow up on issues that arose in the open interviews and served as the basis for common questions/topics in the interview protocol. A sufficient number of interviews for each of these topics mentioned in the semi-structured interview protocol were conducted to obtain generalizable information. The interviews were conducted with household members, either individually or with all household members present. Semi-structured group interviews conducted in India proved to be more effective²⁴. At the case study sites, interviews were conducted with key informants including local authorities, health and education staff, and former project staff. These interviews focused on contextual drivers and changes, and sector specific impact information, such as the occurrence of certain diseases. In total, 332 individual and 40 group interviews were conducted along with two focus group discussions. Of these interviews 56 were with key informants.

Direct observations during household interviews and village transit walks were an important source of information. At the start of the research at each site, systematic site walks were conducted by the team, who were accompanied by community members where possible. Interaction with community members was generated during the walks. The observations of the team members were individually noted and then shared, compared and analysed at the end of each day.

Prior experience of the evaluation team in several of the locations visited provided important information, as it afforded the team with knowledge of earlier phases of the recovery that could be compared to present day observations.

To counter the risk of anecdotal information becoming predominant, daily evaluation and planning meetings were conducted. At the end of each day, the team shared, checked and analysed the findings of the day and identified questions that needed specific attention the following day, ensuring that key questions were sufficiently answered. Recurring themes were further refined.

1.3.5 Triangulation

Due to the complexity of establishing evidence-based causal relationships among many different drivers, triangulation of methods, sources, and investigators was conducted to validate the data collected. The different methods of data collection allowed for the validation of findings: the findings of the quantitative data collected through the survey, qualitative data collection, the project document review and desk review of relevant literature corroborated each other, and in cases where there was a discrepancy, further research was conducted. If discrepancies could not be resolved the evaluation made a judgment on the most reliable source to use. The collection of information from *different sources* also provided a solid element for the validation of the data: interviews with key informants and beneficiaries supplemented with the knowledge of the local consultants and translators who often had in-depth knowledge of the area. Different research teams were used at each site. Two teams worked in parallel, providing different angles and daily validation of findings by cross checking.

²⁴ Whereas in Sri Lanka and Indonesia, interviewees easily invited the interviewers into the house, in India interviewees preferred to meet outside. Often more people joined in and participated in the interview. This allowed for obtaining information from different perspectives and discussing different points of view.

1.4 Limitations

The validity of the research is subject to some limitations. These are:

1.4.1 Scope

The wide scope of the research with three countries and 28 projects²⁵ was a constraint as it involved covering 17 different locations and diverse interventions such as housing, income generation, water, health and education. The breadth of the evaluation posed limitations with regard to the depth of the analysis that could be conducted. It was also necessary to limit the scope of the investigation to the changes that were most relevant to the impact. In the interest of prioritisation, some broad important and interesting issues were purposefully excluded from the research, such as the influence of participation in local politics and the contribution of local social security and credit systems. The research will touch on some of these issues and recognise their importance, but will not investigate them in depth as this would require a separate investigation.

1.4.2 Construction strategies

The survey included a component on the effectiveness of different construction strategies, classified by the team as self-help/owner built, participative and turn-key. However, contrary to the initial sampling hypothesis, only one project could be considered to be really participatory, while only two projects qualified as self-help/owner built. As explained earlier, a survey sample of 729 respondents is too small to compare individual projects. Consequently, as only one project applied a participatory construction strategy and two projects a self-help construction strategy the numbers are too small for a comparison between the three different strategies. The survey data on the effects of the different construction strategies were insufficiently reliable to be used. The findings on the effects of the different construction strategies are therefore based on the qualitative research, available project evaluations and on responses to questions that cover a large or the full sample²⁶.

1.5 Challenges and opportunities

Assessing the methodology and data collection methods in retrospect, the evaluation team observed that the choice made to identify impacts and drivers first from a wide and open perspective, using data collection methods such as open interviews and semi-structured interviews covering a wide range of issues, before focusing on the specific interventions funded by SwS, instead of taking the interventions as the starting point, allowed to identify the main (also unexpected) impacts and drivers.

The survey sample was limited in size and no comparisons between projects could be made. However, the combination of quantitative and qualitative research using different teams provide a much stronger evidence base than most evaluations that are based exclusively on qualitative research. Data from different sources could be compared and validated. Although the sequencing with initial desk research followed by qualitative field research to identify the research topics for the survey has worked out well, it is felt that a survey to confirm the findings of the qualitative research among another and wider sample is preferable. The initial research was conducted in a location where several different projects were implemented in three sub-locations that were rather different, and the selected location was therefore sufficiently diverse to identify the most relevant

²⁵ Originally 29 projects were intended. However, the team was informed by various sources that due to the tense political situation in Killnochi respondents would not be free to express their opinions. A related concern was that respondents would encounter problems when contributing to the research.

²⁶ E.g. on the preferences for self-help or turn- key construction

issues. However, this will not always be the case and important issues that should have been included might have remained unidentified reducing the value of the survey.

The testing of the data collection methods of the qualitative research before the main field research and the subsequent changes in methods contributed to the quality of the evaluation. Using more 'informal' starting points for the semi-structured interviews responded well to the mindset of the interviewees. While the answers of interviewees in 'real time' and final evaluations were often (understandably) coloured by the needs and interests of the respondents, this was not so any longer when approached less formally and a sincere interest in the achievements and aspirations of interviewees and their families was shown. Individuals and informal groups were often surprisingly open, willing to engage in conversation and respond to the questions posed. It was surprising that in the 372 interviews conducted respondents' asked for support less than 10 times, and, if so, mostly for a very vulnerable other person. It is assumed that the use of PRA methods, such as focus group discussions, reflected the by its nature unequal relationship between 'beneficiary' and 'supplier of assistance' and were therefore in the present situation no longer appropriate.

2 FINDINGS ON RECOVERY OF TARGETED COMMUNITIES

2.1 Introduction

This chapter presents the main findings on the recovery of the targeted communities. The findings are presented according to two main thematic areas: sub-chapter 3.1 illustrates the findings related to housing, settlements, community and social services and sub-chapter 3.2 illustrates the findings related to livelihood interventions.

Each sub-chapter contains: cases studies, findings, drivers and conclusions.

The six case studies illustrate the different impacts in various locations and countries and they describe the different impacts in five housing locations. The description of these differences provides important insights on the interplay of the drivers of change and their contribution in shaping the recovery process.

The findings are then illustrated in relation to various aspects of houses and settlements. This is followed by an analysis of the drivers of change identified as the driving forces behind the findings. Finally, conclusions are drawn for each of the two sub-chapters.

2.2 Case studies related to housing and settlement development

The following five case studies present different situations regarding housing, settlements, community and social services across various locations and countries, two in Indonesia, two in India and one in Sri Lanka.

The differences observed across the various locations allowed us to identify patterns of change and to clarify the most influential drivers of change. The first case study illustrates the role played by the location and the consequences of the transition from a rural area to a more urban setting. It also illustrates the importance of connectivity and of contextual factors, such as the broad economic development in the area. It furthermore presents how these two factors, together with the project outcomes, impacted the recovery of the livelihoods of the beneficiaries. Case study number two illustrates the impact of the location on the lifestyle of the village. It also illustrates how the new location, together with the NGO and government work, created a new awareness of the importance of education. Case study number three illustrates the importance of the regulation of access to the coastal zone. The example illustrates how deeply the post-war situation in the east of Sri Lanka affects the recovery of the target communities. Case study number four illustrates the importance of location and vulnerability to natural disasters and the variation of results in three sub-locations. Case study number five also illustrates the importance of access to the coastal area and how the different interpretation of policies impacts the occupancies of houses.

2.2.1 Singkil: Rural and urban, social coherence and local economy

Singkil is a very rural and poor area located approximately 700 km southeast of Banda Aceh in a swampy river delta. The river villages in the Singkil region had always experienced regular flooding, but when the tsunami aftershock of 2004 caused long-term flooding in the region, the government decided to re-settle the population of two affected river villages and one village in the vicinity of Singkil town in an area closer to town.

The population of the three villages was not mixed and the composition of the original villages was maintained. Although now living in one location, the population of each village is perceived as a

separate community and responds to a different chief. In the villages, social cohesion has been maintained and the villages are well-functioning and coherent communities.

The new settlement is constructed on peat-land and gets flooded every year. The houses are therefore constructed from wood and built on stilts. Using strict design and construction guidelines, the beneficiaries were responsible for the construction process. Overall, they are generally satisfied with the quality of houses. For a majority of the population, the houses were a significant improvement to their prior housing situation, which were often traditional huts made with palm leaves. The new houses are a good size and provide a comfortable space for families. Generally, they are in good condition, and some have been extended or transformed into a shop or coffee-house. Two major changes to infrastructure in the new location include sanitation facilities, which were not commonly used in the previous locations and connection to electricity. The soil is not suitable for vegetable production, but with assistance from the project, a major effort has been made by the community to plant trees and to carve out patches for gardens with elevated platforms or partitions to cultivate vegetables mainly for home consumption.

The change in the location of two of the villages was extremely significant to the villagers, as they were moved from a very remote rural area to a location close to town. Instead of an hour-long trip by boat, schools are now located on the re-settlement site as well as in town, health facilities are located in Singkil and the hospital is located in Rhino approximately thirty minutes from Singkil.

The re-settlement also changed the style of life. People moved from a very traditional way of living to a more modern one. One of the obvious implications of this change is the full inclusion of the villages in the monetary system. In the previous location, people relied largely on the land and the sea for subsistence and livelihood, but in the new location they are more reliant on cash to purchase goods, food, services and to pay for utilities. This required a change in livelihood strategies. Fishing is still a major source of income but combined with work in the palm oil plantation, trading, casual labour and working in government. To describe the livelihood of people the village chief of Siti Ambia summarised: *"People do whatever they can find"*. Describing his own livelihood strategy he explained that he trades with clothes, works in the palm oil plantation, and does various casual jobs whenever he finds an opportunity.

Substantial efforts were made to support people's livelihoods, including skills training and business (re-)start-up. Although relevant, success was mainly limited to those who received new assets to continue the activities they had done before, such as boat construction, fishing, tailoring. In some cases, people sold the support received (tools or livestock) or used the skills and equipment for household production. Regardless of the recent developments - new roads and government buildings - Singkil remains a remote and poor area where economic opportunities are limited and the educated young migrate to other cities to find work that Singkil does not offer.

2.2.2 Tarangambadi: Exposure, education and foreign employment

Tarangambadi is located in a tourist area in Tamil Nadu. The old village was almost completely destroyed in the tsunami. The people are not allowed to stay on the land they previously owned and the damaged houses had to be destroyed. Now only some palm-leaf sheds can be found there to store nets or for fishermen to sleep in.

The new settlement, less than approximately 1 kilometre inland, is well kept and only has a few empty houses. Houses and plots are a good size and well maintained. There are good roads, trees have been planted, a garbage collection system is functional and there are a number of small petty shops. The overall appearance of the village is lively, with people interacting on the street, socialising and conducting daily and business activities.

The disaster and the relocation created an important change from the very traditional way of living in the village to a sudden exposure to external and international presence, which had a strong influence on people's lives. It led to shift in mind set about education and economic opportunities for the villagers, especially for young people.

As one beneficiary stated: *"After the tsunami things have changed a lot because of NGOs and the foreign people who came. This interaction has changed the perception of how people can live their life"*.

Another beneficiary also stated: *"My father changed a lot from the tsunami experience and pressured me and my brother to help other people during relief and reconstruction. We participated a lot in various reconstruction committees. I want to be of service. I worked with NGOs, volunteered and did some construction for the neighbours without getting money. I was in school at the time of the tsunami. In those years, I was working at the health centre and I gathered some medical knowledge. Someone from an NGO told me to go to Karnataka where I got trained as a male nurse. Now I do fishing and working in a hospital (between Karaikal and Nagapattinam). The nursing job gives me a secure income and fishing gives an additional income."*

One of the main effects of this new exposure was a new understanding of the importance of education for both boys and girls. One of the beneficiaries stated: *"Things have changed a lot because of the contact with NGOs. There were many meetings and sensitisation in the village that motivated people to study and go to college. Before the tsunami children were studying up to the age of 15. After that, boys then went for fishing and girls often got married"*. A female beneficiary stated: *"The biggest change for women is education"*. NGOs played an important role in the promotion of education. They provided education grants, support to school infrastructure and worked on sensitisation to the importance of education. At the same time, the state government promotes education strongly and social and cultural changes are taking place in the society. On the one hand, children have higher aspirations and do not want to be fishermen anymore. On the other hand, fishing is becoming less profitable and increasingly dangerous; parents do not want their children to be involved in fishing and want them to lead a safer, better and easier life.

However, the increase in education level does not always help to find employment in the area. Economic opportunities are limited and in most cases people have to go to Karaikal or Nagapattinam or even further away to find employment. The opportunities are even more limited for girls. *"Boys can do whatever they like, but women can only do certain jobs because they have to do jobs that are considered safe and acceptable"*. Further, after marriage women often need their husband's approval to work outside the village.

Due to lack of opportunities in the settlement an increasing number of people decide to go abroad to look for work. This is often a strategy to accumulate savings faster for investments in housing, education or to support the family. *"Many people work abroad because they make more money there and they can then support the family more."*

In Tarangambadi, the change in the village came with a sudden exposure to the outside world. The construction of the new settlement has been extremely important, as it created a starting point for the recovery. The effect of the intervention, together with other factors, goes far beyond the physical reconstruction, influencing profoundly the perception of life opportunities and livelihood choices.

2.2.3 Gopalapuram: Self-help, access and post conflict

Gopalapuram is located about 15 kilometres north of the town of Trincomalee at a popular beach in eastern Sri Lanka with several hotels and guest houses. The houses were completely destroyed in the tsunami and in 2006 to 2008 there was heavy fighting in the area. The population of this village was supported with cash to repair and reconstruct their houses destroyed in the tsunami on the former plots. The families closely supervised the construction work of the (mainly local) masons. The houses were often completed in less than 12 months. The village has a mix of various sizes of plots and the houses, as they are designed by the owners themselves, are all different, in great contrast to the turn-key houses. Some of the houses are spacious, beautifully built with great woodwork and nice gardens. The houses and plots are located along a road recently improved by the government that is well maintained. The house owners are satisfied with their role in the process and the quality of the new houses. Some of the villagers only used the amount donated to build their new house, but most were able to add additional resources towards building a bigger house and making significant investments in safety, materials and decoration. While there were many complaints about tiled roofs in the turn-key houses nearby, many of the villagers in Gopalapuram were happy with the tiled roof as it was cooler and there were fewer leaks during heavy rain.

Health and education in the village improved after the tsunami. There is now a hospital nearby and health staff conduct regular home visits. More schools are located in the neighbourhood, but quality is a concern and private tuition classes are necessary to pass the exams. People who have money send their kids to school in town.

The village is close to the sea and the majority of people live of agriculture and fishing. Life has improved for nearly every household, and most households have motor bikes and sometimes a three-wheeler. But work is a considerable problem and most families' economic situation improved only because they have at least one family member working abroad. In this village, it is mainly the men who are working abroad. Women only go abroad when there are no male family members who can go and financial needs are very high. There was a period where many tried to go to Australia on boats, but due to strict Australian immigration rules only 15 to 20 men arrived there with hundreds being sent back. Some died on the way.

One woman stated, "In 2005/2006 things were going well here. We built a house and could buy furniture, but when the war started again, there were many rumours about the safety of the men. Nearly everyone left and we went to India too. My husband's brother decided to stay and he disappeared. In 2008, repatriation started. When my husband heard about the boats to Australia he went back. He was unfortunately not successful and was sent back to Sri Lanka. We joined him here from India in 2012. My mother lives with us and her house is rented to a government official stationed here. My husband grows onions and works in the fields in the early morning. The rest of the day, I do the work on the land and he works as crew on a fishing-boat that brings tourist to the diving spot."

One woman said, "I have three daughters; I gave my first two daughters a house as dowry. They were already married at the time of the tsunami and got a new house. My last daughter cannot marry; I have no money for another house. My husband died and my son had to stop his studies and is in Malaysia. He went on a tourist visa. He is hiding and has a difficult time."

This area has been heavily affected by the conflict. In the last decades, the population was displaced several times and has moved in and out of the area. After the tsunami, many of the Tamil population went to India or the 'Vanni', a part of North Sri Lanka where they felt better protected.

The value of land in the village is rapidly increasing. This is a common trend in the whole of Sri Lanka, but especially here as it is a well-known tourism spot with many new hotels and guest houses. The plots near the coast have become extremely valuable, the closer to the sea the higher the value of the plot. More and more households are building extra rooms and there are already several guesthouses for tourists on the main road. This also has a downside for the population, as the hotels built in front of the beach do not allow public access to the sea anymore. Furthermore, the navy presence in the area puts many restrictions on fishing at the beach and in the sea. One of the beneficiaries explains the situation: *"Fishing was good business in the past. Now the beaches are occupied by tourism and by the navy. Most boats are now only used for the tourists. People cannot go for 'beach fishing' anymore. Before there were at least 10 places where you could bring a net out, now there is none."*

The reconstruction of houses here was extremely important for people. The rebuilt house in combination with the increased value of the land in the area increased the families' capital. But access to the beach and land is restricted, which limits their economic potential in the village. The restricted access to sea and land is a matter closely related to the post conflict transition in the country, and therefore plays a crucial role in the northeast of the country.

2.2.4 Meulaboh: Quality, mobility and vulnerability

Meulaboh is a city located on the coast of Aceh Barat and large parts of the city in the coastal area were badly affected by the tsunami in 2004. Local authorities requested Swiss Solidarity's partner to assist the population of three urban districts: Pasir, Padang Seurahet and Suak Indrapuri. The majority of the population, 1048 families, moved to a resettlement area in Beulang Beurandang, while 201 families chose to remain in the original locations. In 2007, a spring tide flooded the new houses in Pasir, which had a large effect on the community there.

The resettlement site, Blang Beurandang, is located 10 kilometres inland, outside of Meullaboh and has become a vibrant community. Houses are generally well maintained with many having been extended and modified giving them an individual appearance. Several small commercial activities have developed in the area, which are mainly run by women, and vary from very traditional small-scale activities, such as small petty shops, restaurants and cafes, tailoring, etc., to more innovative businesses, such as on-line trading and wedding decoration. Most of the successful businesses are built on experience acquired before the tsunami. In some instances, these businesses were supported by partners with training or provision of assets.

The new location did not disrupt livelihoods and the majority of people are still in their previous occupation in or related to Meulaboh town. For fishermen and fish traders the change in location had a stronger impact on their livelihoods. As the new settlement is well connected to town with a good road and with motorbikes widely available, people generally have been able to adapt to the new location.

Local leadership is flexible and allows houses to be rented and sold. Houses can be used as collateral for bank loans and Beulang Beurandang has been fully integrated into the housing market in Meullaboh. The vibrant new settlement with easy access to good schools and health facilities is clearly appealing, and offers good value for money, which attracts new, often young, people.

The situation is different in the original villages of Pasir and Suak Indrapuri. In both areas, houses have been reconstructed and the settlements are lived in, but in 2007 many houses were flooded

again which changed the general perception of the area. People experienced a renewed sense of vulnerability and discomfort and many living closest to the sea moved away. Especially in Suak Indrapuri, there are many empty houses, less extensions and renovations, and some disrepair of houses due to the proximity to the sea. In Suak Indrapuri, except for the houses close to the main road, the value of houses is low and attracts people that cannot afford housing elsewhere, e.g. poor people, boat owners and big companies that are renting houses for workers coming from outside of Meullaboh. This has inevitably changed the composition of the villages.

Quality construction and connectivity combined with freedom in the use of houses contributed to safe and comfortable living conditions in a vibrant and lively Beulang Beurandang re-settlement area. Due to the vulnerability to flooding of Suak Indrapuri, the areas attract low-income groups, making the community less functional and vibrant and positioning the area on the low spectrum of the housing market.

2.2.5 Karaikalmedu: Policy, plot size and construction quality, women activities

The village of Karaikalmedu is located in Tamil Nadu, in the district of Pondicherry. A part of the old settlement lies within the limit indicated by the government in the Coastal Regulation Zone (CRZ), and the residents were given houses on a new site, less than a kilometre from the village. The village is a traditional fishing village quite uniform in terms of cast and occupation with the large majority of the inhabitants being fisher folks and belonging to the same cast.

The settlement looks lively with many construction projects, people chatting and conducting activities in the street. The overall physical appearance of the village is mixed: From the original nice meandering footpaths, parks and informal meeting places, not much is left. Many houses are well maintained and have been extended, depending on the size of the family and their capacity. Some built a second floor, others remain as they were delivered. As plot sizes are small, the enlarged houses nearly occupy the whole plot. Other houses did not do any maintenance and as construction quality is low these building begin to show technical problems and a relatively large number of houses is empty.

Many houses in the buffer zone were only partially damaged and many owners decided to stay there instead of moving to the resettlement site. The owners decided to stay in the old villages either because the old houses are more convenient or because they first want to make the necessary enlargement, renovation or repairs of the new house in the resettlement site before they or someone of the family moves in.

Officially, houses can't be sold or rented for a period of 10 years, although informal private arrangements are possible. These agreements are usually made through the local leaders and are normally only allowed for original villagers' family members. However, because there are many empty houses, the village leaders of Karaikal are relatively flexible and allowed outsiders to rent some of the empty houses. The renters are mainly casual labourers from the neighbouring town that find low cost housing here.

Many women are engaged in economic activities. As stated by one of the beneficiaries: "*Before only old women were working, now also young and married women are working. The cost of living has gone up and one income alone is not sufficient anymore*". A higher income is needed to sustain the family as the village became more integrated in the market economy and cost of living increased. Primarily women are engaged in fish vending. They buy the fish from the boats at the beach or in the new fishing harbour close by and sell it in the village, the neighbouring town or even beyond. Some others run petty shops in the new settlement. That they are owned and managed by women wasn't the case before the tsunami. A local NGO with a strong experience in working with women was already present

before and remained active after the disaster contributing most to this change. It also increased the availability of credit by adding a few new savings and loan groups to the groups it supported already before the tsunami in the village. Most women in the village are now part of these groups and they use the small credits for households needs.

