This research examines Sri Lanka's recent settlement policies and the outcomes of housing reconstruction that has taken place as a part of tsunami response. Post-tsunami housing reconstruction in Sri Lanka imposed a change towards more compact settlements, where a high number of people live closer to each other when compared to traditional villages. The objectives of the research are two-fold: firstly, to map out and scrutinize the factors and processes that have resulted in the post-tsunami settlement patterns characterized by high-density housing and apartment housing, and secondly, to find out how apartment housing that is an outcome of donor-driven development caters for the ways of life of the inhabitants. The research also evaluates the success of donor-driven housing development in meeting its development objectives.

The analysis of the structural forces and mechanisms behind the post-tsunami settlement patterns is based on literary review that includes critical observation of relevant policy papers, national regulations and international agreements and guidelines. The examination of the implications of the change in housing form on the residents is carried out through a case study of a selected apartment housing scheme in Kalmunai, Eastern Sri Lanka. The primary data was collected during a field trip in November 2010. As the study is about understanding and interpreting social realities, qualitative methods that comprise of individual semi-structured interviews and various participatory methods were found most conducive. The total sample size is 51 individuals, mostly comprising of community members, including women and men in all age groups, as well as relevant local government authorities and civil society representatives.

The research findings show that there are major gaps between the socio-cultural values and behavior and economic needs of the inhabitants on one hand, and the type of habitat apartment housing provides on the other hand. The housing programme has been successful in fulfilling the passive function of a house - provision of shelter. Improved living conditions and modern facilities bring stability to life and ease women's workload, especially. However, the flight of residents out of the scheme manifests that provision of physical shelter is not enough to meet the housing needs. From the economic point of view, it is evident that space limitations imposed by the apartment housing, such as lack of land for gardening, farming and animal husbandry and availability of space for home based businesses or cottage industries, have had a detrimental effect on the income levels and food security of the residents. Such restrictions have resulted in increasing the vulnerabilities of the residents already living on the verge of survival. From the social perspective, apartment housing schemes can provide a conducive environment for social interactions and formation of social capital, given that there is sufficient allocation for social spaces within the scheme. However, the section of population that forms a "minority" within the scheme do face difficulties in fitting in to the local community.

The research findings bring into light some of the main weaknesses of the donor driven housing/development. Donor driven development provides limited space for community consultation and participation in the implementation of the project. Subsequently the development processes do not support local ownership or building of social capital. This can have devastating effects on the sustainability of the project outputs, as shown in the case study. It also undermines the role of the community and social networks in supporting (or disabling) people's bonding with places and the formation of sense of place.
Tutkimuksessa tarkastellaan Sri Lankan viimeaikaista asutuspolitiikkaa ja vuoden 2004 tsunami seurannutta jälleenrakennusta, jolle on ominaisia muutos tilaampana asutuksensa verrattuna perinteiseen kylämuotoiseen asutukseen. Tutkimuksen tavoitteena on kartoittaa ne tekijät ja prosessit, jotka ovat johtaneet uudenlaiseen asutusrakenteeseen sekä selvitää miten kerrostonalasuminen vastaa asukkaiden tarpeita ja elämäntapoja. Tutkimuksessa arvioidaan myös kuinka hyvin tsunami jälkeinen donor-veroineen rakentarakenne on saavuttanut sille asetetut tavoitteet.