The mixed situation of the settlement (a high number of empty houses together a mix of nicely renovated and extended houses and some deteriorating houses) is created by the interplay of the following drivers: quality of the construction and the size of the plots, the policy and regulations on the buffer zone and the right to sell and rent houses, the availability of a second house in the original location.

2.3 Impacts of the quality of housing, settlements, connectivity and social services

2.3.1 Investments in housing and settlement development

Swiss Solidarity (SwS) invested a total of over 112 million Swiss Francs in the 29 projects, which were evaluated. Approximately 70 percent was invested in housing and related settlement development and community infrastructure. Out of the 70 percent, most of the money was used for the construction or repair of approximately 18,000 houses. A significantly smaller portion was spent on the construction of community infrastructure, such as drainage systems, footpaths, parks, and community buildings, such as community halls, market places, playgrounds, childcare facilities, emergency shelters, sports fields, health facilities and schools²⁷.

Many projects developed houses in multiple locations, which were sometimes as far as 80 kilometres apart from one another. Many projects constructed houses in the previous village location for the inhabitants of the affected community. If a community was to be resettled, the composition of the community remained the same and residents often even kept the same neighbours as before. However, in one new settlement the inhabitants of several different affected villages were combined and past neighbourhood relations not respected.

Each project applied its own construction strategy. Two projects in Sri Lanka applied a fully 'owner driven construction' or self-help housing approach. Cash transfers were made to the house owners, who were fully responsible for the design and construction. One project used a participatory approach, where the beneficiaries were responsible for the construction of the house and either constructed it themselves or hired a contractor (often a local carpenter), but the house had to be built according to a standard design with strict building guidelines and under supervision of the SwS partner. The other projects provided mainly turn-key houses. Although the partners intended to involve the beneficiaries in the design and the construction and/or supervision of the houses, this approach was not very successful as the beneficiaries preferred turn-key housing.

The post-tsunami reconstruction of houses and settlements was a collaborative effort by many different actors, including SwS. The national, state, provincial and local governments contributed greatly by providing the land, which was either state land or bought from private owners. They also contributed in kind in a variety of ways including: preparing the land before construction began; providing transportation infrastructure, such as roads; and connecting the houses with water and electricity networks through (semi-)state organizations. The local governments, who were often

²⁷ One rural school and some health facilities were part of the housing and settlement reconstruction programs. One water project implemented in one of the housing locations is considered part of that project. Three other schools and one district hospital are not located in a housing reconstruction area and are considered separate projects and the impacts of these four projects will be discussed in Chapter 4.

aligned with local organizations such as the fishermen associations, were mainly responsible for the selection of beneficiaries and the distribution of houses²⁸.

In the owner-driven construction projects, the house owners often invested their own money in the house, which they obtained either from their savings or by borrowing money. In the turn-key projects, owners often invested in their house after the house was turned over to them.

2.3.2 Impacts

Overall, the current situation in the supported communities is largely positive. The new and repaired houses have contributed greatly to stabilizing the personal and social circumstances of the affected families. The overwhelming majority of people interviewed identified the provision of the house as the most important event that contributed to their recovery.

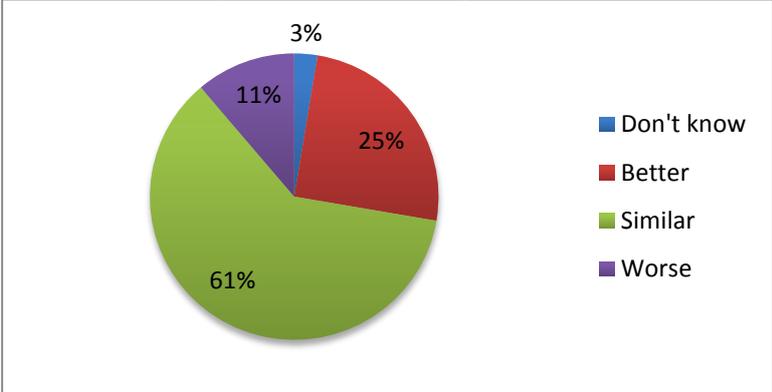
In this sub-chapter, the impacts in the areas of housing, built environment, connectivity and social services will be described in more detail. Subsequently this chapter will elaborate on the drivers of the recovery drawing conclusions on the contribution of the activities funded by SwS.

2.3.3 Housing

Comfort, safety and social contacts

Over eighty-five percent of the residents of the new and repaired houses mentioned that their house is of a higher quality than, or at least as good as, their pre-tsunami house.²⁹ In general, women appreciated the houses more than men.

To which extent are you satisfied with the repaired, reconstructed or new house your family is living in? ³⁰



²⁸ The Swiss Solidarity partners often had some indirect influence on the process.

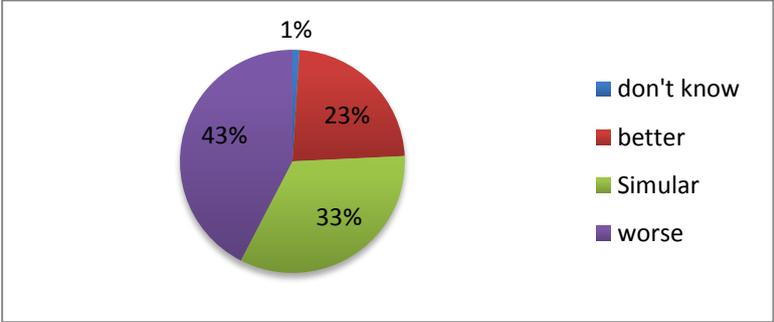
²⁹ Survey Q10C.

³⁰ Survey Table 11

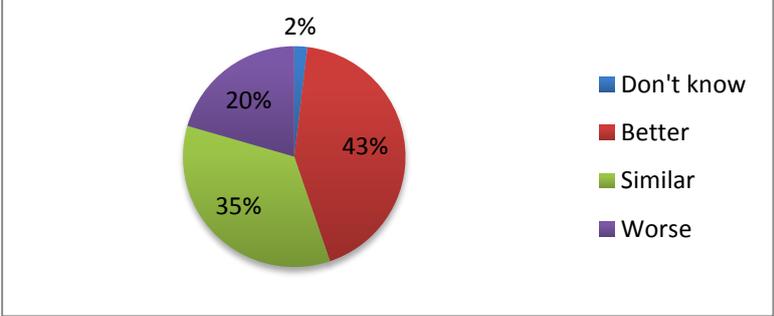
Both the survey and qualitative research found that a large majority of families have a comfortable house where they can rest after daily work, meet with friends and relatives, feel safe, store their belongings, and provide opportunities for productive activities. The houses are nearly always occupied and in general good condition. Some of the houses are pleasantly painted in bright colours and they are often located on fenced, standardized, shadow rich, individual plots. There are exceptions as three of the 15 projects visited show a slightly different state of recovery, with more houses empty or in need of repairs.

The majority of beneficiaries are satisfied with the new house. Eighty percent of survey respondents perceive the house as equally or more comfortable than their previous house, approximately four times more than those that considered their current house to be worse. Women are more positive than men with regard to comfort³¹. The perception of comfort is influenced by space, number of rooms in the house, safety and the capacity to receive guest. Satisfaction with these aspects of the house was often mentioned in the interviews.

Is the present house similar, better or worse than pre-tsunami house on the following parameters? - Comfort³²



Is the present house similar, better or worse than pre-tsunami house on the following parameters? - Feeling of safety³³

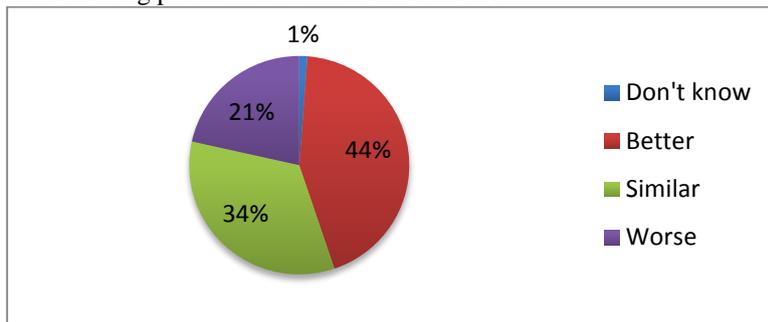


³¹ Women 44% positive and men 40%

³² Survey Table 10d

³³ Survey Table 10e

Is the present house similar, better or worse than pre-tsunami house on the following parameters? - Number of rooms³⁴



As confirmed by the qualitative study, the beneficiaries' perception of comfort, safety and number of rooms available depends on the pre-tsunami situation of their families, their wealth and their status. The vast majority of beneficiaries improved their living conditions, passing from a small traditional house³⁵ to a larger or similar house made of brick. However, some families indicated that they moved from a larger to a smaller house or plot. This explains why roughly eleven percent of the respondents felt that their housing was better pre-tsunami.

The qualitative study also established that the new location, no matter how close to the original village, also influences the perception of comfort. The lack of a natural breeze was often mentioned, as the new houses are often located further away from the sea, which limits the cooling effect from the sea breeze. This was especially true in the Indian villages visited.

The quality of construction is also an important factor as it often contributes to the overall satisfaction of the beneficiaries. In a few cases in India and Sri Lanka, shortcomings such as damaged roofs and leakages were observed during the field visit, which resulted in dissatisfaction of residents and a lower perception of comfort.

These perceptions of comfort are subjective. Not everyone experiencing such shortcomings indicated that the pre-tsunami situation was better. Many people have coped with issues, such as adverse weather conditions, all their lives. The qualitative research found that even with the shortcomings of their houses, the majority perceived their present house as an improvement to their previous house, often a traditional house with a roof made of palm leaves.

Maintenance

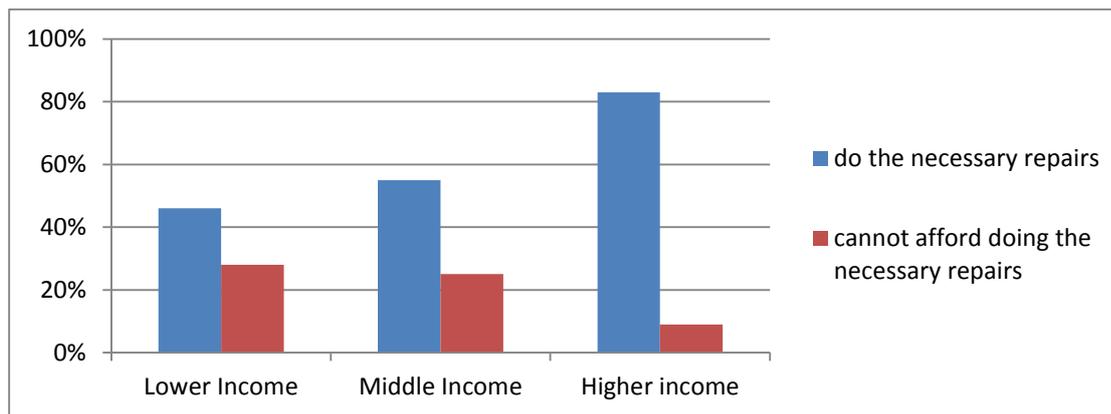
In general, the houses were observed to be in good condition, which was confirmed by the survey. Over 52 percent of the respondents indicated that they conduct ordinary repairs to the houses, with the highest percentage in Sri Lanka. Approximately 25 percent of the respondents in all three countries said that they did not have the money to pay for repairs. About 8 percent said that their house does not need repairs, and over 7 percent did not consider maintenance an important issue.

Significant difference can be seen between income groups in terms of conducting the needed house repairs. As the figure below indicates, wealthy inhabitants are generally able to do more repairs.

Repairs by level of income

³⁴ Survey Table 10b

³⁵ Often described by the beneficiaries as a traditional hut or a Cajun hut



Findings from a recent study on housing indicate that housing had a significant impact on the reduction of household expenses³⁶. This finding also emerged clearly from the qualitative study. When discussing the impacts of the new houses on their lives, the beneficiaries/respondents often mentioned that the new house needed less maintenance compared to their pre-tsunami house. Previously, the majority of beneficiaries lived in traditional houses, often covered with palm leaves, which needed to be repaired and replaced regularly. The new houses built with bricks and permanent roofing materials reduced, in the short term, the burden and cost of maintenance.

Extensions and improvements

The overall appearance of the project settlements has changed considerably since the handing over of the houses as a significant number of houses have been improved and modified by the owners. The new settlements show a rich diversity of modifications, embellishments and enlargements, from a simple covering of the veranda to a three story 'palace' with impressive Roman pillars supporting the porch. The survey illustrates that over 23 percent of the house owners invested in their house after it was handed over. They often extended the house by one or more rooms. This was especially seen in Indonesia (33 percent) and India (23 percent) where people expanded their house, but less so in Sri Lanka. Currently, people are still remodelling their houses in various ways, including combining houses to create one large house and adding porches and rooms for the newly married.

Respondents mentioned that a shortcoming of the new house was that the built-in kitchens were not adequate for cooking with wood due to smoke and danger of fire. In Indonesia, 68 percent of all households built an additional kitchen³⁷, 46 percent in India, and 28 percent in Sri Lanka. Respondents indicated that they preferred cooking on wood, rather than gas, and therefore often (re)built the kitchen.

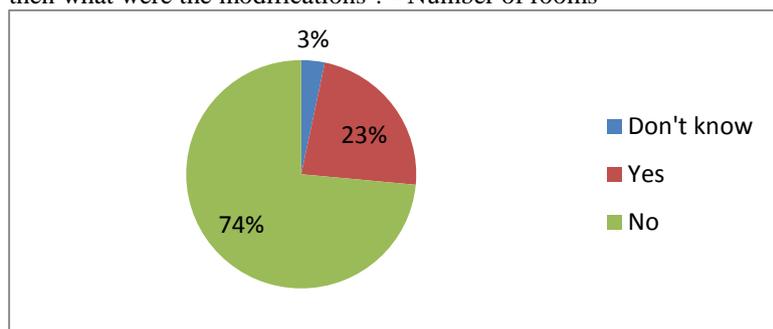
Some of the modifications were done to address construction shortcomings or other factors such as flooding. In some houses, the floor was raised because of flooding. In 9 percent of the houses, other modifications were made to facilitate the economic function of the house, e.g. shop, coffee-houses, workshops, etc..

Did you modify the house after you got it? If yes,

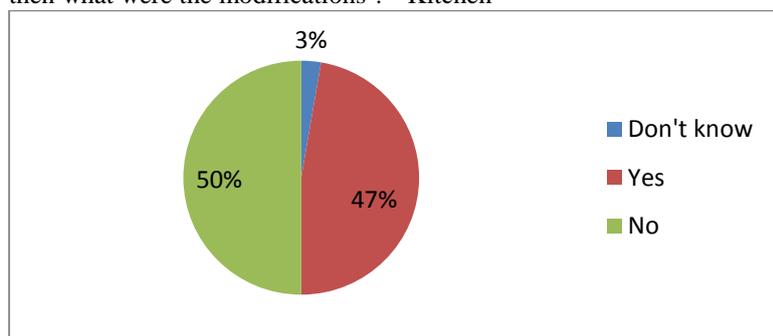
³⁶ Anna Tibajuka, (2009) *Building Prosperity: Housing and Economic Development*, Earth Scan Publication Ltd, London

³⁷ In Indonesia kitchens are traditionally external to the house. Here, it was agreed between the implementing partner and the beneficiaries that the construction of the kitchen was a responsibility of the beneficiaries.

then what were the modifications ? - Number of rooms³⁸



Did you modify the house after you got it? If yes, then what were the modifications ? - Kitchen³⁹



Equity and Social status

From what could be seen, the intervention covered almost the totality of the target group, including people from different social status. In almost all the settlements visited, people stated that everybody from the original location received a house. In one location in India, a group of dalits⁴⁰ was included in the settlement. This initially created some tension within the community. The area allocated to the dalits is at the back of the village furthest from the road and the beach. This part of the settlement looks more deteriorated, as inhabitants are poor and cannot afford to make routine repairs to houses.

In another case, people from different casts who had lived separately in the former village were mixed in the new settlement. This created tension in the community and contributed to the deterioration of the settlement.

“The people who lived together are now separated because of the lottery system that was used to allocate the houses. It would’ve been better if the land distribution had been different and if we had kept our old neighbors. Previously all people from the same cast lived together in the same part of the village. Now everyone is mixed. Within the fishermen cast are different casts and people with different jobs who are now all mixed. Our neighbors are now drinking and fighting a lot. Also girls are sent out to do ‘bad’ jobs.”

“The reason why some people don’t have a nice garden like us is because people have different background. Those people are beggars”

³⁸ Survey Table 12a

³⁹ Survey Table 12c

The new house has an impact on the perceived social status. In the new settlement, all beneficiaries received the same house and the same size plot. The perception of their social status depended on their own wealth and status before the disaster; naturally, wealthy people feel that their social status has decreased (16 percent), while poor people, particularly those having lived in traditional houses, feel that their social status has increased (24 percent). People who had similar houses before the disaster did not observe any substantial change. The majority of respondents perceived their social status to be similar to before.

“Before there were only one or two large houses and those people were respected. Now we are respected too by visitors from elsewhere. I now have to serve visitors a soft drink instead a cup of tea or water”

“Living in such a house and neighborhood, cannot drive a normal motor bike any more, I now need to drive one with fancy wheels and so”

Over time, those in the communities who are better off are investing more in their houses. Those who have a stable income, e.g. government officers, and regained their economic wealth were able to invest in their house. By building significant enlargements, large porches, etc. their social and economic status is made more visible again, thus re-establishing the status differences.

“Everyone in the village feels equal because they have the same kind of houses. Now people are doing renovations so there are differences, but still everyone has brick houses”

This change in perception of social status was more prominent during the initial period where houses were handed over to residents. In the long term, economic differences remain substantially unchanged. The poor remain poor and the rich remain rich.

Occupation, mobility and ownership

In most locations visited, the overwhelming majority of the houses are inhabited⁴¹. In a small number of sub-locations visited during the review, a larger number of houses were not occupied⁴². This happened for different reasons, including the extreme vulnerability of the area (as illustrated in the case study of Meulaboh), the lack of opportunities to rent or sell the house when not used, e.g. for temporary re-location for schooling of children and the availability of a second house in a different location. The houses that are occupied are inhabited either by the original beneficiary or his family or by a new household who bought or is renting the house. Nearly 20 percent of the current inhabitants of the new settlements in Indonesia are ‘newcomers’, in Sri Lanka about 16 percent and in India the percentage of newcomers is lowest at 12 percent⁴³.

The original owners sell or rent the house for many reasons. They might move for better employment or income generation opportunities elsewhere, education for children, wanting to live closer to the workplace or their original family or wanting to live in a more prestigious neighbourhood. One student inherited the house from his father and partially paid for his studies in Banda Aceh by renting it out. Some elderly people sold the house and returned to their village of origin with enough cash to live a comfortable old age, others have sold the house and used the

⁴¹ In Meulaboh this is about 95%

⁴² The team observed that these houses were not occupied for the long term. For various reasons houses may not be occupied temporarily, but this was discounted as part of the normal lifestyle of the target beneficiaries.

⁴³ Survey table 5

money to start a business, and yet others returned to their former house in the original location closer to the sea. It was often suggested that many fishermen moved back to the coastal areas, this was however not evident to the research team as most fishermen were relocated to areas that are still rather close to the sea or have found solutions to cope with the distance⁴⁴. Some house owners were forced to sell their house or lost their property to the bank, as they had mortgaged their house for a loan that they could not repay. Poverty was occasionally the reason for people to sell or rent out their houses, with some very poor families selling their house to pay for their daily needs or to pay for high and unexpected expenses.

At the same time, people are moving to the settlement for various reasons such as low buying prices (23 percent) or low rent (15 percent), nearness to the workplace (13 percent), better facilities in the settlement (10 percent) and a better community (5 percent)⁴⁵.

Low prices should be assessed in the framework of the current housing market, as low prices do not necessarily mean that the settlement is not a popular place to live. On the contrary, in some cases the houses in the settlement are of good value compared to houses in other locations. In Meulaboh, Indonesia, some people move to the new settlement as they consider it a safe place for their children to grow up and young married couples could afford the low rent allowing them to leave their parents' home and live on their own. The settlement is also located close to the city, which allows people to move from rural areas to an affordable, more urban area. Though, in some locations the low rent was a sign of a less successful location and it attracted poor people who could not afford the rent elsewhere.

Selling of houses is only one of the causes of changes in ownership. Many of the original beneficiaries have passed away over the years. Now, several years after the completion of the houses, nearly 15 percent of all houses have been inherited by the children of the original beneficiary⁴⁶.

In Sri Lanka, the ownership of houses changes often due to marriage customs and practices. It is customary for the bride's family to provide a house as a dowry or gift, especially among Tamil and Muslim communities. Consequently, the parents and siblings often move out and hand over the ownership to their daughter (or son in law). This is probably the reason that Sri Lanka has the highest percentage of female ownership of the houses (35 percent). In Indonesia, women own 25 percent of the houses and 16 percent in India. In Indonesia, joint ownership is more common than in India and Sri Lanka where male ownership of the houses dominates (60 percent)⁴⁷.

⁴⁴ Some people stayed during the night to guard nets and boats, others were observing the sea and informed the fishermen of the conditions for fishing.

⁴⁵ Survey Table Q7a

⁴⁶ Survey Table Q5

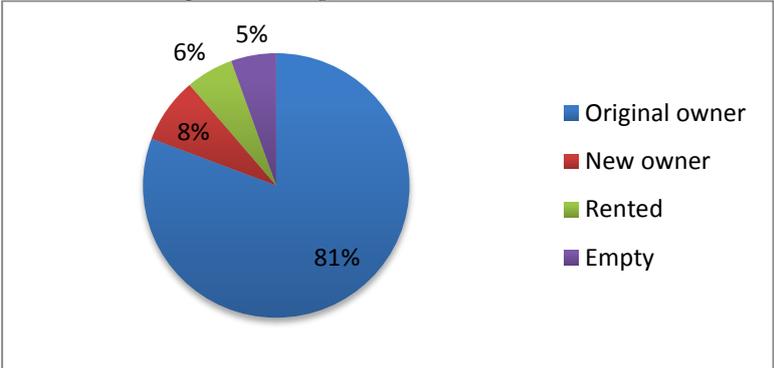
⁴⁷ Survey table Q6

A more detailed case study of Blang Beurandan in Indonesia highlights this mobility issue covering 1039 households⁴⁸. It shows that 839 houses are currently occupied by the original owners or family members, 60 houses were rented out, 83 had been bought while 57 houses were empty. The study gives a detailed overview:

Houses occupied in Belang Beurandang

Original owner	New owner	Rented	Empty
839	83	60	57

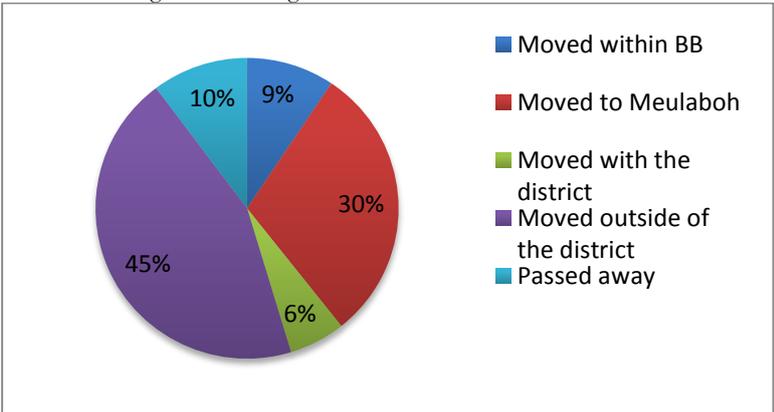
Current house occupation in Blang Beurandan



Migration data of 117 families who sold or rent out their house (of 200 families that left)

Moved within BB	Moved to Meulaboh city	Moved within the district	Moved outside of the district	Passed away
11	35	7	52	12

Beneficiaries migration in Blang Beurandan



⁴⁸ A small number of houses were re-allocated to new beneficiaries at a later stage. These houses are not included in the overview.

Housing plots

In terms of practical value, such as storing nets and boats, constructing a shop, having shade and comfort, people felt that these plots are similar to, or better than, the former plots⁴⁹. The plot sizes are standardized within each new settlement, but vary per country and location. As the land was provided by the state, national and local government determined the location and plot size. Sometimes occupants enlarged the plots by occupying public land next to the house, with or without formal approval, which increased the (monetary) value of their property. Where plots are smaller, options for extension are severely limited. The enlarged houses occupy nearly the full plot creating a rather cramped living environment, although this is not unusual and not necessarily considered to be a hardship in these cultures. Naturally, plot sizes vary where houses were reconstructed on the original plot.

Several projects successfully supported the new house owners with tree seedlings. In the past few years the trees have grown, providing shade, giving the settlement a pleasant appearance and increasing the comfort within and outside of the house.

Settlement development

The new settlements are well-structured with good internal roads and drainage systems. People move in and out to go to work, school, the beach, harbor or markets easily. One often finds small retail, coffee and bike repair shops, people meeting in front of their houses and children playing in the streets. Generally, the new settlements have the appearance of a middle-class housing location.

Overall, the settlements where the houses are reconstructed or repaired on the original sites are equally functional and lively. As the houses are rebuilt or repaired by the beneficiaries themselves along already existing roads, the appearance is more diverse. Here also the settlements have been rebuilt and people have resumed their social and economic life.

As mentioned before, the recovery of the houses and settlements was less successful in three of the 17 visited project locations. In these locations, there are more empty houses and houses that are in a bad state. The community is less coherent and the overall impression of the settlement is less positive.

Community infrastructure

Infrastructure included local roads, footpaths, and drainage systems as well as playgrounds, sports fields, landscaping and parks. Most respondents are extremely positive about the village infrastructure with nearly 80 percent perceiving the village infrastructure as equal to or better than before the tsunami and only 16 percent as worse. It is likely that the respondents only reflect on those components that are of immediate importance to them such as roads, drainage, etc.

In most settlements the internal roads were in good condition and are highly appreciated by the beneficiaries⁵⁰. The conditions of the drainage systems vary, and in at least one settlement the inhabitants indicated that the poor construction and lack of maintenance⁵¹ occasionally cause flooding.

⁴⁹ Survey table 10j. Men have slightly less positive opinions than women. Only 20% feel that the plots provide better conditions to keep animals, to do home gardening, etc. than in pre-tsunami times against nearly 40% who believe that the conditions are worse

⁵⁰ Survey Table 10L. The survey found that over eighty percent of respondents show a fair degree of positivity on the matter of internal roads

⁵¹ People throw garbage in the drainage canals, drainage canals are not cleaned and sometimes totally blocked.

In the majority of the settlements, the landscaped public areas, such as footpaths, parks, playgrounds, sport fields, public benches, were not used or maintained. Also, most community buildings, such as community centres, bus stops, fishermen society buildings and disaster shelters, were neglected. Such facilities play no or a very limited role in the communities' life unless they are directly related to the core activities in the villages. In a fishing town, buildings are used for net repair or as a fish market. In one of the community buildings, one room is used as a clinic once a week. In another village, a large, two-story community centre is used weekly for private tuition classes and is occasionally used for weddings. The community garden disappeared and the community shop closed. In a third village, a community centre is temporarily used as a workshop for carpenters who are constructing a hotel, which is completely unrelated to the village.

In general, there is no understanding of who is responsible for the management and the maintenance of public buildings and public spaces. Even when a clear handover was made between the Swiss Solidarity partners and village leadership, there tends to be a lack of ownership of public structures.

The communities do use and maintain the traditional community buildings, such as the mosques, churches and temples.

Community relations

In interviews, community members did not perceive major changes in internal community relations nor did they perceive it as a matter of concern; with two exceptions, both in Sri Lanka.

When interviewed, the majority of people did not perceive a change in the traditional mutual support systems⁵² as observed in earlier research. We observed that the negative impacts of the humanitarian assistance observed in previous studies did not have long term effects.

About 60 percent of beneficiaries did not report to have experienced any change in the feeling of belonging to the community, including contacts with friends, the neighbourhood and participation in (family) events. The survey shows that around 20 percent experienced a positive change and approximately 12 percent feel that the change has been negative. This is most likely related to the fact that the composition of villages, and in some cases neighbourhoods, remained unchanged in the new sites. Fifty five percent of beneficiaries live near their previous neighbours, and 13% still live in the same neighbourhood but with new direct neighbours. Only 18% of the households live in a new neighbourhood with new neighbours.⁵³

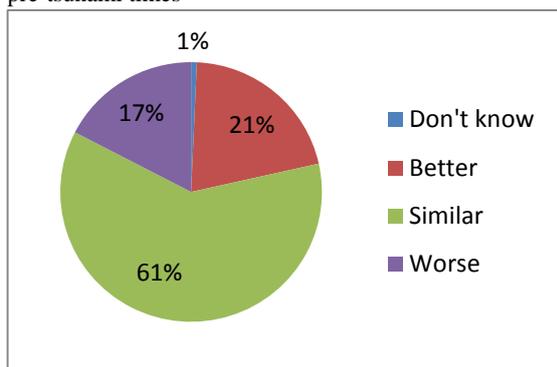
In settlements where people from different villages or neighbourhoods were mixed, social cohesion was lower. In these cases, the inhabitants are not as willing to interact with other community members, complain more about the neighbours' (negative) behaviour and are generally more negative about the community they live in.

The findings might not reveal the whole truth as both Sri Lanka and Aceh recently passed through decades-long conflicts and questions about inter-village and intra-village relations are still sensitive issues.

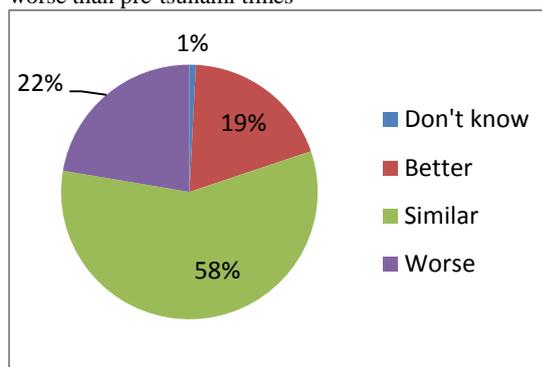
⁵² Survey Table 21C

⁵³ Survey Table 61C

In terms of your community; do you think that social status is similar, better or worse than pre-tsunami times⁵⁴



In terms of your community; do you think that contacts and support of friends and neighbourhood are similar, better or worse than pre-tsunami times⁵⁵



In some projects, the SwS partner made efforts to strengthen community relations (e.g. regular community meetings, organizing joint activities of different groups within the new settlements). The evaluation could not establish the contribution these activities made to the findings on community relations.

Connectivity

Connections to places of work and income, social and administrative facilities, family, social and political gatherings, and events have a major impact on people’s lives. These aspects, which are central to economic integration and even globalization, we have labelled connectivity. The locations where the new SwS settlements have been constructed are well connected. In most cases, the relocation area is close to the former site. Where this is not the case, new roads built by the government connect the new sites to the main town and services.

The findings of the survey illustrate that around 40 percent of people believe that the transport situation to the workplace and main villages is similar to before the tsunami, while there are equal numbers of people thinking that it is better or worse (both around 30 percent)⁵⁶.

In Indonesia, there is a more negative response on the connectivity of the new locations. Over 40 percent perceive transport to the workplace as worse than before the tsunami. Here half of the new houses are constructed at a distance of five or more kilometres from the previous location, significantly more than in other countries. In one case, the interviews indicate that the distance from the previous location has created additional transport costs and complexity. In another location, two villages moved from more isolated locations to a more central location with good connections to social services, markets, etc. Here people were more positive about the transport issue.

Social services

Access to social services is an essential part of people’s living conditions. Access to water, health and education are basic needs and their fulfilment has a strong impact on people’s wellbeing, quality of life, livelihoods, and ultimately on their life choices.

One of the most significant changes observed during the research is around the recognition of the importance of education. Parents as well as students stressed the importance of education, as

⁵⁴ 21a

⁵⁵ 21c

⁵⁶ Survey Table 10k

fishing is now considered too dangerous and not seen as a reliable occupation for a viable livelihood. In most countries, families make major efforts to cover the costs of education. Providing good education is considered the responsibility of all older family members. Often one family member works abroad to cover the costs of education of their children, younger brothers or sisters. In the fishing villages in India, the evaluation team met many youngsters who were studying for A-levels, at university, or already held a degree and were looking for job opportunities in India or abroad.

On this topic, some beneficiaries stated:

“There is considerably more education after the tsunami. Fishing is heavy and dangerous and we expect our sons to have a different profession or work abroad”

“Before the tsunami there was less education. People had less education and less opportunities. Now everyone who can, goes to school. Many even go to schools and have jobs outside the village. (.....) Children have different aspiration than fishing and also the parents have higher aspiration for their children”

Over 70 percent of respondents indicated that education is very important and another 15 percent indicated education to be a somewhat important priority⁵⁷. There is hardly any difference between men and women with regard to the priority of education for their children. The lower income groups give slightly less importance to education, with 60 percent considering it important.

In Sri Lanka, the interviewers found a much lower priority for education than in India and Indonesia. Boys and girls leave school early, as boys can make money from fishing and girls often get married at a young age. The relatively low priority of education in Sri Lanka was recognized by some of the key informants and teaching staff, but rejected by others. The survey findings also contradict the interviews findings, which showed that education was a priority in Sri Lanka.

“There are not many children in the village that study in A-levels. The reason is that there is little money for education and transport. Boys think that at least they earn 50 rs a day if they go to sea so they stop their education. Girls also stop. Often they start working in garment factories after the age of 18. Also there are also still many child marriages, especially girls but also boys. In town it is different. There everyone studies”

In all countries, the access to primary education remained similar or improved. Schools that were demolished by the tsunami were rebuilt by humanitarian organizations in the new settlements or nearby. Many schools were not affected by the tsunami, as they were further away from the coastline. Nearly half of the respondents feel that primary education improved and 36 percent that it remained the same. Approximately 12 percent feel that it has deteriorated⁵⁸. For secondary education, the overall assessment was also positive, though slightly less positive than that of primary education.

The cost of education remains a factor of concern, especially for secondary education. Nearly 60 percent of survey respondents feel that costs have remained the same or increased in the past decade and about 30 percent feel that costs have decreased. These figures are slightly better for primary education. In Indonesia, the respondents are far more optimistic about the costs of

⁵⁷ Survey Table 29A

⁵⁸ Survey Table 17b

education with approximately 45 percent feeling the costs have gone down compared to before the tsunami⁵⁹.

The quality and accessibility of health services remains constant or improved slightly.⁶⁰ The affected hospitals were reconstructed and many hospitals that were not affected benefited from additional investment in equipment, an increase in staffing and/or staff training.

The more negative responses on access to medical help are probably linked to the cost of the services as 38 percent of respondents feel that the costs are higher than before, especially in Sri Lanka, where 54 percent feel that the costs have increased⁶¹. The elderly are especially concerned about the health costs.

Illnesses have severe consequences for households, not only on a personal and human level but also on an economic level. Despite the increased access to healthcare facilities, health remains one of the main concerns of the beneficiaries. According to the interviewed families, health issues are the third largest threat to household stability, with over 80 percent perceiving illness as a major threat or risk⁶².

Water supply was often problematic due to dried-up public taps or failing water supply systems. More problems were observed in India and Indonesia. In India, one of the visited villages depends fully on the water provided by private companies. In other villages, water supply is often limited to a few hours per day or week. Water supply is problematic also in Indonesia, and to a lesser extent, in Sri Lanka. For more than one third of the respondents in all three countries, the provision of potable water (for household and productive use) is insufficient and thus a concern. About another third respondents indicated an improvement of water provision, and one third did not experience a change.⁶³ There are no major differences between men and women.

Major efforts were made by programs to address the issue of water. Programs offered various types of solutions including coordinated with the government for the provision of water; funding the construction of a water plant; construction of individually owned wells; establishment of public wells; and in two cases, installation of water harvesting systems. Public water systems were particularly unreliable in India and Indonesia, and families often built their own well. Overall, water remains a problem.

People are generally positive about sanitation. Despite some problems with pit construction and maintenance/cleaning, over 75 percent of the respondents mentioned that sanitation facilities are better or at least similar than before⁶⁴. Latrines are widely used as a result of various influences, including the influence of many health and hygiene education programs and the idea that the use of a latrine is part of a modern lifestyle.

⁵⁹ Survey Table 17c

⁶⁰ Survey Table 16b. For 80 percent of respondents the quality of and for 60 six percent the access to health services remained equally good or improved. Less than 20 percent felt that quality and 32 percent that accessibility had deteriorated. Men are generally more concerned than women, while the older are more concerned than the younger generations about access .

⁶¹ Survey Table 16c

⁶² Survey Table 49

⁶³ Survey Table 18b

⁶⁴ Survey Table 18e

The living conditions of nearly 40 percent of the residents improved due to the provision of electrical connections⁶⁵ and better services. Nearly all houses visited had electrical appliances, such as fans and TVs, and, depending on the country, often fridges, washing or sewing machines.

2.3.4 Drivers of recovery

While the process of recovery is different in each settlement, there are a number of common factors or drivers that define the process of recovery.

The drivers have been clustered in three broad, but not exhaustive, categories:

- Drivers directly related to technical aspects of the physical reconstruction, such as construction quality and strategy, design and building materials;
- Drivers related to the governance of the recovery process, such as: national policies, regulations, decision-making processes concerning allocation of houses, buffer zone, location, connectivity, plot size, conditions for renting and selling of house and plots;
- Contextual factors such as stability, peace and conflict, natural disasters.

These drivers can affect the recovery in a positive or negative way and depending on the interplay of the different drivers determines to what extent the interventions are successful in contributing to the recovery of the affected communities. Different actors have control or influence over the different drivers. The relative influence of the different actors varies per country and location. While in India the different levels of government played a very active role in the recovery process, defining many of the drivers, in Sri Lanka this was less so, providing more space for influence of the humanitarian organizations. The evaluation has examined the degree to which the main drivers interacted with Swiss Solidarity interventions.

On the resettlement sites, Swiss Solidarity programs largely determined the layout of the settlement, construction strategy, and issues like design of the house, space, type and quality of materials used. These factors, as perceived by the inhabitants, influence different components of housing quality, relations to and within the community and, to a certain extent, contribute to a reduction of social differences.

Construction quality and strategy

Quality of housing construction is obviously an important driver of the recovery of housing functions, as it determines to a large extent whether the family's social life and livelihoods can recover. Generally, beneficiaries felt that the construction quality was good and the majority are satisfied with the quality of the house received.⁶⁶

The importance of quality for the beneficiaries is immediately understood as it affects their living conditions. However, the significance of this factor for overall recovery can easily be overlooked. In fact, this can be better appreciated by exploring negative cases.

In three locations where the construction quality was relatively low, living conditions were affected negatively. The occupancy rate of those settlements was much lower due to housing construction issues in combination with other factors (such as plot size, location and policies). This triggered a deterioration of the settlement. The cost of repairs is often high and beyond the financial capacity of the beneficiaries. More people move out, a number of houses are rented out at a low price or

⁶⁵ Survey table 18f

⁶⁶ Survey table 10c. The evaluation team did not include technical specialists assessing construction quality. This was not the aim of the evaluation. All reference to construction issues are to the quality perceived by the users. However, in many cases these observations could be confirmed by the evaluation team, e.g. bad quality of wood used for doors, windows and roof construction, bad quality of concrete in roofs and ceilings, etc.

occupied through unclear private arrangements or simply left vacant to further deteriorate. The interplay of construction quality with other drivers is described in the case study of Karaikalmedu. In contrast, in almost all settlements with good housing quality the number of empty houses was lower, the settlement was considered attractive by newcomers, and the quality of housing was quoted as a reason to choose to move into the settlement by newcomers as was, among others, observed and described in the case study of Meulaboh

There is a relationship between construction quality and construction strategy. Interviewees who had constructed the houses themselves had significantly less complaints about the houses. Self-help housing construction strategies tended to ensure a higher control over construction. In many cases, the house owners chose their own design and hired their own contractor (often a relative, friend or somebody well known). Often, they were directly involved in the construction, helping with minor tasks and generally were able to provide close supervision during the work. This severely reduced the room for construction shortcomings.

There is also a relationship between construction strategy and construction speed. Most houses in the self-help projects were completed in a short time, often within a year or less after the start of construction. With the house being a crucial element of recovery, the earlier the families can leave temporary housing, the earlier they can re-shape their former lives and the shorter the recovery process.

In Sri Lanka, with many turn-key and large scale owner-driven projects, the residents could compare both construction strategies well. Eighty-eight percent of survey respondents prefer to manage construction themselves, while only five percent would prefer a turn-key house.

In Indonesia half of the projects were turn-key and the quality of construction of the turn-key built houses was generally high. Nonetheless, the survey indicates that 63 percent of respondents prefer to construct their own house in the future and only 33 percent would still prefer a turn-key house.

In India, where all the houses were more or less turn-key built, the preference for owner built houses is lower with 30 percent⁶⁷.

This data indicates that owner-controlled construction strategies are generally perceived positively in Sri Lanka and Indonesia. The reason for this preference lies in the possibility for beneficiaries to choose their own design, the sense of ownership and control of the process. This ultimately resulted in short construction times and higher quality of construction. Thus the construction strategy can have a strong influence on recovery⁶⁸.

Drivers related to governance

The main actors determining governance are the national, provincial and lower levels of government. However, other organizations, like the fishermen associations in Sri Lanka and fishermen Panchyats in Indian, also play a role in the governance of the communities and the recovery process.

Higher levels of government define the legal frameworks, budgets, large infrastructural investments and can define key parameters such as plot and house sizes and land allocation, while local

⁶⁷ Survey table 66

⁶⁸ The evaluation of the cash for repair and construction also found that full control of the construction processes by the (future) house owners was generally appreciated. It also lays out the conditions that must be met for owner-driven construction to be successful.

government and administration play a role in guidance, coordination, beneficiary selection, etc. and are especially important in the maintenance of the recovery gains.

During the reconstruction process SwS partners interacted with the different levels of government at various levels of intensity for these crucial issues. For example, SwS partners, with more or less success, often verified the beneficiary lists provided by the government, negotiated the location, quality of land and the necessary infrastructural improvements of the new settlements, plot sizes, inclusion of vulnerable people, allocation processes of houses to beneficiaries, public transport facilities, etc. The level of influence of SwS partners on the government varied according to the political context, the role the government intended to play in the process, the capacities, the willingness of different government actors to collaborate, and the definition of the role of the Swiss Solidarity partners in the recovery process and their capacities to influence the different government actors.

Project documentation gives limited insight into the interplay of governance and government actors. It is generally limited to the limitations and constraints in collaboration with government actors, such as the 'slow' process of land identification and acquisition, delayed or even undelivered infrastructure. This can be understood from an implementation level; it shows, however, also a rather limited vision of the important role of governance during the recovery process and thereafter.

Location and connectivity

Location is certainly one of the most important drivers and was largely determined by governments. Nearly 30 percent of the houses are either in the same location or located less than one kilometre away from the location of the former house (especially in Sri Lanka). Another 30 percent of houses are located between one and five kilometres away from the previous location (in Sri Lanka and India). These factors support the recovery process in a positive way. Ease of access to the former workplace, markets, relations, social services etc. are generally maintained and do not require additional efforts or adaptations.

In several locations in India and Sri Lanka, the resettlement sites are only a few hundred meters away from the original village. In some cases, the old village is within walking distance from the new settlement. Often it can easily be reached by bike or motorbike, and sometimes there is a dynamic interaction between the new site and the old site. In some cases, churches and temples remain in the old village and are widely accessed from both people remaining in the old village and people from the resettlement site. Often, families have members on both sites. Therefore, people continue to largely access the same health centers, hospitals and schools as before the Tsunami.

Between the three countries, Indonesia had the largest distances from the new settlement to the previous villages. For 12 percent of the population the new settlements were built between five to ten kilometres away. For another 12 percent, the distance to their previous village was more than 10 kilometres⁶⁹.