Avainsanat: Nyckelord – Keywords
jälleenrakennus, asutuspolitiikka, humanitaarinen apu, kerrostonaloasuminen, osallistuminen
Sällytyspaikka – Förvaringsställe – Where deposited
Helsingin yliopisto, Kumpulan tiedekirjasto
Muuta tietoa – Övriga uppgifter – Additional information
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<th>Description</th>
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<tbody>
<tr>
<td>ALNAP</td>
<td>Active Learning Network for Accountability and Performance in Humanitarian Action</td>
</tr>
<tr>
<td>CBO</td>
<td>Community Based Organization</td>
</tr>
<tr>
<td>DDP</td>
<td>Donor Driven Program</td>
</tr>
<tr>
<td>DS</td>
<td>Divisional Secretariat</td>
</tr>
<tr>
<td>GN</td>
<td>Grama Niladhari (government official)</td>
</tr>
<tr>
<td>GoSL</td>
<td>Government of Sri Lanka</td>
</tr>
<tr>
<td>HAP</td>
<td>Humanitarian Accountability Partnership</td>
</tr>
<tr>
<td>HSS</td>
<td>Housing Scheme Society</td>
</tr>
<tr>
<td>IDP</td>
<td>Internally Displaced Person</td>
</tr>
<tr>
<td>INGO</td>
<td>International Non-Governmental Organization</td>
</tr>
<tr>
<td>IRCR</td>
<td>International Committee of the Red Cross</td>
</tr>
<tr>
<td>LKR</td>
<td>Sri Lankan Rupee</td>
</tr>
<tr>
<td>LTTE</td>
<td>Liberation Tigers of Tamil Eelam</td>
</tr>
<tr>
<td>MoU</td>
<td>Memorandum of Understanding</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>ODP</td>
<td>Owner Driven Program</td>
</tr>
<tr>
<td>ONHP</td>
<td>One National Housing Policy</td>
</tr>
<tr>
<td>PRA</td>
<td>Participatory Rural Appraisal</td>
</tr>
<tr>
<td>RADA</td>
<td>Reconstruction and Development Agency</td>
</tr>
<tr>
<td>RC</td>
<td>Red Cross</td>
</tr>
<tr>
<td>RRR</td>
<td>Relief, Reconstruction, Recovery</td>
</tr>
<tr>
<td>SWOT</td>
<td>Strengths, Weaknesses, Opportunities, Threats</td>
</tr>
<tr>
<td>TAFLOL</td>
<td>Task Force for Logistics, Law and Order</td>
</tr>
<tr>
<td>TAFOR</td>
<td>Task Force for Relief</td>
</tr>
<tr>
<td>TAFREN</td>
<td>Task Force for Rebuilding the Nation</td>
</tr>
<tr>
<td>TAFRER</td>
<td>Task Force for Rescue and Relief</td>
</tr>
<tr>
<td>TAP</td>
<td>Transitional Accommodation Project</td>
</tr>
<tr>
<td>THRU</td>
<td>Tsunami Housing Reconstruction Unit</td>
</tr>
<tr>
<td>UDA</td>
<td>Urban Development Authority</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
<tr>
<td>UNHCR</td>
<td>United Nations Refugee Agency</td>
</tr>
<tr>
<td>TAP</td>
<td>Transitional Accommodation Project</td>
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<tr>
<td>VE</td>
<td>Village Expansion</td>
</tr>
</tbody>
</table>
1. INTRODUCTION

On 26 December 2004, a massive earthquake off the west coast of Northern Sumatra in Indonesia generated a series of tsunamis that led to devastation and destruction on an extraordinary scale. The disaster killed over 227,000 people and displaced about 1.7 million people in fourteen countries around the Indian Ocean region (Cosgrave & Telford 2006: 16). Besides the loss of life and injuries, the tsunami caused extensive damage to properties and livelihoods. Business assets were destroyed and livelihoods disrupted, fisheries being the most severely hit industry. On a broader scale the tsunami had an enormous impact on development processes, conflicts, poverty and patterns of risk in the affected area, as did the subsequent relief and development efforts (Christoplos 2006).

Providing permanent housing for the tsunami affected population was a major component in post-tsunami response. The post-tsunami settlements stand out explicitly in the Sri Lankan coastal landscape. The diverse landscape comprised of houses with home gardens placed in hundreds of small villages have been replaced by extensive housing schemes with strict layouts, structurally solid houses and creating population densities that are much higher than in traditional Sri Lankan villages. Boano (2009) claims that the reconstruction operation in Sri Lanka has created a new “tsunami geography” that comprises of new urban settlements and villages in relocation sites that are remote and unsustainable. Witnessing the change raised my curiosity on why such a change has taken place and what are the implications to the new residents of these housing schemes. This curiosity served as a motivation for the study, and helped to process the research questions.

The purpose of this study is to examine Sri Lanka’s recent settlement policies and the outcomes of donor-assisted housing reconstruction. In order to understand the change brought about by post-tsunami settlements in a wider context, compared to what has existed before, and to form an idea of the factors behind the change it is necessary to understand the settlement and development policies that created the old and new settlements. Analysis of how the post-tsunami housing stands out in the longer continuum of settlement policy is carried out based on literature on the subject. During the 20th century the settlement development in Sri Lanka followed mainly two models: expansion of existing villages and colonization of unpopulated or scarcely populated areas in the dry
zone. In both approaches the settlers were provided with farming land for subsistence and small-scale commercial agriculture, resulting in rural settlements with self-employed farmers as the core element (Peiris 2006). As a result of the past settlement policies Sri Lanka is still mostly a rural country, the share of urban population being mere 15 percent, and an urbanization rate of 0.5 percent annually (Dept. of Census and Statistics 2001).