In Meulaboh, the new settlements are located further away from the town centre and the harbour than the previous villages. Generally, people have been able to easily adapt to the new location. Most services, such as education, are available in the village or nearby and the distance to the hospital remains the same. The new settlement is well connected to the town with good roads. Due to the easy availability of consumer credit, motorbikes are widely available and are extensively used by both men and women. Nearly all households have one or two motorbikes and sometimes cars. Although transport is costly, it allows people to move easily back and forth, which limits the

⁶⁹ Survey Table 61c

negative effect of the location on recovery. Women are slightly more affected by the distance, as the motorbike is often only available to them when not in use by other (male) family members. When they do not have access to motorbikes, they depend on the more costly three-wheelers and limited public transport.

In Singkil, the majority of residents come from distant, isolated places that can only be reached by boat, as illustrated in the case study. In this situation, the relocation decreased the distance to employment opportunities, social services, markets, etc., thus having a positive effect on livelihoods. However, there is a trade-off, as the fishermen now have to travel to fishing places with a three-wheeler and opportunities for food production in home gardens are slightly reduced. The residents who come from Singkil live further from the main road. For the residents of Singkil, the location has had a (limited) negative impact on their livelihoods.

The majority of the new locations in Sri Lanka and India were close to the original sites and did not require difficult adaptations to the new situation, which has had a positive effect on the recovery of the population. In Indonesia, the new sites were more distant from the previous locations. On the one hand, this created some challenges for the beneficiaries, especially for fishermen because of the increased distance from the sea. On the other hand, in Singkil, this negative aspect was counterbalanced by the increased connectivity of the new site's proximity to town, while in Meullaboh the main problem is the increased cost of transport.

Plot size

The selection of the land by the government also influenced the size of plots. This is an important driver, as it influences housing recovery as well as livelihoods. Generally, in the case of both in-situ reconstruction and resettlement sites, plots were sufficiently large. They provide enough space for the house, house extensions, shops and small workshops, meeting people (in India often in front of the house), trees for shade, etc. In one specific sub-location, where the plots were small, various consequences were observed. Naturally, space constraints limited the possibility for extension and in combination with other factors, such as poor construction quality, short distance from the previous location and availability of a second house in the former village, this led to a substantially lower occupancy rate compared to other settlements. In this sub-location, a particularly high number of empty houses could be observed during the field visit. Some families felt that a major investment was needed to remedy the lack of space before they could move in. Many were willing to wait a substantial length of time to save enough money for renovation before they moved in. Some large families invested a substantial amount of money in house extension before they moved in.

Policies

National and local government played an essential role in the recovery process. The national policies regarding the buffer zone, provision and preparation of land, related infrastructure, conditions of handing the houses and plots to beneficiaries, and provision of social services had a major influence on the recovery process.

Policies concerning ownership and use of land and houses had substantial consequences on various aspects. National policies regulate the use of donated houses and, to different degrees, impose time limits before deeds are issued and houses can be sold or rented. In Indonesia people have been able to enjoy full property rights. In India and Sri Lanka there are more restrictions. In India, the restrictions are imposed generally with the approval of the local leadership, and informal solutions could often be found through private arrangements made by beneficiaries. In the east of Sri Lanka, the absence of the deeds was felt to be a major restriction, especially because it is combined with a lack of trust in the government and a high level of uncertainty about the current situation.

These differences impact the mobility in the three countries:

In Indonesia, where houses can be freely sold or rented, there is high mobility and people are moving in and out of the settlements. In India, local leadership often restricted mobility by allowing only families with close ties to the existing community to live in the settlement⁷⁰. Although private arrangements for rental or selling of houses are made, in eastern Sri Lanka mobility was seriously constrained. People doubted whether the government would issue the deeds and whether this would be with or without certain restrictions. In combination with the political circumstances and the particular situation of Muslim and Tamil communities, this determines low mobility.

Where mobility is restricted residents are limited in their freedom to create their lives the way they want to. They are somewhat restricted to realize economic and social opportunities that require moving to another location and to make use of their plot and house as an asset.

Trust in the government and the issuance of deeds also determines the level of investment that people are making in housing and settlements. Investments and extensions are made in India, Indonesia and Southern Sri Lanka. In contrast, in the east of Sri Lanka, where people have serious concerns regarding the deeds and scarce trust in the government, very few improvements and extensions are made.

Government policies on ownership and deeds also determine the degree of flexibility in the use of the assets. This is an important aspect, as it allows people to adapt to the waves of change that have occurred in the time span since the completion of houses. Greater flexibility, as in Indonesia, allows people to adjust to the intervening changes. Some people sold the house in the resettlement site built by Swiss Solidarity, bought a cheaper one on a site in a different area, and with the remaining sum were able to buy a boat for their livelihood. Older people often moved in with relatives, sold the house and used the money as a pension fund. Other people invested money to buy a second house in the same settlement and used the rent to supplement their income and pay for the education of children and other household expenses.

Contextual factors

Stability, peace and conflict

The conflict and post-conflict tensions in eastern Sri Lanka have a major influence on the recovery process of the people living there. This situation affects both new and existing settlements. It negatively influences economic recovery and the living conditions. People were affected by war and by the disaster and hit by subsequent waves of insecurity, destruction of assets and displacement.

During the conflict in Sri Lanka many Tamils fled, often to India, and others migrated to other countries or within Sri Lanka, leaving their houses empty or taken care of by other family members. Most Tamil families have come back to these areas since the conflict ended in 2009.

There is a general feeling of uncertainty and mistrust in the government. There is a conspicuous presence of the army and navy in the area, and this has repercussion on access and security. As explained by one of the beneficiaries "*There is no war and no peace*". Many restrictions, such as access to land, to the sea, to livelihood options are imposed by regulations or simply *de facto* affect the overall recovery of the settlements.

⁷⁰ Religion also played a role in the Hindu as well as the Catholic communities.

The level of investment in the resettlement sites in east Sri Lanka is much lower than in other areas and it is rare to see extensions or modifications of houses. In this sense, there is a striking difference to the south of the country where substantial amounts are invested in the houses.

Vulnerability and intervening natural disasters

Although the feeling of lack of safety that was present after the tsunami has decreased, natural disasters are still felt to be a major threat by over 40 percent of the families. This has not stopped most families from living in houses built on their original affected plots. Yet, where the threat remains visible and present, the settlement is often negatively affected. In Indonesia, one of the original villages where houses were reconstructed has been severely affected by recurrent high tides and floods. Many houses in proximity of the sea are empty, and the village is deteriorating. The value of houses is lower compared to other parts of town and to the resettlement site built by the same organisation. Those families that have the opportunity move out, the poorest households have no option but to stay. At the same time, the low house prices attract poor families to the area. Furthermore, companies and boat owners rent cheap houses for their employees. Thus, the original composition of the village is changing.

2.3.5 Conclusions

SwS's construction of houses and development of new settlements was largely successful and has substantially supported the rebuilding of family lives and social relations, community functions and the provision of social services. The beneficiaries believe that the provision of a house was the most significant support that contributed to recovery, both on a personal and a community level. The importance of a house was clearly illustrated by the beneficiaries in their 'narrative of the recovery'. They acknowledged that new houses are an essential component of their overall recovery, as they provide them and their families with shelter, safety and a living and working space. Houses also contribute to recovery from trauma and make it possible to concentrate on other aspects of recovery; and they allow affected people to maintain social relations and be part of a functioning community again.

The key actors in the reconstruction process are governments, SwS and the communities, supported by the synergies created with other organizations. The governments set the rules and conditions and provided the land and most of the infrastructure. SwS had a significant role in shaping many of the other drivers of the recovery. The housing and community reconstruction projects funded by SwS determined the construction strategy, the quality of the houses and parts of the community infrastructure. The different interplay of these factors in the various locations clarifies their fundamental importance. Looking at the two extremes of the spectrum illustrates how these factors shaped the process. In some villages, good construction quality, spacious plot and preserved village composition, created a 'housing effect', not only contributing to safety and comfort of the occupants but also to creating a vibrant and lively settlement attractive to newcomers. On the other side of the spectrum, in a minority of villages where the quality of construction was poor, the size of the plots limited, the composition of the original village severely altered, or the settlement was still vulnerable to flooding and post conflict conditions and the development opportunities for residents were restricted, some houses remain unoccupied and are rented out or sold at very low prices to poor newcomers.

National and local governments largely determined the location of new settlements, their connectivity and the flexibility in the use of the property. To various degrees, SwS partners were able to influence government decisions. Generally, the location of the targeted communities facilitated their recovery process due to their proximity to the former locations, good access roads and access to social and other services. The restrictions and limitations to property rights of the houses and plots reduced people's capacity to use the house in support of their economic

improvement, to move elsewhere in response to personal or family events (illnesses, retirement, education, etc.) or better economic opportunities. Ultimately these factors limit the capacity of people to adapt to the waves of change unfolding in the long term. The degree of flexibility varies by country; while restrictions on selling or renting in Indonesia are flexible, the opposite applies to India and Sri Lanka.

The evaluation concludes that government policies, regulations and practices have a profound influence on the project impact. In some cases, project proposals anticipated the consequences of national and local policies on the impact of the project and acted on this analysis to limit negative effects. However, in general, project documentation contains limited analysis of these issues. It is suggested that this should be a point for further discussion between SwS and its partners to ensure that these aspects are thoroughly analysed and taken into account during design and implementation.

SwS reconstruction programs were highly relevant. The overwhelming majority of beneficiaries indicated that the construction of houses responded to a primary urgent and fundamental need and provided the starting point for a new beginning.

Coverage of the programs was high. From what could be observed, the targeted communities were almost entirely covered by the intervention. Occasionally, individuals living at the margin of the community before the disaster may have been left out. However, this did not appear to be a significant issue.

The projects can be considered effective, as the reconstruction supports the long-term recovery objective. Except for a few, all houses are occupied and the majority of the occupants perceive the living conditions as similar or better to pre-tsunami conditions, including access to services. The main obstacles to sustainability are housing maintenance costs for low income groups, the low cost in India and the management of public services, water in particular. As governance structures are generally weak in the water sector, the new settlements are no exception and changes require interventions above the local level of the projects.

In summary, within the complex process of reconstruction the construction and repair of 23,000 houses in numerous existing villages and resettlement areas was highly relevant, largely effective and largely sustainable and had a significant impact on achieving a 'new normality' for the large majority of the targeted affected families.

2.4 Case studies related to livelihood

The case study of Malagampura in Sri Lanka was selected because it presents some of the main drivers influencing the recovery of livelihoods and in particular the importance of access to markets and support to entrepreneurs with previous experience.

2.4.1 Sri Lanka, Malgampura: Livelihood, market and experience

The population of the resettlement site is composed of people affected by the tsunami and people below the poverty line who were living in the district. Others moved in later, buying the houses from those that wanted to leave. They often came from neighbouring villages, e.g. young married couples. The overall appearance of the village is very positive as houses are along good roads and the plots are very well maintained with trees and flowers. However, the village is not without problems. Since the residents came from different locations, there is not much unity in the village and drinking and drug use has caused problems. The houses were built by another humanitarian agency and the SwS partner provided livelihood assistance after the houses were completed. The livelihood support included kitchens⁷¹, hygiene and sanitation training, rainwater harvesting, savings groups and home industry development, and residents speak appreciatively about it.

The home industry assistance support was an integrated packaged training that included business plan development and financial administration; leasing equipment; and business coaching and market development. The participants started small shops, fish drying, rope production, food processing, sewing, and selling ready-made garments.

The results of the livelihoods program are mixed with almost all women starting a business, but many stopped over time. A few businesses have been successful and provide the main family income. For example, one of the successful beneficiaries is running a large-scale family run fish drying business, which also employs four external people. The family were running the same business before the disaster, and partly due to the support they received, they were able to restart the business. The key to their success is their previous experience and the capacity to re-invest all the initial profit in the business. When asked what made her successful the owner of the business said: *“Buying fish is not easy. It requires a lot of negotiation. Not everybody can do it.”*

Drying fish is a traditional activity in the area and most families already had experience in this business and continue to do fish drying. However, they do it on a small scale to supplement the main family income earned by the men in the household. Men mainly work as crew on multiday fishing boats. Drying fish does not require marketing efforts as traders come to the village to buy the dried fish. The fact that households had previous experience in this business contributed to their success.

Marketing problems are the main reason why businesses fail. One woman was very successful with yoghurt production. She sold her product in the nearby town and won awards as the most successful business woman. To get to the town, she needed to walk to the main road and get a bus or hire a three-wheeler. As the production was small, this was costly. She fell ill and did not produce for a while, and when she returned to the market, her clients were being supplied by other producers. She did not succeed in finding a sufficient number of new buyers and had to stop. Marketing challenges in combination with very small profit margins were the reasons for many others to stop their businesses.

⁷¹ Kitchens were not provided by the organisations that had constructed the houses

“I got a sewing machine and made bed sheets and pillow cases. I went house to house to sell. That is heavy work and the profit was small. I was often ill and when the machine broke down I stopped.”

Others were producing string hoppers⁷². One woman did not have a large enough market in the settlement and was not able to sell the product outside of the village, so the business was not profitable and she stopped. Another woman continues to sell irregularly, e.g. to workers when there is road work in the area.

There were some surprises. The lady that started the beauty parlour became a successful shopkeeper after she had her first child: *“I can sell with a kid on my arm but I cannot work in the beauty parlour”*. Another lady bought a fishing net that is used by her brother, and since traditionally a part of the catch goes to the owner of the net, she is able to have a small income from the net without any effort.

Overall, whether people had a successful business or not, they all spoke appreciatively about the assistance received and the training that had been organised. The owner of a failed business stated that training had been the most important form of support that she received because it improved relations in the community. This indicates that perhaps the results of such assistance should not only be assessed in terms of sustainable businesses.

2.5 Impact on investments in economic recovery

2.5.1 Introduction

While other donors provided large-scale support to the fishing sector in the form of boats, engines, nets and infrastructure, SwS limited itself to occasional and small-scale support to the sector⁷³ and concentrated its support at the household level and on micro- and small entrepreneurs.

In the majority of locations where houses were built with SwS support, its partners also assisted the affected households with livelihood support.

The evaluation included seven such projects in five resettlement areas supported by Solidarity and three in resettlement areas where houses had been built with support from other humanitarian agencies. The support aimed at the recovery and creation of new primary and secondary income sources with the main focus on the latter. Most projects covered all households of the re-settlement area, but a few only targeted the most vulnerable families with most of the beneficiaries being women.

The support consisted of one or more of the following components: skills and knowledge development, including business and administrative skills; business plan development; business development coaching; provision of equipment, materials and working capital; and marketing support. Many of the projects also included the creation of savings and loan groups for women.

One of the projects had a different focus and target group. It supported the recovery of micro- and small entrepreneurs whose business was their primary source of income outside of the settlement areas in the whole Province of Aceh.

⁷² Traditional noodle from Sri Lanka

⁷³ A few boat engines and nets, training in engine repair and fishing technologies and occasional support to the fishing sector infrastructure

The total investment in livelihood support/economic recovery projects included in the evaluation was 22 million Swiss Francs (17 percent of the evaluated investment), only a quarter of the total support given to housing.

The findings are described below and are classified into three areas:

- 1) recovery of family income
- 2) recovery of assets
- 3) recovery of the local economy.

2.5.1.1 Recovery of family income

Recovery of family income has largely been successful. Both in the survey and the many interviews most families who received Swiss Solidarity support mention that they have recovered their family employment, job or business, and incomes are in a similar or better state compared to before the tsunami.

Professions/sources of income of the target group, return to previous occupations

The affected areas were not in affluent parts of the three countries. Before the tsunami, the large majority of families had low-income professions with generally low levels of skills involved and many relied on the informal sector. They considered their families to belong to the lower economic stratum of society.

Although, the destruction was massive, in Sri Lanka and India it was confined to the coastal stretch. Adjacent areas continued to provide employment and casual labor opportunities as well as opportunities to restart pre-tsunami petty trade in fish, newspapers, etc. Most people interviewed had returned to their former employment or restored their former income generation activities. The fishing sector, providing over half of the families with a primary income, recovered through the efforts of the fishermen themselves⁷⁴ along with substantial external support. Government officials (including health and education staff) continued to be paid after the tsunami and could eventually return to their previous jobs. At the same time, the re-construction activities provided a lot of temporary work for skilled and unskilled construction workers.

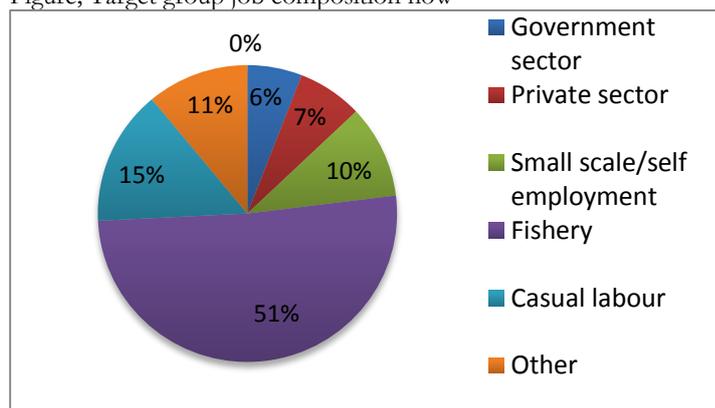
Consequently, the job profile has not changed much since the tsunami. The majority of the population work in fishery (51 percent), as casual laborers in construction or agriculture (15 percent), self-employed in small-scale businesses (10 percent), work in the private sector (7 percent) or employed by the government (6 percent). Only a small proportion of the population are skilled salaried professionals or self-employed with well-developed business skills and a permanent income⁷⁵. For more than one third of survey respondents finding a job or maintaining their employment or business remains a serious concern⁷⁶.

⁷⁴ In the early days after the Tsunami fishermen in India constructed primitive canoes to return to fishing. After they received assistance, they actively exchanged and sold boats, nets, etc. appropriate for them until they had acquired the equipment suited to the type of coast and fishing they engage in.

⁷⁵ Survey Table 23C

⁷⁶ Survey table TQ42

Figure; Target group job composition now



Income and expenditure

The incomes of most households have recovered and a large majority have a higher income than before the tsunami, though some are still low and often fluctuating. Nearly 90 percent of survey respondents said that they can meet their basic needs, but nearly 13 percent can only survive with great difficulty⁷⁷. There are clear differences between countries and locations. In Indonesia, very few families have great difficulties meeting their basic needs and the semi-urban environment in the resettlement location close to Meulaboh town is significantly better off than the rural and isolated resettlement area of Singkil in poorer southern Aceh. The overall positive situation in Indonesia is in stark contrast to Sri Lanka, where nearly a quarter of households can hardly survive on the income they earn. High levels of poverty were especially found in post-conflict eastern Sri Lanka, where the majority of the population has very limited economic opportunities and there are many widow-led households⁷⁸.

For various reasons, expenditures within the settlements have increased with the recovery. First, the cost of living has increased due to inflation. Second, some families have less access to free goods because they moved to a new location. In Singkil, the relocation of two villages from their original location meant that the beneficiaries reduced their fishing activities as they now had better access to a variety of (unreliable and low-skilled) jobs and activities, which allowed them to increase their monetary income. However, they lost access to most of the free goods such as fish, coconuts, fruit, and small scale rice and vegetable production that had supported the families before, when they were living close to the river.

Further, as stated earlier, the new lifestyle that accompanies the new housing goes hand in hand with higher expenditures for ‘fancier’ motorbikes, fridges or washing machines, more or better quality furniture, soft drinks for visitors, and higher educational expenditures.

Fishing sector

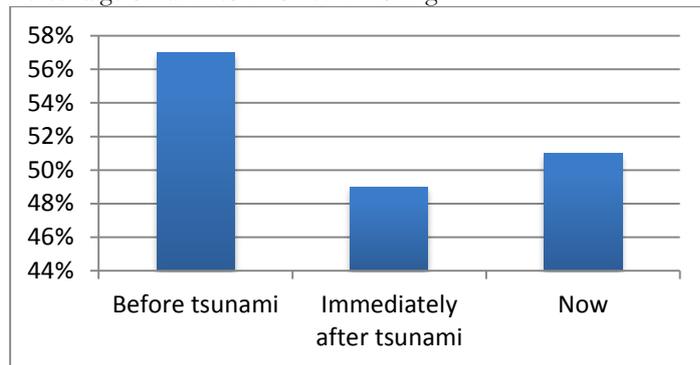
Fishing is the main profession in the affected areas, and with the recovery of this sector, over 50 percent of households recovered their main source of income. In India, this was true for nearly three out of four families. This is less than before the Tsunami as immediately after the Tsunami, the number of families that depended on fishing decreased from 57 percent to 49, and increasing slightly to 51 in 2014⁷⁹.

⁷⁷ Survey table 59

⁷⁸ This is particularly the case in Eastern Sri Lanka, where possibly more women were widowed by the conflict than by the Tsunami.

⁷⁹ Survey table Q23A,B and C. While fishing decreased, government employment increased by 1%, casual labor by nearly 3%

Percentage of families involved in fishing



As stated above, although declining, fishing remains the primary source of income by far. The sector consists of inland, coastal and deep-sea fishing. Coastal fishing remains the dominant sub-sector in India and Sri Lanka. Although there is no scientific evidence, it is generally assumed that fish stocks close to the coast are decreasing, and nearly all respondents mentioned decreasing daily catches and consequently decreases in income from coastal fishing. In parts of eastern Sri Lanka, bans on fishing in parts of the sea for military reasons are constraints to coastal fishing, especially in areas around Trincomalee. Also, large stretches of the beach are barred from fishing activities because of tourism. Enforcement of regulations concerning illegal fishing methods improved after the end of the conflict, which impacted fishermen's catches negatively, though not all seem to be affected to the same degree⁸⁰. With coastal fishing becoming less attractive, coastal fishermen become crew members of the better paying 'multiday boats'⁸¹. This affects the local economy as the boats of coastal fishermen are owned locally and their catch sold daily in the village. The owners of the multiday boats live elsewhere, often in large towns, and unload their fish in larger fishing harbors. As the boat owners come from different parts of the country and don't recruit local crew members, the increase in multi-day fishing has a negative impact on the economic recovery and employment opportunities for fishermen in eastern Sri Lanka. The development of multi-day fishing is supported by government policies that encourage deep sea fishing and the post-tsunami reconstruction programs that provided new landing facilities, increasing the fleet of multiday boats since the Tsunami^{82 83}.

Although coastal fishing is a male-dominated business, fishing is also important for women, especially for poor women. In India, the wives of boat owners normally sell the catch on the beach to local women and local or regional traders. In some villages, women are very active fish-traders, selling the fish in their own village and neighboring villages and towns. They are further engaged in assisting fishermen, e.g. by preparing the fish-lines.

Fresh water fishing (including collecting shell fish like oysters) is practiced by men as well as women. In Singkil, river fishing is an important source of income for many families. However, this is often not the primary source of income and is practiced in slack times by coastal fishermen or older fishermen who cannot go to sea anymore as well as by women. It is especially important for the household economy in Eastern Sri Lanka, where women, among other activities, collect oysters.

⁸⁰ Exemptions were made, said to be favoring certain groups and political affiliations.

⁸¹ Shaw observed that while deep sea fishermen earned 31,474, Coastal fishermen earned only 11,967 and lagoon and river fishermen/women 7,490 Sri Lankan Rupees. Shaw, J. See also Five years on: livelihoods in Tsunami affected communities. Evidence from Sri Lanka and India. Page 19. www.rmit.edu.au

⁸² In Sri Lanka as well as India, everyone spoke about fishing in each other's national waters. Indian boats were regularly seized by the Sri Lankan navy and vice versa.

⁸³ Shaw page 18-20 and TEC A ripple in Development. Page 70

In one of the poorest locations, women lost the income from lagoon fishing when the lagoon was being used by a salt factory.

Self-employment

After fishery and casual labor, self-employment is the third main source of income. Self-employment is also the primary focus of livelihood support from humanitarian NGOs. Shaw⁸⁴ found that in India and Sri Lanka only a small number (17 percent) of small businesses generate net profits sufficient to clear the poverty line for a family of four. High earning micro-enterprises such as carpentry, mechanical workshops, building contractors, and retail trade located in permanent shops on main roads were more stable and profitable than others. Shaw also observed that over 80 percent of the small businesses consist of marginal self-employed activities with incomes well below the poverty line or semi-subsistence activities with direct input into family, food security or other needs, such as clothing. The qualitative research conducted in the new and rehabilitated settlements during the evaluation confirmed Shaw's conclusions. The interviewers observed that for women self-employment is one of the main sources of income, but in most cases, consisted of marginal activities supplementing the main family income.

Employment abroad

Those who cannot earn enough with casual labor or self-employment, resort to foreign employment to complement their income. In India and Sri Lanka, many families have at least one family member who works abroad. The higher wages are often necessary to cover family investments in education or marriages of children, younger brothers or sisters, enlargement of the house, or starting or improving businesses. In many of the villages visited in India and Sri Lanka, a significant proportion of the population (15 percent or more) had family members working abroad. Well-educated youth interviewed in India often saw it as the only option for employment outside the fishing sector.

“The reason that people go abroad is because there is less money in the fishing here. There is more money to be made abroad.”

“There are about 100-150 people (10-15% of households) working abroad mainly in Singapore. They first have to take a course in Chennai, which costs 1.5 lakh and with the certificate of completion they can apply for employment. They pay 3 lakh to the agents if they get a job and they have to take out a loan, they also have to pay 36% interest. They earn 30,000-40,000 a month abroad.” (Interview reference 1 and 2)

2.5.1.2 Recovery of assets

Many people lost all their assets, including productive assets, in the disaster. People lost houses, plots of land or access to them, shops, productive tools and equipment. Assets, either in cash or kind are essential for families to be eligible for loans (banks but often also money-lenders require a form of collateral), to obtain an income through renting out property or to sell to obtain cash to overcome a family crisis or a period with low or not income.

The main external contribution to the recovery of assets came from the free house and plot. Both are expensive assets and had a tremendous impact. The group that benefitted most was the low-income group and people who lived in small or temporary houses before the disaster. These families not only recovered their pre-tsunami assets but even increased them in value.

Whether these assets can be used as collateral, to obtain an income or to cover expenses in times of crisis, depends on the transfer of property rights of the plots and houses. The deeds of new 'donation' houses have often not been handed over yet due to the 10-year time restriction. In Sri Lanka, there are further concerns regarding possible limitations to the rights of house and plot use.

Where people previously owned plots near the beach, it is not always clear whether people still have ownership rights over those plots. This is certainly a contentious issue in eastern Sri Lanka, where the plots are becoming increasingly attractive to the developing tourism industry, which is leading to the construction of new tourist resorts.

2.5.1.3 Recovery of the local economy

With the recovery of the households, the new settlements have developed a small local economy. Local retail shops, coffee-shops, and pre-schools have been opened. Furthermore, nurses and midwives have started private practices in the evening hours and tuition classes have been organized. The local economy is integrated in the larger regional economy. The fish catch is sold to local and outside markets, sometimes in other countries, and fishermen work on boats departing from other villages or states. Home industries find part of their clients in neighboring villages, residents work outside of the village, women go to external markets to buy food and other household products, and building contractors are hired from other villages to enlarge houses.

2.5.2 Drivers

Recovery of income is, as other studies⁸⁵ have previously argued, driven by the efforts of the affected households to rebuild their income bases. They build on their existing skills sets, obtained from passing skills from 'father to son', education, training and experience before the Tsunami, and their pre-tsunami networks that link them to employers, clients, suppliers, administrators and regulators. To be successful, they depend on the functioning of markets such as labor markets, markets to sell their products, markets for raw materials and products to trade, and markets for formal and, especially, informal credit. In a wider sense, they also depend on the recovery of the economic infrastructure, on national and regional economic development, and on the social-political conditions in which their recovery takes place.

The drivers of recovery for this sector can be clustered into four areas: 1) support provided by SwS, 2) own initiative, 3) local drivers of recovery, 4) contextual drivers.

2.5.2.1 Support provided by SwS

Housing: important support to livelihood recovery

Housing was mentioned by many interviewees and in the survey as the major support to livelihood recovery. Without the plot and house, the time and energy they needed for livelihood recovery would have competed with the time and energy necessary to obtain land and build a house. Considering the amount of investment necessary for a plot and house, recovery of livelihoods would have taken considerably longer. The availability of plot and house provides the families with the opportunity for savings to be invested in business, education, health, etc.

Projects providing livelihood support

The SwS partners' livelihood support had three distinct target groups: 1) Micro- and small-scale entrepreneurs with previous experience living outside the resettlement areas; 2) Micro- and home-based entrepreneurs who already had businesses before the tsunami in the resettlement areas; 3) Start-up entrepreneurs without prior experience, recruited among the whole population or exclusively from vulnerable groups in resettlement areas.

⁸⁵ See among others TEC II, A ripple in Development

- 1) Group one: Micro- and small-scale entrepreneurs from the whole Aceh provinces who had either lost their assets or their markets due to the Tsunami e.g. the shopkeepers, spice grinders, that had their equipment at the Meulaboh market that was destroyed by the tsunami. Most of these entrepreneurs had already restarted their businesses soon after the Tsunami, often on a smaller scale in primitive circumstances, using damaged equipment or borrowing or hiring equipment from others. Sometimes they were supported by former suppliers with the initial capital to restart their business or they used their remaining savings or savings made during the initial phases of the recovery (by working for humanitarian agencies, etc.).⁸⁶ These entrepreneurs obtained a significant SwS funded grant for investment in equipment, and to a much smaller extent, they were supported with training, mainly of their staff. Nearly 1500 small-scale entrepreneurs obtained this support. The support increased their income and provided employment to nearly 9000 people. A random selection of entrepreneurs visited in Meulaboh confirmed that the project outcomes were sustainable and had a high rate of long-term success. Nearly all supported entrepreneurs were still in business, had sufficient income to sustain their families and often employed a small number of staff. Most beneficiaries visited were male but some female entrepreneurs had also been supported and were doing well. Some were doing particularly well and had extended their businesses considerably, occupying a strong position in the market and continuing to invest.
- 2) Group two: Self-employed micro- and home-based entrepreneurs with previous business experience in the new settlements. This group had previous sectorial experience and entrepreneurs were largely still in the same business as before and often supplied to former clients or client networks. They mostly received a full package which included business plan development, training, coaching, a much smaller grant for equipment than the first target group and sometimes marketing support. For this group, the qualitative research found a high percentage of success. As can be concluded from Annex IV, over 80 percent are successful or very successful to some extent. Most beneficiaries were women, and most earned a subsidiary income from the activities contributing to the main family income.
- 3) The third group consisted of start-up entrepreneurs recruited among the whole population of a resettlement site or among the more vulnerable families from resettlement sites. Those who had indicated an interest in starting a business were invited to select a potential income generating activity and develop a business plan. They were generally supported with training, equipment, materials and/or working capital, and sometimes business development coaching. The equipment was given or leased to the beneficiaries. Reports and evaluations at the end of the projects observed positive impacts on income. However, a few years later most of these activities had stopped and only a few individuals still continued operating their new businesses. The equipment (or livestock) was either sold or used to meet family needs. The programs assumed that participants had entrepreneurial skills and attitudes, or if not, they would develop them with training and coaching. Unfortunately, the reality often contradicts this assumption. It was further assumed that participants knew the viable opportunities in the local economy best, though many simply followed what they had seen to be successful for others, such as retail shops, tailoring, food processing, poultry or goat rearing and started in already saturated local markets. Many had chosen activities that provided incomes too low to compete with alternative opportunities, such as cleaning, garment industry, etc. Often illness was given as a reason to stop trading as markets were lost during the period of interruption or urgent family needs forced

⁸⁶ Interviews with in Aceh Banda and Meulaboh

beneficiaries to sell their assets. The exception was where limited skills were required and market channels were ensured to have buyers coming to the producers. See for example the dried fish business in the case study of Malgampura, Sri Lanka.

Under the livelihood programs, large numbers participated in a wide range of short training programs, such as cake making, tailoring, hat making, carpentry, etc. Often it was found that people (mainly women) had participated in several training programs in different skills and that very few had used the newly acquired skills. The training had very little impact as most of the women attended for social reasons. An exception was the training in construction skills conducted in mobile training centers shortly after the tsunami when demand for construction labor was high. This training was found to be successful in Aceh and east Sri Lanka, and the mobile training centers were still in use there.

The evaluation did not assess secondary impacts of the programs. While the training, saving and loan schemes and starter programs did not have much impact on economic recovery they may well have had positive social impacts⁸⁷.

Support to savings and loan groups

Many projects encouraged women to start a savings and loan scheme. The support was given in different forms, sometimes with relatively large grants to new groups. Overall, this was not successful and the evaluation did not find many functioning savings and loan groups. Several projects provided large grants to newly formed groups that were not sustainable, and there were no indication that the savings and loan groups had recognized and related to the institutional context in which they operated.

These findings on savings and loan groups are not uncommon. A study of savings and loan groups after the Tsunami in Aceh and Sri Lanka found⁸⁸:

(Sri Lanka) The field study met with an oversupply of microfinance organisations; in some villages there had reportedly been around 20 suppliers and individuals and families had taken out loans from different agencies.

(Aceh) Most of the 400 INGOs and multilateral organizations imported or pre-designed financial products for post-tsunami microfinance support⁸⁹. Donors, pressured for quick disbursement of funds and often working with very short timeframes, grossly overrated the absorption capacity of the microfinance market and institutions, which resulted in over-saturation of grants and loans in tsunami-affected areas

⁸⁷ In one interview a women stated that because of her participation in a livelihood program, she got out of her lethargy and started to actively shape her life again.

⁸⁸ Wageningen University, Department for Disaster Studies, *Marketing & Consumer Behaviour Group 2010* Lessons learned from micro credit provision in the response to the tsunami in Aceh and Sri Lanka

⁸⁹ Cordaid Microfinance Post-Tsunami, 2008, page 23: “ADB, for example, set up a USD 12.5 million ‘Microfinance Innovation Fund’; ILO and Save the Children, Oxfam and World Relief had equally substantial programs. Mercy Corps and Grameen Foundation engaged with BPRs and MFIs from outside Aceh, respectively. The government coordinating body for the reconstruction of Aceh, BRR16, planned to embark on Microfinance through 73 ‘MFIs’ with loan amounts ranging from USD 200 to USD 20,000 to clients on concessionary interest rates as per the Sharia way.

In stark contrast to this strategy, in one location in India, a local NGO that had already been involved in savings schemes before the Tsunami used the additional funding to carefully increase the number of groups and the groups were still functioning. This strategy enabled the NGO to provide continuing support to existing groups along with new activities after the SwS partner had left.

Economic infrastructure

On a small scale, economic infrastructure, including fish- and other markets, ice factories and net repair places, was (re)built to re-enforce the local economy. The infrastructure that was destroyed by the Tsunami and rebuilt was still operational at the time of the evaluation. Good examples were net repair places and previously existing fish markets. However, the few new infrastructure projects that had not existed pre-tsunami largely failed, such as new market places in Indonesia and Sri Lanka. Also, the new infrastructure projects built by non-profit organizations to establish business activities, like an ice factory and boat yard, were no longer operational.

2.5.2.2 People's capacity and own initiatives

While livelihood support has assisted economic recovery, livelihood recovery is primarily driven by the initiatives and efforts of the affected households themselves. They are the first to act and the key factor for success. Many fishermen constructed basic traditional boats to be able to return to fishing soon after the tsunami. Once new boats and nets were supplied by humanitarian agencies, they actively sold and bought boats until the right type of boat was in the right hands. Others searched for their former or new jobs in or outside the relief and recovery efforts. Small entrepreneurs restarted their businesses on a small scale with the limited resources they had. They benefitted from their skills-sets and experience to produce good quality products and re-connected with pre-tsunami clients and networks. The asset replacement programs enabled expansion of these initial efforts and the restart of those that had not managed to do so yet.

2.5.2.3 Local drivers of recovery

Location, markets and connectivity

Location, connectivity, functioning of and access to local markets play essential roles in the recovery of income. As we have seen in Chapter 3.1, most of the new locations were close to the former ones and the distance to former workplaces and markets did not change significantly. Most markets were unaffected and continued to function, ensuring supply and demand of goods and labor. This meant that most people could, after a certain period, go back to their previous employment and jobs, or after recovering their means of production and working capital, could reassume their pre-tsunami income generating activities.

The longer distance to the markets in Meulaboh, Indonesia is still felt to be a disadvantage as it has led to an increase in transport costs. The quality of connectivity ensured that this did not have major effects on the recovery of primary incomes. However, some women did mention that the longer distance to market had a negative effect on their economic activities⁹⁰.

In Singkil, where the new settlement is further away from the pre-tsunami location, the effects were two-sided: the new housing was closer to alternative job opportunities, but simultaneously increased the cost of living, as it implied transport costs for fishermen and diminished access to free food, such as self-produced vegetables, fruit, and rice.

⁹⁰ This is partially related to culture, as married women are often not allowed by their husbands to work outside the settlement in which there is no demand for some pre-tsunami activities such as laundry.

Humanitarian assistance to the fishing industry and changes in the industry

With the majority of incomes earned in the fishing sector, the abundant humanitarian assistance to this sector was extremely important for the recovery of household and village economies. The assistance may not have been delivered in the most effective and efficient way. However, perhaps because of its abundance, the fishermen were able to sell, buy or redistribute until they owned the right boats with the right equipment. The interviewees often did not blame the humanitarian agencies for their lack of knowledge of the fishing industry because they understood that this was not their core business.

As previously explained, the fishing sector continues to change with decreasing coastal fishing and increasing deep sea fishing. Incomes from coastal fishing are decreasing while deep sea fishing provides opportunities for relatively good incomes. Not everyone can make the change from coastal fishing to deep sea fishing. In eastern Sri Lanka, hardly anyone has access to the multiday boats owned by people from different ethnic groups in other parts of the country. As coastal fishing is an important source of income for women, the decrease of coastal fishing also affects subsidiary incomes for fishermen's families.

Access to alternative employment

Not everyone wants or is able to return to their old job or activities. Access to alternative employment is an important factor contributing to recovery. In India and Sri Lanka most alternative employment is found abroad. As far as this evaluation observed, moving abroad was not supported by agencies although removing the existing financial barriers would have contributed to this recovery strategy, especially for the poorest households.

Governance

Governance policies and practices are an important factor, impacting on the recovery of income in the settlements supported by Swiss Solidarity in several ways:

The role of government issuing supportive policies and in reconstructing and rebuilding the essential infrastructure for the economy to function, such as roads, electricity, institutions, creates an enabling environment and is essential for the recovery of household incomes.

Limiting policies and practices with regard to selling and renting of houses (see housing section for details) can hinder house-owners ability to move to locations with better opportunities to make a living, as they cannot sell the house to buy another one elsewhere. It also inhibits house owners' ability to increase their income by renting the house if they (temporarily) do not need it and from using the house as collateral for a loan.

In eastern Sri Lanka, the buffer zone restrictions are *de facto* applied to restrict access to the original plots, which are close to the sea and thus important to the main livelihood of many households in this area. (See case study of Gopalapuram, Sri Lanka) Those who cannot present the formal deeds of the plots they have been living on before are afraid of confiscation by government. These plots are valuable assets considering their location in a fast developing tourist area. Hotels and military forces further restricted access to and use of the beach and parts of the sea for fishing.

In Sri Lanka, recent enforcements of fishing regulations to preserve marine resources and the valuable reefs include limiting net size and destructive fishing practices, which were not enforced during the many years of conflict, have had an impact on the catch. The enforcement and distribution of permits for certain fishing methods appears not to be transparent.

Government's support of deep sea fishing negatively affects the catches of day fishers and women involved in fish trading. This has led some men to joining deep sea fishing crews.

2.5.2.4 Contextual factors

National and regional economy and markets

The disaster caused enormous damage to parts of the affected countries but the national and regional economies and markets continued to function and benefit from strong economic growth in the initial years after the Tsunami. The continuity of markets was a basic condition for recovery. National economic growth also had a positive effect on the economic recovery in the affected areas.

Peace and conflict

Particularly in Aceh, the newly established peace created many new opportunities for local trade and exchange in the affected areas. In contrast, the conflict in most of eastern Sri Lanka, which restarted in 2005 and lasted until 2009, followed by the post-conflict restrictions, slowed down and still suppresses recovery and development opportunities of local communities, e.g. by restricted access to the sea, beaches and agricultural land, the distribution of fishing and trade permits, and more subtle forms of discrimination.

Roads and transport

All three countries have invested heavily in road improvements, reducing transport times to major markets, and importantly, lowering transport costs and improving access to inputs, markets and information. In India, the improved connectivity within the Tamil Nadu villages and with other states, such as Karnataka and Kerala, has increased access to regional markets. Improved roads in the coastal areas have linked local villages to the town and to Chennai. In Sri Lanka, investments in roads have greatly reduced travel times between villages and the main towns in the east and the south. Similarly in Indonesia, roads are the main factor in the increased connectivity of both project locations.

The extent to which this has already had an effect on the economic development in the affected areas could not be established. Experiences in other countries show that the effects of new roads on the local economy are not immediate, and the contribution to recovery is not yet known and might still be limited⁹¹.

2.5.3 Conclusions

Recovery of income and assets is an essential, if not the most essential, element of recovery. Once relief support ends, families once again depend on their income to meet their basic needs.

As shown in this chapter, most affected families targeted by SwS activities have an equal or better income than before the Tsunami and can meet their basic needs again. However, most pre-tsunami and present day have low income jobs and activities, and approximately 10 percent can only make ends meet with much difficulty.

⁹¹ Interviewees in Kennia, east Sri Lanka, observed differences from the recently improved road and replacement of ferries by bridges, such as more traffic and more tourist facilities, but the impact on the local economy had not yet been felt.

The recovery of incomes to meet basic needs is an extremely important achievement of the overall Tsunami response. While the capacities and efforts of the affected people themselves are the main drivers, they operate within the context of recovery of markets and infrastructure and overall economic growth, peace or conflict. The humanitarian community made an essential contribution to this process with funding the recovery of infrastructure, the fishing sector, housing and settlements, and economic activities.

By providing housing, SwS made a very important contribution to the economic recovery of households. Although not a direct livelihood intervention, the provision of housing in a well-functioning settlement was found to be extremely important to affected communities, because it meant that community members did not have to spend very scarce resources and time for many years on the reconstruction of their housing. SwS's contribution to the recovery of housing and settlements had the double benefit of supporting the recovery of families' living conditions and creating opportunities for economic recovery.

To optimize its efforts, SwS predominantly left the funding of the replacement of boat engines, fishing nets, and infrastructure to other humanitarian agencies and only participated on a very limited scale. Where SwS funded interventions at the household level (e.g. net, engines), it was both relevant and effective and had a positive impact. Where it funded non-commercial organizations to substitute private sector activities, it was partly effective but not sustainable and impacts are no longer felt.

While the existing skills-set, networks, etc. are the basis on which most households built their income recovery, the productive assets, such as boats, equipment, livestock, are essential for many. SwS concentrated its efforts mainly on support to micro, small and home-based industries providing primary and subsidiary incomes to families. The single largest investment was made in asset replacement to micro-/small-scale entrepreneurs, which was very successful. With the replacement of assets, the entrepreneurs re-started their businesses in various ways and could expand production. This improved the incomes of nearly 9000 families.

SwS's investments were similarly successful where they supported home-based entrepreneurs with previous business experience in resettlement areas. These activities were mainly managed by women and in most cases provided subsidiary incomes, an often small but important contribution to low family incomes. Support to these activities contributed to (re)establishing the local economy within the settlements, currently providing for a range of families' needs, like food, clothing, transport, child care, primary health care and recreation.

The support to 'start up' covering the whole settlement population or specially targeting vulnerable groups was much less successful. Among these groups, participants with an entrepreneurial attitude benefited from the different forms of (skills and asset based) support that was provided and were successful with their businesses. This unfortunately was a small minority, the large majority of new businesses stopped immediately or after some time.

A similar process was observed with savings and loans schemes. Those that were successful were part of an existing and wider program, recognizing the context in which they were implemented. The target group was enlarged with the addition of a few new groups and continued after the humanitarian support was completed. However, those that were 'isolated' or newly established groups were generally short-lived and did not deliver the expected impacts (reducing household vulnerability, enabling investments). It requires time for such groups to form and develop trust and commitment. They should not be established through an isolated activity provided externally by a short-term intervention as it is not a humanitarian activity but rather a development one. Therefore,

it should meet different conditions and requirements, such as experienced and skilled local partners who understand and link into the institutional context, with a long-term commitment to the area and with enough stability and their own resources to allow the investment of time required.