Towards the end of the 20th century land has become a more scarce resource while at the same time non-agricultural economic sectors, i.e. industry and service sectors have grown. Thus, it has been claimed that settlement policies will need to be updated to respond to the challenges and requirements of today. Post-tsunami reconstruction has brought a change to traditional settlement patterns, with more densely populated housing schemes, including blockhouses, which earlier have been found in the Colombo metropolitan area only.

Implications of the changed settlement pattern on the residents are examined through a case study, which was conducted in a housing scheme in Kalmunai, located in the Ampara district in Eastern Sri Lanka. Kalmunai was chosen for the study due to a local linkage: Finnish Red Cross has funded two housing projects in the area. The selected housing scheme consists of 240 apartments. The new residents moved in in August 2009. Some of the questions that I will discuss in the study are:

- How socially and culturally appropriate is the new housing form? How do the apartment and scheme layout cater for people’s way of life? What are the cultural adaptations visible in the block housing scheme?
- How appropriate is the new housing form from the point of view of local livelihoods?
- How have different home based enterprises accommodated in an apartment house environment?
- How does apartment housing and the housing process support (re)formation of social capital?
- How is the maintenance of a jointly ruled property organized and managed?

The aspects under scrutiny include physical environment, infrastructure and services, livelihood opportunities of the community members, and networks within the community. Evaluation of the apartment housing scheme is carried out in the light of various humanitarian principles and standards for humanitarian aid.
2. THEORETICAL BACKGROUND

The theoretical background draws from development geography as well as from regional, urban and human geography. The two themes of settlements and housing on one hand and development and humanitarian aid on the other hand – and their interface – are followed throughout the study. This is because the change in settlement pattern has not been indigenous, but is a result of development intervention. A large number of external agents came to operate in the tsunami hit areas in the form of development co-operation, creating a specific form of tsunami response.

Theory on urbanization and settlement systems are shortly presented in chapter 2.1, followed by a discussion on urban planning, and changes in planning during the last decade. Housing development and how house forms are connected with cultural, social and economic factors is presented in chapter 2.3, whereas chapter 2.4 discusses places as social constructs and home as a specific type of a place.

The study presents an aspect of international development and humanitarian aid, the post-tsunami settlements being results of such aid. The discourse on development and aid is presented in chapter 2.5, with emphasis on the juxtapositioning of community-based development theories and donor-driven development. Chapter 2.6 discusses how “long term development” is regarded in disaster response and humanitarian aid – a subject that is vital to the overall sustainability of the new settlements and wellbeing of the residents. There are several guidelines that attempt to guarantee good humanitarian practice, which are presented in chapter 2.7 with emphasis on Sphere standards that provide practical advice on housing and settlements. The most essential terms and the way they are understood and used in this study are presented at the end of this chapter.

2.1. Urbanization and settlement systems – defining urban and rural

Geographers have a long tradition of studying human land use, population density patterns and evolvement and growth of settlements. The interactive relationship between cities and surrounding countryside has interested many geographers. Spatial structures of how settlements have been laid out – their number, size and location – and how they form urban hierarchies have been subjects of a number of studies in settlement and urban geography. These theories are applied in the planning of cities, infrastructure and services. For example, Walter Christaller’s Central Place Theory, which analyzes how
and where places of different hierarchical order should be functionally and spatially distributed with respect to one another, has been used for physical planning around the world, including Sri Lanka (Peiris 2006).

Human settlements can be defined as “purposely grouped, organized clusters of houses and non-residential buildings” (De Blij 1993: 364). They consist of physical elements such as shelter and infrastructure, and services such as education, health, culture and welfare (Habitat 1976). Hamlets and villages are referred to as rural settlements while larger clusters in the form of towns and cities are referred to as urban settlements.

There is no common criterion for defining villages, towns or cities, or to differentiate rural from urban. Some of the stereotypical differences drawn between urban and rural populations are presented in Table 1, and include the number of population or population density, how people are employed and the status granted by the government. The differences in defining urban and rural challenge the comparison of urbanization between countries (e.g. Hartshorn 1992).