In summary, SwS is a small player in the large process of economic recovery in the tsunami impacted areas. The contribution they made was relevant and largely effective in parts of the communities in which their partners worked. The sustainable impacts of the investments are mainly derived from the housing project, which freed up capital to be used in re-establishing businesses or income generating activities, and support to home-based entrepreneurs with prior experience. The support to 'start up' and savings and loan groups was certainly relevant but, unfortunately, neither very effective nor sustainable.

3 IMPACT OF SOCIAL INFRASTRUCTURE INVESTMENTS

The evaluation covered three large schools, two in Aceh and one Sri Lanka, and one hospital in Aceh, the third largest component of the program with a total investment of just over 19 million CHF.

3.1 Findings on schools in Aceh

In Aceh, Indonesia, the education sector was badly affected by the conflict and the Tsunami. This led the government to invest heavily in the sector. In 2008, Aceh had the second highest education expenditure per capita in the country. Examination results are now similar to the national average and this seems to suggest an improvement in the quality of the education⁹².

The project in Banda Aceh town reconstructed the heavily damaged buildings of the Inshafuddin School. Before reconstruction, the school functioned as both a boarding school and public school. It charged only a registration fee and offered special support for weaker students who followed the state curriculum with difficulty. The project aimed at ensuring the education of schoolchildren, orphans and underprivileged children through reconstruction of the infrastructure. The buildings were designed for 400 students, but at present the school has close to 600 students with slightly more girls than boys. Because of the high number of students the dormitories are overcrowded with insufficient escape route capacity in case of fire.

The school is managed by a private organization and has a strong religious approach⁹³. As a semi-private institution the school has to cover a significant proportion of its expenses through income from school fees and contributions to the costs of boarding.

In Sigli town the school is basically a new facility to meet the educational needs of the district. The former building is now used by another school. The few schools in Sigli that were destroyed by the Tsunami were rebuilt with funding from other donors. The school's buildings are designed for 800 students with boarding capacity for 350 students. As the district education authorities decided in 2010 to make it a full boarding school, it can only accommodate approximately 350 students and functions below half of its capacity. The school is a public school and does not charge schools fees, but students pay for the costs of boarding.

The ministry decided to 'promote' both schools to 'unggulan' or model schools. These are part of the national educational strategy, and are expected to guide other schools in raising the general level of education in the district. There are thirteen model schools in Aceh province.

The schools are in high demand and apply a heavy selection system. Since the schools have become model schools, students come from all over and from outside the province⁹⁴. School fees and/or boarding costs are high, while very few students receive scholarships. The schools are not special elite schools but they recruit their students mainly from better-off families, as the selection system and the low number of scholarships limit access of lower income groups.

⁹² Shah, R. (2014), Education and social change in post-conflict and post-disaster Aceh, Indonesia, Education and International Development, Working Paper 19

⁹³ The Province of Aceh has a strong Muslim influence in its policies and legal frameworks. In the two schools in Aceh, approx. 25% of all teachers teach a subject related to religion. All students study religious subjects in the evenings.

⁹⁴ Aceh families living outside the province send their children to these schools as they provide good education and, as they are boarding schools with strict rules, provide a protected environment.

The schools have an excellent reputation in the province. Their students win many prizes in national competitions and over 90 percent continue their education at provincial and national universities. How effective the schools are in raising the general level of education could not be assessed. There are no specific strategies to transfer knowledge and experiences of the model schools to the other schools in the district. The school and district education personnel believe that regular teachers' meetings, teachers' training, and school competitions are good channels to share best practices from model schools to regular schools⁹⁵.

3.2 Findings on the school in Sri Lanka

The school in Sri Lanka is located in the weakest educational sector of the district. It is a public day school with free education, and it recruits students mainly from lower income families in the neighborhood. Before the Tsunami the school buildings were located next to the main road. They were not destroyed by the Tsunami but were too small for the number of students from the then separate primary and high schools. The former buildings are now occupied by the coast guard. The new school is located two kilometers off a main road and is not accessible by public transport.

In Sri Lanka, many parents perceive the existence of public transport as an essential condition to send their children to a school; families with better income in the area therefore send their children to other schools with good public transport connections. This is one of the reasons why the number of students remains below the full capacity of 1430 students and 12 classrooms are still closed.

The number of students is increasing and stands at 850 at the moment, mainly in the primary and junior high school. The number of students in the senior high school is very low and A-level education may not be continued. There is a strong tendency for students in the area to leave school at or before O-levels. Young boys often leave school for multiday fishing, which provides a good income; both boys and girls often drop out because of early marriage⁹⁶. The school results have been below the targets set by the district.

However, since 2010, under new management, school results and the motivation of the teaching staff have significantly improved. Although schools in Sri Lanka are fully funded by government, government contributions do not fully cover all operational costs and schools therefore depend on contributions from the parents for good operation and maintenance. As the parents in the area are generally poor and cannot contribute much, not all operational costs are covered at the expense of the necessary maintenance.

3.3 Staffing and facilities

In all three schools the teaching staff were well motivated and in both schools in Aceh highly qualified. All three schools have excellently designed and constructed buildings ("our school is the most beautiful school in Sri Lanka"). The decision by the provincial education department in Aceh to promote schools with such excellent facilities to 'unggalan' or model schools can therefore be well understood. The buildings were in good condition, but two of the three schools mentioned that they only had funds for the most urgent maintenance.

⁹⁵ Shah, R. (2014), Education and social change in post-conflict and post-disaster Aceh, Indonesia, Education and International Development Working Paper 19

⁹⁶ School management and teachers have difficulty to motivate boys to continue education, as boys at 16 can earn much more than the school teachers. Many girls marry when 15-16 years old; this is hidden in the statistics as the formal marriage age is 18. There are, however, many informal marriage arrangements. We were told by teaching staff that parents allow children to start a household to avoid unwanted pregnancies.

3.4 Findings on the hospital in Indonesia

The hospital in Aceh is located in a new district. Prior to the construction of the new hospital, people from the Nanga Raya district could obtain hospital treatment only in Meulaboh town, approximately 40 minutes away by car. The new hospital serves 220 villages with a population of 165,000 inhabitants. Hospital statistics indicate a strong growth in the number of treatments and patients, hospital staffing levels, income, expenditure and profits. According to the hospital management, the performance indicators are above national standards. The hospital reports to the district 'resident' (highest administrative authority in the district) not the district health ministry. It has a semi-independent status⁹⁷ and functions as a private business, covering a significant part of its costs from the health insurance of its patients. The hospital management reported that there are no specific maintenance issues.

The information provided by the hospital management was not confirmed by the team's own observations during the hospital visit or the interviews conducted in the hospital and the area. The buildings showed signs of insufficient care and maintenance and hygiene practices were questionable. The overwhelming majority of people interviewed in the area indicated that they go to the new hospital in Nanga Raya only for minor treatments. For more serious health problems people are still attending the hospital in Meulaboh.

3.5 Conclusions

The project objectives are defined in general terms as: the creation of education capacity for a specific number of students and health for the population of the district. One project mentions that the target group especially includes orphans, children from the neighborhood and underprivileged children. The projects are driven by technical parameters and did not define more specific objectives or indicators to measure their outcomes. Project documentation does not provide reflection on the sector, policies and strategies, bottlenecks and how the construction of infrastructure would contribute to sector performance.

The absence of clear objectives and project strategies makes evaluation of impacts especially difficult.

From an LRRD perspective all four projects are relevant, assessed against the district and national sector strategies. They are in line with these policies and strategic priorities. This was confirmed by the relevant district line ministries, school and hospital personnel, and confirmed by observation, as all the structures are all well-staffed and, in the main, sufficiently funded by the relevant authorities⁹⁸.

When evaluating the projects against their own goal of creating capacities, their impact is limited. The buildings are operational and the quality of education is good to high. However, coverage⁹⁹ of the schools remains low, with two out of the three schools functioning below capacity. Where specific target groups are mentioned (orphans, students from poor families and neighborhood) the objective was not met. Short-term sustainability is not a major issue, as all schools have their funding largely ensured and the buildings are well built and robust, which ensures sustainability of the structures. However, the problem of maintenance could arise in the coming years, especially for the structures that are functioning below capacity and will have problems to raise funds for the

⁹⁷ Only 10% of all hospitals have this status

⁹⁸ Based on interviews with the educational and health authorities in Banda Aceh, Sigli and Nagan Raya

⁹⁹ Defined as the actual number of students accommodated compared to the installed capacity

maintenance of large buildings not fully utilized. Furthermore, the school in Sri Lanka could lose its A-level classes because it may not attract sufficient numbers of students.

The extent to which the hospital project in Nagan Raya achieved its own objectives could not be established, as the information from the hospital management and other sources was contradictory. Within the scope of this evaluation further investigation to clarify the contradiction in information was not possible.

The TEC study in 2009 observed that (in the case of Sri Lanka) “innumerable schools, clinics, community centers, paddy store centers, etc. have been built or rebuilt, ostensibly at the request of relevant line ministries, without sufficient understanding how these facilities will be staffed, run and maintained in the long run”.¹⁰⁰ While the evaluation confirms this observation, it observes that a good understanding of the added value of these structures to overall sector performance is also needed.

The TEC study and this study’s findings point to the importance of a good understanding of the sector needs and dynamics in the design and implementation process. Funding requests should include long-term and specific objectives and strategies how these objectives will be achieved, and progress should be monitored¹⁰¹. Swiss Solidarity requires sectorial knowledge and experience when venturing into a sector. This is even more relevant in cases where the investments do not replace an existing infrastructure that has a clear target group and fits within an existing institutional framework, but are new investments, such as the school in Sigli and hospital in Nagan Raya, that aim to improve sector performance by filling a gap.

¹⁰⁰ TEC, page 68

¹⁰¹ With such a strategy the school in Merissa would probably not be located on a site not accessible by public transport.

4 CONCLUSIONS AND LESSONS LEARNED

4.1 Conclusions

The impact of the SwS funding was evaluated against the sustainable recovery of the Tsunami-affected households and communities. This chapter presents the overall impact identified by the study; highlights the answers to the evaluation questions drawing from the findings presented in Chapters 3 and 4; provides general conclusions; and offers lessons learned and suggestions for further reflection.

General conclusions

- a) The large majority of households supported by Swiss Solidarity have recovered, sustained their lives, and developed their capacities within the normality they live in.

The families in the communities supported by SwS largely recovered their livelihoods. They recovered their housing and incomes, and they live in communities they feel they belong to and that provide them with the social context and services that they need.

They have taken ownership of the support and used it to shape their lives and communities in their own way, according to their own priorities. Social relations and mutual support systems were maintained or re-established.

There is ample recognition of the value of the support provided for recovery, while the often found 'aid dependency culture' which might had developed during the response was not evident.

- b) The degree of success is the result of the interplay of many different drivers, and not every household and every location has fully recovered.

There were different degrees of recovery in different locations. While the large majority of families and communities have recovered, some households and sub-locations lag behind. The degree of recovery was the result of the interplay of different drivers, which had either a positive or negative influence on the outcome of the process. For example, shortcomings in construction had a strong negative impact in one location, while the impact was felt much less in another location. Some important drivers were largely under the control of SwS partners, such as the construction strategy, design and quality. On many others, such as the choice of location, connectivity, markets, allocation of houses to beneficiaries, and external factors, Swiss Solidarity partners had limited or no influence.

- c) Swiss Solidarity and its partners, the beneficiaries, governments and others all contributed to the success of the recovery process.

The householders themselves were key drivers of their recovery. People's capacities, attitudes and investing heavily their own resources were the main driving factors in the recovery process. Families invested money, time, skills, engaged with organisations, owned the assets received, changed and traded them to adapt them to their own needs.

The people were the main drivers in the recovery of incomes. Many initiatives were taken in the very early days after the disaster to continue with former jobs and income generating activities. With the reconstruction of the basic infrastructure that provided access to markets and the replacement of assets, incomes recovered to pre-tsunami levels or above. Families played a key role

in the recovery of housing in self-help construction or in the adaptation of the houses according to their needs once the turn-key houses were handed over.

Different levels of government played an essential and indispensable role in the recovery process and maintenance of its results. Many drivers that influenced the recovery process to a large extent, such as the selection of locations, selection of beneficiaries, allocation of houses, and provision of services, were under the domain of the different levels of government. As such, in many regards, the success of the recovery process should also be attributed to them. While SwS partners interacted closely with the government, the level of influence they were able to exercise varied greatly from case to case.

Contextual factors played a substantial role. In the positive sense, the end of the conflict in Aceh, and the strong economic growth in the years after the Tsunami created supportive conditions for the recovery. In a negative sense, the (post-)conflict environment restricted access to resources in eastern Sri Lanka and intervening natural disasters in Aceh slowed the recovery process.

Other *humanitarian organizations* contributed to the recovery of the communities targeted by SwS by supporting the recovery of the fishing industry, health and education, and other facilities.

Evaluation question 1: What long term impacts have the SwS funded assistance had on the lives of the assisted population?

- d) SwS funding of the reconstruction of homes and settlements had a major impact on the recovery of the livelihoods of the affected families.

With the construction and repair of houses, SwS made a significant contribution to the recovery process of approximately 18,000 households. The new and repaired houses created a stable environment, contributed to recovery from trauma, and created a real starting point for the recovery of communities at all levels.

SwS's partners ensured, to a large extent, the effectiveness of drivers they had control over during implementation, such as size and design of homes, construction management and supervision, or in the owner-driven housing projects, the planning and supervision of the flow of funds to beneficiaries. They also interacted and coordinated closely with government officials regarding decisions under the government sphere of control that were important to the recovery of housing.

- e) With the provision of housing, SwS made an important indirect contribution to the recovery of family incomes and other livelihood assets.

The construction and repair of houses goes beyond the mere provision of a living space and the physical reconstruction of settlements, infrastructures and communities. Perhaps just as important, the SwS housing also made a major contribution to economic recovery at the household level. With the provision of the house or the resources to reconstruct their house, families could devote their time and resources to the recovery of other livelihood functions, such as the household economy. Without the provision of a plot and house, most households would have struggled to survive for many years and would have had to build a house at the expense of other functions, such as education and health care. In the short term, the lower maintenance costs of a well-constructed new house contributed towards the economic recovery of households.

With the provision of a house, the families also obtained a capital asset they could use for purposes other than housing. This asset, if sold or rented out, provides an income in the form of rent or

cash. It can also provide the basis for a loan or serve as the last resort in case of a family crisis. It also has the potential to increase in value.

However, long term restrictions on the transfer of the house reduced the value of the house for its inhabitants, as they could not readily adjust to changing circumstance in their lives, or adapt to contextual changes. The higher degree of flexibility in the use of the assets in some locations increased the contribution to recovery and made the intervention more sustainable.

- f) Swiss Solidarity successfully supported home-based, micro- and small entrepreneurs to rebuild their businesses, but support to 'new entrants' and savings groups had minimum impact.

People themselves were the main drivers of income recovery. Once the markets were functioning and the infrastructure that provides access to the markets was reconstructed, many re-assumed their former jobs and activities. With the provision of equipment, stock and/or working capital many small, micro- and home-based entrepreneurs successfully re-started or accelerated the development of their businesses.

For home-based entrepreneurs asset replacement was often conditional on a package of measures, including business plan development, training and other support activities. The added value of this costly support could not be established.

While initially the support to 'new entrants', often entailing vulnerable households or women, and savings and loan groups looked promising, it turned out that these activities were largely not sustainable and had minimum long term impacts. Addressing these issues requires an in-depth understanding of economic development, which not all organizations had, and requires, in most cases, a longer-term commitment than humanitarian assistance can provide, and strong linkages with policy frameworks and governance structures.

- g) The large social infrastructure projects served immediate users but their impact at sector level was difficult to establish.

The four social infrastructure projects were all operational and in line with district and national sector strategies. Some operate below maximum capacity and serve a different target group than envisaged. They made a contribution to the capacity of the sector - the objective of the projects, but the precise extent of their contribution was difficult to establish within the scope of this evaluation.

Evaluation question 2: To what extent did the assistance from SwS respond to the priority needs of the assisted population?

- h) The overwhelming majority of beneficiaries in the three countries consistently indicated that the single most important external support to their recovery was the provision of housing.

Housing was the largest proportion of the support provided by SwS by far. Through the provision of housing, SwS made an important contribution to the high priority need for income after the relief goods distribution ended. Similarly, through asset replacement SwS gave further support to the recovery of the incomes of small, micro- and home-based entrepreneurs; the latter mainly women, providing an important subsidiary income to the often low-income households.

Evaluation question 3: To what extent did the targeting approach contribute to poverty reduction and to the reduction of social inequalities?

- i) The SwS support avoided an increase in poverty, reduced (temporarily) social inequalities but could not substantially improve the incomes of the poorest and most vulnerable families.

Reducing poverty and the reduction of social inequalities was not an objective of most of the SwS funded projects. However, without external support it is most likely that at least a portion of the target group that defines itself as belonging to the poorer strata of the community would have fallen into poverty. As stated before, it is difficult to imagine how the low paid labourers, small traders and families in Eastern Sri Lanka affected by many years of conflict could have recovered without the provision of adequate housing.

The provision of identical plots and houses levelled social differences but, as most people return to their previous employment, jobs and activities, those that were better established before the Tsunami, recovered faster and were able to expand, modify and often embellish their houses, and individual differences are re-establishing.

The specific activities to reduce poverty and vulnerability (providing skills and equipment for home based industries, and savings and loans groups for the most vulnerable) made little or no contribution to their economic position in the long term.

Accountability statement

- j) The funds provided to SwS by the Swiss public and Swiss organisations have effectively supported the recovery.

By far, the largest part of the funds that the Swiss public and Swiss organizations provided to SwS have been invested in projects that successfully contributed to the recovery of the targeted households and communities. Only a smaller part of the funds were invested in projects where the impacts were difficult to assess or were very limited. Therefore, the evaluation concludes that the SwS projects have made a significant contribution to the recovery from the enormous damage caused by the Tsunami.

4.2 Lessons Learned

1. The evaluation findings provided extensive information on the different factors that influence the success or failure of an intervention, such as the location of villages and resettlement sites and allocation to beneficiaries. These factors could be considered in the design and approval processes, and monitored during implementation. It is suggested to evaluate and eventually adapt the project guidelines ('lignes directrices) against these findings.
2. One of the key findings refers to flexibility of support. The utility of support lies in the use that the beneficiaries can make of it. The more freely they can decide on how to use the provided support, the more important it becomes to them and the more sustainable it is. This applies to the design, selling, and letting of houses, but also to the replacement of assets.
3. Flexibility also applies to supporting former or existing micro- and home-based industries. As there were no indications that extensive packages including business plan development and obligatory training were more effective than asset replacement with less strings

attached, it could be considered to test letting the recipients determine the most effective use of the funding available to them. This conceivably would increase flexibility while significantly reducing programme costs.

4. Investments in social infrastructure programs, like health and education, need to consider assessing the viability and design of the project in more depth, especially where it does not concern the reconstruction of a previously existing structure. More attention needs to be given to a deeper understanding of the context, the long-term developments, and policy frameworks within the sector in which the support is provided. This could well imply that SwS requires that partners who propose such projects have past experience in the sector or make other partners who possess such experience responsible for the design and implementation within their wider program.
5. The above observation also applies to programs that support economic recovery. SwS has partners with substantial knowledge and experience in economic recovery programs that include asset replacement but can go beyond these immediate needs. These partners have a good understanding of the functioning of markets (among others labour and credit) and the institutional framework in which they function. Better use of this experience would be beneficial to the design and implementation of economic recovery programs and avoid mistakes made in the Tsunami response.
6. Although strategies to reduce poverty had (unfortunately) little impact, protecting poor and vulnerable families remains a humanitarian principle, and it is therefore suggested to analyse and consider alternative strategies to support the poorest and most vulnerable members of the communities. As many countries have social safety nets (with all their limitations) and special social support programs for specific groups, this might ultimately provide opportunities for (temporary) additional support to these groups to strengthen their livelihoods.
7. Impact evaluations can identify the factors that determine success or failure of humanitarian interventions and, especially, their long-term viability that would otherwise go unnoticed. As there are no easy answers in the response to disasters, learning from past experiences is important and impact evaluations are conceivably a better tool than end-of-project evaluations for learning important lessons.

ANNEXES

I. Terms of Reference

Project evaluation 2004 Asian Earthquake and Tsunamis

Introduction

On 26 December 2004 one of the biggest natural disasters in modern times occurred in south-east Asia : an undersea earthquake led to a series of tsunamis which devastated large coast areas in 14 countries, from Thailand to Bangladesh in the East all the way to Somalia and South Africa in the West. The earthquake and tsunamis led to over 180,000 dead. The worst destruction was in Aceh in Indonesia, in Sri Lanka and parts of Southern India.

Context

On the same day of the disaster SwS opened a donations account, followed on 5 January 2005 by a national fund-raising day. The SwS appeal was the best-supported campaign ever, raising more than one quarter of a billion Swiss Francs. The Swiss public in general, but also public bodies and the private sector contributed to this result.

Purpose

The purpose of the evaluation is to provide an accounting to the Swiss public of the impact of the funds they provided to SwS in the aftermath of the Asian Earthquake and Tsunamis of 26 December 2004.

The evaluation is intended primarily as an accountability evaluation but is also intended to identify lessons for future SwS operations.

Scope

The evaluation covers SwS funding in three countries in response to the Asian Earthquake and Tsunamis of 26 December 2004. The three countries covered are Indonesia, Sri Lanka, and India. Thailand and Somalia are excluded as they represent a relatively small amount of funding. Recently terminated or still ongoing projects are not included, either. Other support (i.e. for individual Swiss families) is also excluded as the focus is on overseas humanitarian assistance.

Given the time since the beginning of the response, grants such as emergency aid, or projects that are unlikely to be traceable at this time, are specifically excluded from the scope of the evaluation.

The evaluation is focused on three areas:

- Housing repair and construction and the related infrastructure.
- The construction of large schools and hospitals.
- Livelihood support

The evaluation will focus on 21 of the largest non-emergency grants by SwS¹⁰².

Ref no	Agency	Country	Project title	Grant amount (CHF)	Initial Start	Finish
197.015	Caritas Suisse	Indonesia	Reconstruction of 1'260 houses	17,138,795	01/05/2005	31/07/2009
196.025	Croix-Rouge suisse	Sri Lanka	Reconstruction of 410 houses, one school and basic village infrastructure	8,059,847	01/08/2005	30/09/2008
197.03	Croix-Rouge suisse	India	Tsunami Housing Reconstruction Programme, 1000 houses and common infrastructure	7,419,385	01/12/2005	31/12/2008
193.045	Croix-Rouge suisse	India	Construction of 1'200 houses and basic infrastructure in three hamlets.	6,706,747	01/06/2005	30/08/2008
194.017	Croix-Rouge suisse	Indonesia	Reconstruction of the school facilities	6,703,461	01/06/2005	30/07/2010
195.03	Entraide protestante (EPER)	Sri Lanka	Cash for Repair and Reconstruction	6,166,497	01/06/2005	30/04/2006
194.019	Caritas Suisse	Sri Lanka	Reconstruction of 1'000 houses and village infrastructure	6,103,786	01/07/2005	31/03/2008
193.042	Swisscontact	Indonesia	SPAN Swiss Project for Business Recovery in Aceh and North Sumatra	6,086,513	01/07/2005	31/12/2009
197.016	Caritas Suisse	Indonesia	Reconstruction of 600 houses	5,916,173	01/07/2005	30/12/2008
193.043	Croix-Rouge suisse	Sri Lanka	Cash for Repair and Reconstruction	5,715,585	01/03/2005	30/04/2006
194.015	Caritas Suisse	India	Construction of 486 houses and basic village infrastructure	4,981,448	01/06/2005	31/12/2009
196.029	Solidar Suisse	Sri Lanka	Reconstruction of 1'125 houses and of village infrastructure, promotion of income generating activities (brick making, carpentry), protection of coastal region	4,324,933	01/10/2005	01/02/2009
198.025	Entraide protestante (EPER)	Sri Lanka	Construction of a primary and secondary school (912 students)	3,874,561	01/02/2006	28/02/2009
198.026	Croix-Rouge suisse	Sri Lanka	Construction of 270 houses	3,821,324	01/12/2005	31/03/2008
192.021	Croix-Rouge suisse	Indonesia	Infrastructure rehabilitation and improvement of access to clean water	3,663,360	01/04/2005	30/09/2006
193.031	Caritas Suisse	Indonesia	Reconstruction of the district hospital	3,445,587	01/06/2005	30/06/2008
199.017	Entraide Protestante (EPER)	Sri lanka	Phase II - Cash for Repair and Reconstruction in Matara District	3'135'465	01/05/2006	31/03/2007

¹⁰² Four grants were excluded as one was in Thailand, one was an emergency relief grant, and two (a grant for psycho-social support and a grant for mobile training unit in 2005) were considered unlikely to be traceable after the passage of time.

Ref no	Agency	Country	Project title	Grant amount (CHF)	Initial Start	Finish
199.019	Croix-Rouge suisse	Sri Lanka	Cash for Repair and Reconstruction in the District of Trincomalee, Phase 2	3'106'680	01/05/2006	31/04/2007
198.030	Solidar Suisse	Sri lanka	Reconstruction of the community infrastructure and livelihood program in 7 villages	3'100'797	01/02/2006	01/02/2009
196.041	Entraide Protestante (EPER)	Inde	Reconstruction of 389 houses and basic village infrastructure	2'807'178	01/10/2005	31/05/2008
193.041	Croix-Rouge suisse	Indonésie	Reconstruction of the "Bantuan Becanan Alam" school facilities	2'690'827	01/07/2005	30/06/2008

In addition to these projects, the evaluation team is required to identify a further 10 projects for analysis at least six of which should be livelihood support projects.

Methodology

The evaluation team is expected to use mixed methods in their approach. The team is expected to use the ALNAP *Evaluation of Humanitarian Action: Pilot Guide* as a model for the evaluation, and to comment on the utility of the guide and any improvements needed at the end of the process.

This evaluation is going to be looking back nearly ten years to the international response to the Tsunami. Research has shown that recall is most accurate when it is around issues that the respondent experienced directly and feel deeply about. The evaluation design was chosen to focus on areas which are expected to be accurately recalled. It is expected that interviewees will accurately recall their acquisition or repair of a house, and any significant changes to their livelihood.

The basic design for the evaluation is as follows:

1. Initial period of desk research to formulate the detailed questions and establish the field-work plan.
2. Face to face survey of those living in houses constructed with assistance from SwS.
3. Detailed field work to follow up on the detailed questions generated by the original desk research and the survey. This fieldwork will be split into two parts to allow some reflection on learning from the first period of fieldwork to influence the approach in the second part.

The survey will be a key element of the methodology as almost 50% of SwS funding went for shelter. The survey is expected to inform the evaluation about:

1. The relationship between the house and the family set of livelihoods.
2. Which of their key needs were met or unmet in the response?
3. Who benefited and who lost out in the housing allocation?
4. Which approaches (turn-key, self-build, repair grant etc.) were the most effective?
5. The extent to which house recipients are still resident in those houses.
6. The extent to which the house-dwellers have access to other services.
7. Outcomes and impact of the housing support on the family- what changes did getting the house (or getting funding for repair) bring to the family.

The survey will be conducted in time for the results to inform the main evaluation fieldwork. The details of the survey are as follows:

- Survey method: Face to face interviews using a structured interview form.
- Survey population: Beneficiaries of Swiss Solidarity's support.
- Sampling frame: Occupants of houses built or repaired with financial support from Swiss Solidarity
- Sampling: Random number sampling after applying a number to each house in a particular group.
- Sampling rate: 5% of the houses.
- Substitution rule: (If no answer or refusal to participate) - nearest qualifying dwelling to the door of the selected house.

It is expected that the evaluation team will sub-contract a survey firm to conduct the survey. The survey will focus not only on shelter issues but also on livelihood issues and supporting services (water, power, etc.). It is expected that the more detailed follow up work will use qualitative methods to further deepen knowledge of any issues revealed by the quantitative survey.

The evaluation team is expected to present a detailed methodology in the inception report. See below for details.

Evaluation questions

The two key evaluation questions are:

1. What longer term impacts have the SwS funded assistance had on the lives of the assisted population?
2. To what extent did the assistance from SwS respond to the priority needs of the assisted population?
3. To what extent did the targeting approach contribute to poverty reduction and to the reduction of social inequalities?

The evaluators are expected to address these question both in terms of individual families and, to the extent possible, of the broader community.

The evaluation team will expand these questions for the three themes (shelter, schools and hospitals, and livelihoods) and devel op an evaluation matrix setting out the subsidiary question; the criteria by which the question will be assessed; the likely sources and methods that they plan to use to answer the question.

Subsidiary process question

When talking to partners with experience of other funders, the evaluation team is expected to probe what, if any, advantages or room for improvement SwS has in relation to other funders. The object here is to identify what unique advantage SwS has, or where improvements are needed.

First document review

The evaluation team will review the documents listed in the key documents list attached to this ToR. In addition, they may review other documents as appropriate.

Consulting with files

The evaluation team will have three days in which to consult the files at SwS and to develop the list of other projects to be targeted. They will have a fourth day in which to finalise this list and develop an initial travel plan. This list will take into account:

- The feasibility of tracing the particular project
- The need to identify at least six additional livelihood projects for review

- The desire to include partners other than the five largest partners already targeted in the 22 biggest projects. However it is recognised that this may be difficult.

Outputs

The evaluation team are expected to produce the following outputs in line with project deadlines:

- List of projects to be evaluated (for the initial meeting)
- Initial travel plan to be presented at the meeting with partners
- An inception report setting out how they plan to approach the evaluation
- A revised semi-structured interview, and or work plan, taking into account the findings of the survey.
- An aide memoire after the initial fieldwork setting out any revisions to the work plan and or data collection tools for the second period of fieldwork.
- A draft evaluation report
- A final evaluation report
- A short summary of the main evaluation findings
- The presentation of the evaluation results in Geneva
- Comments on the ALNAP EHA Guide.

All the evaluation outputs will be written in English.

First meeting with partners

The evaluation team will meet with partners at the end of the week in which the team reviews project files in Geneva. The team will present their draft travel plan at this meeting and discuss the extent to which it will be possible to trace those assisted by the selected target projects.

Inception report

The inception report will include the following elements:

- The list of projects to be targeted
- The work plan for the evaluation team
- An evaluation matrix setting out: the subsidiary evaluation questions; the criteria used for assessing the questions; the planned sources for the necessary data; and the methods used to collect the data.
- The detailed methodology that the team plans to use
- The sampling strategies that the team plans to use for different data collection methods including the initial interview target list by job function
- Draft data collection tools including:
 - The survey form
 - A set of semi-structured interview guides for different interviewee types
 - A topic guide for focus groups
- The format for the survey report, including the key areas to be addressed
- The planned layout of the evaluation report

Survey report

The survey report will summarise the survey data from the three countries. It will be accompanied by a full data file of responses for analysis by the evaluation team. The format of the survey report will be defined by the evaluation team in the inception report. It is expected that the survey report will focus on a few key issues.

Aide memoire

After the first period of fieldwork (3 weeks in Indonesia) the evaluation team will produce an aide memoire within three days of return setting out the incipient lessons and any changes that they propose for the conduct of the second phase of the fieldwork. The team leader will travel to Geneva to present the aide-memoire and to discuss any issues raised with the steering committee. There will be a gap of two weeks between the two periods of fieldwork to allow for any necessary discussion of proposed changes.

Draft evaluation report

The draft evaluation report will be produced no more than five weeks after the conclusion of the fieldwork. The evaluation report will be no more than 50 pages plus annexes. The report will be written in an accessible style suitable for general readers. A key element of the report will be the inclusion of vignettes of individual family experience of the assistance that they received or did not receive to put a human face on the assistance.

Final evaluation report

After comment on the draft report, the team will have two weeks to prepare a final evaluation report incorporating those comments that they accept. The team should also report to the steering committee on whether they have incorporated the comments and why they have or have not.

Summary of main evaluation points

While the main report will include an executive summary, this summary is different. It will be written in simple language to facilitate a ready understanding of the points made and to make translation easier.

Feedback on the ALNAP EHA guide

The evaluation team will provide written feedback on using ALNAP's *Evaluating Humanitarian Action: A pilot guide*, and will be available for a short telephone interview by ALNAP if needed.

The evaluation team

The evaluation team will consist of the core team of two people plus one additional expert per country to provide detailed context knowledge.

The evaluation team leader is expected to have:

- Significant experience of humanitarian evaluation
- Good writing skills in English
- Previous experience in at least some of the target countries

The team as a whole should include the following

- Experience of evaluating recovery or development interventions
- Sufficient French to understand documentation in the Swiss Solidarity files
- The ability to analyse the quantitative data from the survey (this requirement may be met by a team member who does not travel)
- Experience of shelter programmes or evaluating shelter interventions
- Experience of livelihood programmes or of evaluating livelihood interventions.

Evaluation management arrangements

This is an independent evaluation. The evaluation team will keep SwS informed of any changes to the plans or of any threats to the independence of the evaluation.

Steering committee

The evaluation will be managed by a steering committee formed by staff from the programme function in SwS. External support is decided by SwS according to needs.

Reference group

SwS establish a reference group to provide input on the different evaluation outputs, including the inception report, survey report, aide memoire, and draft evaluation report. The reference group will be drawn from SwS programme staff and the programme or evaluation staff of partners. The

reference group will comment on different outputs and may make recommendations to the steering committee, but the final decision on the outputs rests with the steering committee.

Communication policy

SwS will be conducting a communication campaign around the evaluation. This campaign will highlight:

- That SwS is evaluating its work.
- Examples of the impact of SwS's work.

The evaluation team will be expected to provide input to the communication campaign in terms of their time, up to a maximum of three days, to be interviewed, in Switzerland and or in the field, etc. as needed or to identify positive impacts for the communications team to follow up.

Even though the communication campaign will tend to concentrate on positive examples, the evaluation team is expected to retain their independence, and to document both positive and negative examples of impact in their evaluation. The team is expected to be frank and truthful in any interviews that they give, and there is no expectation that they will present other than an accurate picture of what they find.

Timeline

The following broad timeline is proposed for the process. Bidders may pose a different timeline, so long as the overall objective of a final evaluation report by November is met.

Milestone	Date	Days			
		TL	TM	L.Exps	Trans
Finalisation of the terms of reference	December 2013				
Recruitment of the evaluation team	December 2013- January 2014				
Initial document review and desk research	March 2014	8	7		
Inception Report	April 2014	8	3		
Recruitment of Survey organisation	April 2014	2	0		
Translation of the survey form, recruitment and training of enumerators, selection of interviewees (pseudo-random sampling)	May 2014	2	0		
Survey	June 2014	0	0		
Analysis of survey report, consultation of SwS	July 2014	10	5		
Initial fieldwork: Indonesia	August 2014	21	21	19	12
Aide memoire and Geneva debriefing	August 2014	3	1		
Final fieldwork: Sri Lanka and India	September 2014	35	35	32	20
First draft of evaluation report	October 2014	20	10	5	
Final draft of evaluation report	November 2014	15	3		
Preparation of summary report	December 2014	3	1		
Presentation of evaluation results in Geneva	December 2014	3	2		
		130	88		

Costs

The maximum budget for this evaluation (including contingencies and taxes) shall not exceed 355'000 Swiss Francs.

Key document list

- Aysan, Y. (2008). External Evaluation of the Swiss Consortium's Cash for Repair and Reconstruction Project in Sri Lanka 2005-08: Final Report (pp. 27). Geneva: Consortium of Swiss Organisations.
- Cosgrave, J. (2007). Synthesis Report: Expanded Summary: Joint evaluation of the international response to the Indian Ocean tsunami (pp. 41). London: Tsunami Evaluation Coalition.
- Davies, A., & Hermawan, R. (2009). Assessment of the Economic Recovery of Aceh and Nias: Projects funded by Swiss Solidarity: 2005 – 2009 (pp. 39).
- Ferf, A. J. E., Benedict, J., Hanifa, A., & Sathasivam Tilakan. (2009). External Review of Post-tsunami Livelihood Projects in Sri Lanka (pp. 104). Geneva: Swiss Solidarity.
- Rawal, V., Thamizoli, P., & Murali, N. (2008). Swiss Solidarity funded Tsunami Projects in India: An Independent Evaluation (pp. 104). Geneva: Swiss Solidarity.
- Sager, H., & Bakce, D. (2008). Final Report: External Evaluation 2008: Swiss Project for Business Recovery in Aceh and North Sumatra (SPAN) (pp. 45). Geneva: Swiss Solidarity.

II. Evaluation program

<u>Date</u>	<u>Activity</u>	<u>Location</u>	<u>Project no.</u>	<u>Related organisation</u>
04/03 – 11/03	Meeting Swiss Solidarity Staff. Project Selection. 1 st meeting reference group	Bern, Switzerland	-	-
INDONESIA (pre-mission)				
22/05 – 31/05	Pre-mission Indonesia	Meulaboh, Indonesia	197.015/211.024/211.026/221.024	Caritas
19/06	Second meeting reference group	Bern, Switzerland	-	-
INDIA				
26/07	Arrival in India, Chennai	-	-	-
27/07	Travel day	Puducherry	-	-
28/07	Fieldwork	M.G.R. Nagar	193.045/193.046	SRC
29/07 - 31/07	Fieldwork	Karaikelmedu & Kottucherryedu	193.045/193.046	SRC
01/08	Fieldwork	Thoduvai	196.041	HEKS
02/08 – 03/08	Fieldwork	Tharangambadi	197.030	SRC
04/08	Travel to Kanyakumari	-	-	-
05/08 – 07/08	Fieldwork	Melamanakudy, Kodimuni, Melamanakudy	194.015/197.013	Caritas
08/08	Travel day	Trivandrum	-	-
09/08	Team meeting/analysis and initial conclusions	Trivandrum	-	-
10/08	Travel to Indonesia	-	-	-
INDONESIA				
11/08	Arrival in Indonesia	Medan	-	-
12/08	Preparation work/ Interviews	Medan	-	Swisscontact
13/08	Travel to Banda Aceh/Interviews	Banda Aceh	193.041/194.017	SRC
14/08	Visit to Inshafuddin School	Banda Aceh	193.041	SRC
		Singli	194.017	SRC

	Visit to Singli school			
15/08 – 16/08	Fieldwork	Banda Aceh	193.042	SPAN/ Swiss Contact
17/08	Travel day	Meulaboh	-	-
18/08	Fieldwork	Meulaboh	197.015/211.024/ 211.026/221.024	Caritas
		Nagan Raya	193.031/223.005	Caritas
19/08	Fieldwork	Meulaboh	193.042	SPAN/ Swiss Contact
20/08	Fieldwork	Meulaboh	193.042	SPAN/ Swiss Contact
		Meulaboh	197.015/211.024/ 211.026/221.024	Caritas
21/08	Fieldwork	Meulaboh	197.015/211.024/ 211.026/221.024	Caritas
22/08	Fieldwork	Nagan Raya	193.031/223.005	Caritas
	Preparations & meeting with journalists/Swiss Solidarity	Meulaboh	-	-
23/08	Meeting with journalists	Meulaboh	-	-
24/08	Travel to Singkil	-	-	-
25/08 – 27/08	Fieldwork	Singkil	197.016/214.032	Caritas
28/08	Travel day	Medan	-	-
29/08	International travel day	-	-	-
	SRI LANKA			
09/09	Preparation	Colombo	-	-
10/09	International travel day	-	-	-
11/09	Preparation/ Interviews	Colombo	193.043/199.019	SRC
12/09	Travel/ interviews	Trincomalee	193.043/199.019	SRC
13/09	Fieldwork	Salapayaru (Trincomalee district)	196.025	SRC
14/09	Fieldwork	Puduwakattu (Trincomalee district)	196.025	SRC

15/09	Fieldwork	Puduwakattu (Trincomalee district)	193.043 199.019	SRC
16/09	Fieldwork	Gopalapuram (Trincomalee district)	193.043 199.019	SRC
17/09 – 18/09	Fieldwork	Kinniya (Trincomalee district)	194.019	Caritas
19/09 – 20/09	Fieldwork	Batticaloa	204.016	Swiss Contact
21/09 – 22/09	Fieldwork	Pottuvil	205.028	Solidar
23/09	Travel day	Tangalle/ Hambantota	-	-
24/09	Fieldwork	Hambantota district	202.025	ADRA
25/09	Fieldwork	Matara district	195.030 199.017	HEKS
		School in Merissa	198.025	HEKS
26/09	Field work	Matara district	195.030 199.017	HEKS
27/09	Discussion & reporting	-	-	-
28/09	Fieldwork	Galle	299.054	Solidar
29/09	Discussion & reporting	Colombo	-	-
01/10- 02/10	Meeting with partner organizations & research institutes	Colombo	-	-
24/10	3rd meeting reference group	Bern, Switzerland	-	-
24/11	Swiss Solidarity Partner Organization meeting	Geneva, Switzerland	-	-
08/12 & 09/12	Meeting Swiss Solidarity staff & presentation of the final report	Geneva, Switzerland	-	-

III. Project list

Country	Organisation	Project nr.	Category	SwS contribution (CHF)
HOUSING PROJECTS				
India	Caritas	194,015	Housing	4'900'343
	EPER/HEKS	196,041	Housing	2'798'923
	SRC	193,045	Housing	6.668.429
	SRC	197,030	Housing	7'419'385
Indonesia	Caritas	197,015	Housing	17'086'349
	Caritas	197,016	Housing	5'697'200
Sri Lanka	Caritas	194,019	Housing	5.904.948
	SRC	196,025	Housing	8'059'847
	SRC	198,026	Housing	3'431'439
	SRC	193,043	Housing	5'695'253
	SRC	199,019	Housing	2'581'345
	HEKS/EPER	195,030	Housing	6'109'280
	HEKS/EPER	199,017	Housing	2'774'376
LIVELIHOOD projects				
India	SRC	193,046		1'122'312
	Caritas	197,013		903.935
Indonesia	SwissContact	193,042		5.919.566
	SRC	193,041	School	2.656.730
	SRC	194,017	School	6'209'110
	Caritas	193,031	District hospital	3'089'285
	Caritas	221,024		848'052
	Caritas	211,026		720.900
	Caritas	214,032		1'251'559
	Caritas	223,005		198.452
Sri Lanka	Caritas	211,024	Water treatment plant	2'380'756
	ADRA	202,025		922'788
	HEKS/EPER	198,025	School	3.874.561
	SwissContact	204,016		1'121'019
	Solidar	205,028		549.045
	Solidar	199,054		1.127.670

IV. Livelihood table

N	Location	Family	Female headed IH	Sector	Support	Perceived importance of Training	Use support	Previous experience same sector	Business success (0-3)	Other business /income	Reason to stop
1	Kodumunnay	W		Tailoring	Training	low	NO	NO	0		No further support
2	Kodumunnay	W		Tailoring	Training	low	NO	Yes	0		
3	Poduwkattu	W		Tailoring	Training	low	NO	NO	0		
4	Poduwkattu	M		Animal farming	Cows		Yes	Yes	1	Fishing, Tuc tuc	
5	Batticaloa	W	X	Small Shop	Training, shop	High	Yes	NO	2	NO	Illness
6	Batticaloa	W	x	Poultry	Material		NO	YES	0	NO	Illness
7	Batticaloa	W	X	Trade	Material		YES	NO	3	Shop, work abroad	
8	Batticaloa	M		Carpenter	Material		YES	YES	3	NO	
9	Batticaloa	W		Animal farming	Cows		YES	YES	1	Tailoring, chicken	
10	Batticaloa	W		Tailoring	Sewing machine		NO	NO	0	Family	Not able to sew
11	Batticaloa	W		Tailoring	Textile material		YES	YES	2		
12	Batticaloa	W		Tailoring	Training	low	NO	NO	0	Food production	Not interested
13	Batticaloa	W		Packaging chilly	Material		YES	NO	0	Family	Illness
14	Batticaloa	W		Masonry	Training	medium	YES	NO	0	Chikens,son abroad	Employer closed business
15	Batticaloa	W		Printing	Training	low	NO	NO	0	Husband	Never looked for job
16	Batticaloa	W	X	Bag making	Training	medium	YES	NO	0	Garment factory	Not profitable
17	Batticaloa	W		Reatail	Material		YES	NO	0	baby sitting	Not profitable, illness
18	Batticaloa	W		Tailoring	Material		YES	YES	2	Family	
19	Batticaloa	W		Bag making	Material, training	high	YES	YES	2	Family	
20	Batticaloa		x	Fishing	canoe		NO	NO	0	Son abroad	Gave canoe to disable son
21	Batticaloa		x	Shop	Material		NO	NO	0	Family	
22	Batticaloa	W		Retail	Material		Yes	NO	0	Husband abroad	
23	Batticaloa	W	X	Grinding machine	Grinding machine		YES	NO	2	Worked abroad	
24	Batticaloa	W		Poultry	Chikens		YES	NO	0	Family	Not profitable
25	Meullaboh	W		Cake making	2 Trainings (cake a	low	NO	NO	0	Family	No market
26	Meullaboh	W		Restaurant	Furniture		YES	YES	2	Family	
27	Meullaboh	W	x	Tailoring	Training		NO	NO	0	Cleaning, baby sitting	Not profitable
28	Meullaboh	W		Tailoring	Training (tailoring,	low	YES	YES	1	family	
29	Meullaboh	M		Welding	Training management	High	YES	YES	2	Wife job	
30	Meullaboh	W	X	Tailor	Sewing macjine		YES	YES	2	NO	
31	Meullaboh	M		Workshop	Tools		Yes	YES	2	NO	
32	Meullaboh	W		Cake making	Training	Low	NO	NO	0	Son	No further support
33	Meullaboh	W		Cake making	Training	low	NO	NO	0	Family	No space for business
34	Meullaboh	W		Cake making	Training	Low	YES	NO	0	Family	No market

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VI. Key informant interviews

LOCATION	GENDER	ORGANISATION	FUNCTION
INDIA			
Pondicherry	Male	CASA	Regional manager of housing projects of CASA in Tamil Nadu
Melamanakudi	Female	Village Panchayat	Former member
Melamanakudi	Male	Fishermen Panchayat	Member
Kodimunni, Kanyakumari	Male	Village Panchayat	Leader
Karaikel	Female	SNEHA	Founder/director
Karaikelmedu, Karaikel	Female	SNEHA	Facilitator
Karaikelmedu, Karaikel	Male	Polytechnic	Headmaster
Karaikelmedu, Karaikel	Men	Health Center	Doctor
INDONESIA			
Medan	Male	Swisscontact	Former project manager
Sigli	Male	District	Head of District Education Office
Banda Aceh	Male	Ministry of Education	Head of High School division
Banda Aceh	Male	Aceh ventura	Head of office
Banda Aceh	Male	PINBIS	Facilitator
Banda Aceh	Male	PINBIS	Facilitator
Banda Aceh	Male	National bank	Branch manager
Banda Aceh	Male	Investment fund	Director
Meullaboh	Female	Belang Beurandang primary school	Deputy Head master
Meullaboh	Female	Belang beurandang primary school	Teacher
Meullaboh	Male	Suak Indrapui Kachi office	Kachi
Meullaboh	Male	Faculty of Economics	Director
Meullaboh	Male	PDAM	Head of office
Meullaboh	Male	YPK	Project Coordinator
Meullaboh	Male	Belang Beurandang	Kachi
Meullaboh	Female	Belang Beurandang Health Center	Nurse
Meullaboh	Female	CARITAS	Former staff member
Meullaboh	Male	CARITAS	Former staff member
Meullaboh	Male	CARITAS	Former staff member

Meulaboh	Female	Swiss contact/ Pinbis	Former staff
Meulaboh	Male	Swiss contact/ Pinbis	Former staff
Nagan Raya	Male	Ministry of health	Secretary of the ministry of Health
Nagan Raya	Male	Ministry of health	Head of Service department of the ministry of Health
Nagan Raya	Male	Ministry of Health	Health Statistician of the Ministry of Health
Singkil	Male	City Ambia	Kachi
Singkil	Male	Teluk Ambun	Kachi
Singkil	Male	Takal Pasir	Kachi
Singkil	Male	CARITAS	Former staff member
Singkil	Male	Self-employed	Tourist Agent
SRI LANKA			
Colombo	Male	SRC	Former Country Director
Trincomale	Male	SRC	Former senior staff member
Trincomale	Female	Ministry of Health	Primary Health Midwife
Trincomale	Male	SRC	Former senior Staff member
Trincomale	Male	RDS Rural Development Society	Staff member
Kinnyia	Male	Central Government office	Local Counsellor
Kinnyia	Male	Central Government office	Provincial counsellor
Batticaloa	Female	Swiss Contact	Former staff
Pottuvil	Male	Village	Village leader
Pottuvil	Male	Project manager	Former project Director
Hambantota	Female	Village	Chief of leader
Matara	Male		Independent Social researcher
Galle	Male	Rain Forest Internartional	Staff
Colombo	Female	Centre for Poverty analysis (CEPA)	Director
Colombo	Male	Centre for Poverty analysis (CEPA)	Senior staff
Colombo	Male	Social Scientist Association	Director, Lead of survey
Colombo	Male	Social Scientist Association	Researcher East Sri Lanka
Colombo	Male	Caritas	Senior staff
Colombo	Male	Solidar Sri Lanka	Director
Colombo	Female	Solidar Sri Lanka	Senior staff

VII. Survey Tables

		Q5 : Please tell me about the ownership of the house in which you are currently living in. Is the house					
		Don't Know/Can't Say	Inherited	Got as dowry	Given otherwise to you or your family	Bought	Living as a renter
Country	India	15.4%	11.5%	2.3%	58.8%	9.2%	2.7%
	SriLanka	2.2%	31.9%	3.1%	46.5%	13.7%	2.7%
	Indonesia	.4%	1.6%	0.0%	79.9%	6.1%	11.9%
	Total	6.3%	14.5%	1.8%	62.1%	9.6%	5.8%

		Q6 : Who owns the title of the land and the house ?			
		Don't Know/Can't Say	Male only	Male and Female both	Female only
Country	India	5.8%	57.7%	11.2%	25.4%
	SriLanka	5.8%	58.4%	1.3%	34.5%
	Indonesia	6.6%	37.3%	39.8%	16.4%
	Total	6.0%	51.1%	17.7%	25.2%

		Q7A : If bought or rented; What is the main reason for buying/renting?									
		Don't know/Can't say	Nearness to workplace	Better transport	Better facilities in locality	Better community	Better quality of house	Low cost of house	Low rent	Better design of house	Other
Country	India	0.0%	19.4%	6.5%	9.7%	6.5%	6.5%	32.3%	3.2%	9.7%	6.5%
	SriLanka	29.7%	8.1%	2.7%	21.6%	2.7%	0.0%	2.7%	2.7%	0.0%	29.7%
	Indonesia	0.0%	13.6%	0.0%	0.0%	4.5%	2.3%	34.1%	34.1%	0.0%	11.4%
	Total	9.8%	13.4%	2.7%	9.8%	4.5%	2.7%	23.2%	15.2%	2.7%	16.1%

		Q10B : Is the present house similar, better or worse than pre-tsunami house on the following parameters? - Number of rooms			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	.8%	47.3%	35.0%	16.9%
	SriLanka	0.0%	36.7%	35.0%	28.3%
	Indonesia	1.2%	46.7%	31.6%	20.5%
	Total	.7%	43.8%	33.8%	21.6%

		Q10C : Is the present house similar, better or worse than pre-tsunami house on the following parameters? - Construction quality			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	1.9%	41.5%	38.5%	18.1%
	SriLanka	0.0%	47.8%	27.4%	24.8%
	Indonesia	1.2%	48.8%	23.4%	26.6%
	Total	1.1%	45.9%	30.0%	23.0%

		Q10D : Is the present house similar, better or worse than pre-tsunami house on the following parameters? - Comfort			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	1.2%	36.2%	42.7%	20.0%
	SriLanka	0.0%	39.4%	32.3%	28.3%
	Indonesia	1.2%	52.5%	25.0%	21.3%
	Total	.8%	42.6%	33.6%	23.0%

		Q10E : Is the present house similar, better or worse than pre-tsunami house on the following parameters? - Feeling of safety			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	2.7%	37.3%	35.8%	24.2%
	SriLanka	1.8%	38.9%	46.0%	13.3%
	Indonesia	1.2%	52.5%	23.0%	23.4%
	Total	1.9%	42.9%	34.7%	20.5%

		Q10J : Is the present plot similar, better or worse than pre-tsunami house on the following parameters? - Capacity to keep animals/ produce vegetables/fruits			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	3.8%	20.0%	35.4%	40.8%
	SriLanka	14.6%	7.1%	42.0%	36.3%
	Indonesia	3.7%	32.0%	25.8%	38.5%
	Total	7.1%	20.0%	34.2%	38.6%

		Q10K : Is the present Location and connection similar, better or worse than pre-tsunami house on the following parameters? - Transport facilities to my workplace			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	2.3%	35.8%	39.2%	22.7%
	SriLanka	5.3%	25.7%	46.0%	23.0%
	Indonesia	.4%	23.8%	32.4%	43.4%
	Total	2.6%	28.6%	39.0%	29.7%

		Q10L : Is the present Location and connection similar, better or worse than pre-tsunami house on the following parameters? - Roads/ paths within the settlement			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	1.5%	44.2%	39.6%	14.6%
	SriLanka	.4%	43.8%	35.8%	19.9%
	Indonesia	.4%	58.6%	25.4%	15.6%
	Total	.8%	48.9%	33.7%	16.6%

			Q11 : Are you satisfied with the quality of the reconstructed / repaired / new house your family is living in?				Total	
			Don't know/C an't say	Yes; totally satisfied	Yes; but partially satisfied	No; totally unsatisfied		
Country	India	Country	India	2.3%	23.8%	61.2%	12.7%	100.0%
	SriLanka		SriLanka	.9%	24.8%	64.6%	9.7%	100.0%
	Indonesia		Indonesia	4.5%	26.6%	57.8%	11.1%	100.0%
	Total		Total	2.6%	25.1%	61.1%	11.2%	100.0%

		Q12A : Did you modify the house after you got it? If yes, then what were the modifications ? - Number of rooms		
		Don't know/C an't say	Yes	No
Country	India	7.7%	33.8%	58.5%
	SriLanka	.4%	10.6%	88.9%
	Indonesia	1.2%	23.4%	75.4%
	Total	3.3%	23.2%	73.6%

		Q12C : Did you modify the house after you got it? If yes, then what were the modifications ? - Kitchen		
		Don't know/C an't say	Yes	No
Country	India	6.2%	45.8%	48.1%
	SriLanka	.9%	28.3%	70.8%
	Indonesia	.8%	66.4%	32.8%
	Total	2.7%	47.3%	50.0%

		TQ13 : Did you acquire this skill / profession in your family /parents/grandparents or you learnt it after Tsunami?					
		No Response	I learnt it in my family before Tsunami	I learnt it myself before Tsunami	Learnt it after Tsunami in training provided by Government	Learnt it after Tsunami in training provided by NGOs	I am learning as I am working
Country	India	6.2%	62.7%	4.6%	4.2%	4.6%	17.7%
	SriLanka	42.0%	27.9%	11.1%	1.3%	.4%	17.3%
	Indonesia	0.0%	33.6%	63.9%	1.6%	.8%	0.0%
	Total	15.2%	42.2%	26.4%	2.5%	2.1%	11.6%

		Q15 : Do you do the necessary repairs in the house ? If no, then why ?						
		Can't say / NA	Yes, I do necessary repairs	No, Not important	No, Skilled labor is not available	No, do not have the money	No, because the house is in good condition	Other reasons
Country	India	5.8%	44.2%	6.2%	1.2%	25.8%	14.2%	2.7%
	SriLanka	1.8%	62.4%	3.1%	0.0%	27.0%	3.1%	2.7%
	Indonesia	.8%	52.0%	7.4%	.4%	27.9%	8.2%	3.3%
	Total	2.9%	52.5%	5.6%	.5%	26.8%	8.8%	2.9%

		Q16B : If we compare the health conditions of the present time with that of pre-tsunami times, on the following parameters, would you say the conditions are similar, better, or worse? - Quality of health services			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	.4%	18.1%	58.5%	23.1%
	SriLanka	0.0%	51.3%	37.2%	11.5%
	Indonesia	0.0%	53.7%	24.2%	22.1%
	Total	.1%	40.3%	40.4%	19.2%

		Q16C : If we compare the health conditions of the present time with that of pre-tsunami times, on the following parameters, would you say the conditions are similar, better, or worse? - Costs of health services			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	.8%	14.6%	48.1%	36.5%
	SriLanka	0.0%	23.0%	23.0%	54.0%
	Indonesia	0.0%	50.4%	23.8%	25.8%
	Total	.3%	29.2%	32.2%	38.4%

		Q17B : If we compare the education facilities at present time with that of pre-tsunami times, on the following parameters, would you say the conditions are similar, better, or worse ? - Quality of primary education			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	.4%	32.7%	55.4%	11.5%
	SriLanka	18.1%	58.0%	23.5%	.4%
	Indonesia	2.0%	48.0%	27.0%	23.0%
	Total	6.4%	45.6%	36.0%	11.9%

		Q17C : If we compare the education facilities at present time with that of pre-tsunami times, on the following parameters, would you say the conditions are similar, better, or worse ? - Costs of primary education			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	.4%	31.9%	40.0%	27.7%
	SriLanka	17.7%	30.5%	27.4%	24.3%
	Indonesia	1.2%	45.9%	28.7%	24.2%
	Total	6.0%	36.2%	32.3%	25.5%

		Q18B : If we compare the different facilities at present time with that of pre-tsunami times, on the following parameters, would you say the conditions are similar, better, or worse ? - Potable water for household use			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	0.0%	27.7%	33.5%	38.8%
	SriLanka	.9%	36.3%	39.8%	23.0%
	Indonesia	0.0%	31.1%	26.6%	42.2%
	Total	.3%	31.5%	33.2%	35.1%

		Q18E : If we compare the different facilities at present time with that of pre-tsunami times, on the following parameters, would you say the conditions are similar, better, or worse ? - Sanitation facilities			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	1.5%	44.6%	33.5%	20.4%
	SriLanka	1.3%	32.7%	46.5%	19.5%
	Indonesia	4.9%	44.3%	24.6%	26.2%
	Total	2.6%	40.8%	34.5%	22.1%

		Q18F : If we compare the different facilities at present time with that of pre-tsunami times, on the following parameters, would you say the conditions are similar, better, or worse ? - Electricity supply			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	1.2%	43.5%	32.7%	22.7%
	SriLanka	.4%	36.7%	61.5%	1.3%
	Indonesia	0.0%	34.4%	54.9%	10.7%
	Total	.5%	38.4%	49.0%	12.1%

		Q21A : In terms of your community; do you think that the following are similar, better or worse than pre-tsunami times - Social status in community			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	10.8%	32.3%	40.4%	16.5%
	SriLanka	.4%	12.8%	68.6%	18.1%
	Indonesia	0.0%	25.8%	62.7%	11.5%
	Total	4.0%	24.1%	56.6%	15.3%

		Q21B : In terms of your community; do you think that the following are similar, better or worse than pre-tsunami times - Feeling of belongingness to the community			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	1.5%	21.5%	53.8%	23.1%
	SriLanka	.4%	9.7%	72.6%	17.3%
	Indonesia	0.0%	30.3%	58.2%	11.5%
	Total	.7%	20.8%	61.1%	17.4%

		Q21C : In terms of your community; do you think that the following are similar, better or worse than pre-tsunami times - Contacts and support of friends and neighborhood			
		Don't Know/ Can't say	Better than Pre-Tsunami times	Similar as Pre-Tsunami times	Worse than Pre-Tsunami times
Country	India	1.2%	24.2%	46.9%	27.7%
	SriLanka	1.3%	11.1%	66.4%	21.2%
	Indonesia	0.0%	20.9%	61.5%	17.6%
	Total	.8%	19.0%	57.8%	22.3%

		Q23A : What has been the main source of family income Before Tsunami?									
		Government Service	Private Sector Service	Small Scale/Self employed	Large Scale Business	NGO sector	Casual labour (Construction etc)	Fishery	Landless Agricultural Labour	Land Owning Farmer	Other
Country	India	1.5%	1.9%	3.5%	.4%	0.0%	6.5%	80.0%	.8%	0.0%	5.4%
	SriLanka	9.7%	5.8%	16.8%	.4%	0.0%	10.2%	47.3%	.9%	3.5%	5.3%
	Indonesia	4.1%	13.1%	11.1%	0.0%	.4%	19.7%	41.8%	1.6%	2.0%	6.1%
	Total	4.9%	6.8%	10.1%	.3%	.1%	12.1%	57.1%	1.1%	1.8%	5.6%

		Q23B : What has been the main source of family income Right after Tsunami?									
		Government Service	Private Sector Service	Small Scale/Self employed	Large Scale Business	NGO sector	Casual labour (Construction etc)	Fishery	Landless Agricultural Labour	Land Owning Farmer	Other
Country	India	1.2%	1.2%	2.7%	.4%	2.3%	10.0%	73.8%	0.0%	.4%	8.1%
	SriLanka	9.7%	5.3%	15.9%	.4%	3.1%	18.1%	32.7%	1.3%	3.1%	10.2%
	Indonesia	4.1%	14.3%	11.5%	0.0%	.4%	22.1%	37.7%	2.0%	1.6%	6.1%
	Total	4.8%	6.8%	9.7%	.3%	1.9%	16.6%	49.0%	1.1%	1.6%	8.1%

		Q23C : What has been the main source of family income As on Today?									
		Government Service	Private Sector Service	Small Scale/Self employed	Large Scale Business	NGO sector	Casual labour (Construction etc)	Fishery	Landless Agricultural Labour	Land Owning Farmer	Other
Country	India	.8%	1.2%	3.5%	.8%	0.0%	8.8%	76.5%	.4%	0.0%	8.1%
	SriLanka	10.6%	8.4%	13.3%	.4%	.4%	15.0%	38.5%	2.2%	1.3%	9.7%
	Indonesia	7.0%	11.1%	14.3%	.4%	.4%	20.5%	35.7%	2.0%	2.5%	6.1%
	Total	5.9%	6.7%	10.1%	.5%	.3%	14.7%	51.1%	1.5%	1.2%	7.9%

		TQ11 : Which professional sector are you currently employed AS ON TODAY?															
		Fisheries and allied workers	Tourism and hospital industry	Agriculture Sector	Construction related Professionals	Lawyer and allied profession	Technical and associate professional	Police and Military	Education Sector	Health and Hospitals	Transportation	Communication /Media	Eliminatory Occupations	Banking & Finance Sector	Other Professionals	Retired	Remittance
Country	India	74.2%	1.5%	.8%	8.5%	0.0%	2.3%	0.0%	0.0%	.4%	.8%	1.5%	5.0%	0.0%	5.0%	0.0%	0.0%
	SriLanka	42.9%	1.3%	3.1%	7.5%	0.0%	2.7%	1.8%	1.8%	.4%	1.3%	3.5%	4.4%	0.0%	26.5%	.4%	2.2%
	Indonesia	38.1%	1.6%	6.1%	7.8%	.4%	2.5%	1.2%	3.7%	.4%	1.2%	0.0%	15.6%	.8%	20.5%	0.0%	0.0%
	Total	52.5%	1.5%	3.3%	7.9%	.1%	2.5%	1.0%	1.8%	.4%	1.1%	1.6%	8.4%	.3%	16.8%	.1%	.7%

		Q29A : How do you prioritize the following in terms of savings from your earnings ? Is each of the following very important, somewhat important or of no importance at all ? - Children's education			
		Don't Know/Ca n't say	Very important	Somewh at important	Not important
Country	India	.4%	60.0%	23.1%	16.5%
	SriLanka	10.6%	74.3%	8.0%	7.1%
	Indonesi a	.4%	84.4%	13.5%	1.6%
	Total	3.6%	72.6%	15.2%	8.6%

		TQ42 : How much are you worried about this problem? - Getting a job			
		Can't say / no response	This is still a major problem	This is still a problem; but not a big one	This is not a problem anymore
Country	India	1.5%	37.3%	39.2%	21.9%
	SriLanka	19.5%	30.5%	31.4%	18.6%
	Indonesi a	.4%	34.8%	34.8%	29.9%
	Total	6.7%	34.4%	35.3%	23.6%

		TQ49 : Which of the following are biggest problems, threats or risks that you and your family are worried about? - Illness / medical fitness of family			
		To a great extent	Only to some extent	Not worried at all	Can't say/No response
Country	India	28.8%	53.1%	15.8%	2.3%
	SriLanka	30.5%	48.7%	19.5%	1.3%
	Indonesi a	32.4%	39.3%	27.5%	.8%
	Total	30.5%	47.1%	20.8%	1.5%

		Well/ with large surplus	Well/ with surplus	Just enough	Barely
Country	India	2.3%	30.0%	42.7%	10.4%
	SriLanka	.4%	11.5%	29.2%	35.4%
	Indonesi a	2.9%	14.8%	68.9%	13.1%
	Total	1.9%	19.2%	47.3%	19.0%

		Same place as before	Less than 1 km	Between 1 – 5 km	Don't know / Not Sure
Country	India	20.8%	39.2%	34.2%	1.2%
	SriLanka	47.3%	23.0%	27.0%	.4%
	Indonesi a	20.1%	3.7%	22.5%	3.3%
	Total	28.8%	22.3%	28.1%	1.6%

		I live in the SAME area with the SAME OLD neighbors	As on today; I live in the SAME area BUT with the NEW neighbor s	I live in a NEW area BUT with the SAME OLD neighbors
Country	India	31.2%	6.5%	35.4%
	SriLanka	48.2%	.9%	21.2%
	Indonesi a	19.3%	32.4%	11.5%
	Total	32.5%	13.4%	23.0%

		TQ66 : Given a chance to chose, would you have preferred to be in a self-help scheme to reconstruct your own house (community driven) or prefer to have it constructed for you (contract driven)?		
		Prefer to construct it myself	Prefer a contractor constructing for me	Can't say / NA
Country	India	30.4%	46.9%	22.7%
	SriLanka	88.1%	4.9%	7.1%
	Indonesia	62.3%	32.0%	5.7%
	Total	58.9%	28.9%	12.2%