Table 1: Differences between urban and rural areas

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size and spatial distribution of population and settlements</td>
<td>Scattered population</td>
<td>High number of population, high population densities</td>
</tr>
<tr>
<td>Economy and occupational structure</td>
<td>Primary industries, i.e. agriculture</td>
<td>Secondary and tertiary industries, i.e. manufacturing, construction, administration and services</td>
</tr>
<tr>
<td>Number and type of functions of the centre</td>
<td>Low variety of service activities</td>
<td>High range of service activities, including specialist services</td>
</tr>
<tr>
<td>Accessibility to services and information</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Population and migration characteristics</td>
<td>Homogeneous population, net out-migration</td>
<td>Heterogeneous population, net in-migration</td>
</tr>
<tr>
<td>Status granted by government</td>
<td>Rural ranking, e.g. Municipal council</td>
<td>Urban ranking, e.g. Urban council</td>
</tr>
</tbody>
</table>

(Christaller 1933/1966; Hartshorn 1992; Champion & Hugo 2004)

To move beyond rural-urban dichotomy various scales of urbanization or degrees of urban influence have been used to define how an area is positioned in a rural-urban continuum (e.g. Champion and Hugo 2004). Urban sprawl that takes place in the fringes of many cities in developing countries particularly challenges the conventional urban-rural dichotomy.
The year 2008 marked the point when, for the first time in history, over half of the world’s total population – over three billion people – lived in settlements that were defined as urban (Habitat 2009). The driving forces of urban growth and increasing urbanization are divided into push factors, such as rural landlessness, unemployment and crowding, and pull factors such as employment opportunities and bright future prospects that cities offer. The superiority of push factors and incapability of developing cities to accommodate rural-to-urban migrants have led to unplanned and uncontrolled urban sprawl in developing countries (e.g. Cohen 2006). As a result, the bulk of urban growth in developing countries is taking place in unplanned, peri-urban areas. Location in the urban fringe, where land is still available, gives people a foothold in cities and in opportunities they may offer, and often offers a possibility of combining urban and rural livelihoods (Habitat 2009). However, such “suburban development” has lead to a situation where the boundary between urban and rural is dissolving.

The review of literature on urbanization reveals a multitude of benefits that urbanization brings along. Urbanization has been an essential part of economic growth and more stable economies. For example, the countries in the global South that underwent fast urbanization in the 1980’s and 1990’s also experienced rapid economic growth (Habitat 1996). High population densities have typically made the provision of infrastructures and basic services easier – thus urban residents may enjoy better access to education, health care and other basic services (e.g. Cohen 2006). However, the rapid growth of cities in developing countries has made the management of cities increasingly difficult, thus missing out the opportunities that urbanization can offer. Service delivery for the fast growing informal settlements is a major issue, and such settlements are characterized by sub-standard living conditions and tenuous land tenure (e.g. Kasadra & Crenshaw 1991). In fact, many cities in developing countries demonstrate a mode of urbanism where poverty, informality and traditionalism are the norm (e.g. Parnell & Robinson 2012).

2.2. Urban planning

This brings us to the basic principles and challenges of urban planning. It is obvious that while the principles established in the 1970’s remain valid today, there is a clear shift in the planning policies towards the 21st century.
The principles of settlement planning set by Habitat in Vancouver (1976) and Istanbul (1996) emphasize that “Settlement planning should always be an integral part of national development planning” and on the other hand, settlement planning must be geared to achieve the national development objectives. Planning should take into account the present and expected population structure and the appropriate distribution of employment opportunities, services and facilities (Habitat 1976; 1996).

“Planning of individual settlements is oriented to solve the problems derived from the relationship between the environment, and the political, social and economic context, in a continuous process of change and mutual adjustment” (Habitat 1976).

Both the Vancouver and the Istanbul Declaration on Human Settlement emphasize the understanding of the local conditions in settlement policies and spatial planning strategies. Acknowledging local needs and realities and respecting local culture and heritage are prerequisites for making a positive change and sustainable development. The Vancouver Declaration recommends using indigenous planning models that reflect national, regional and local priorities and values and utilizing local resources. Issues such as social justice, economic self-sufficiency and cultural relevancy should be of high importance in settlement planning (Habitat 1976; 1996).

The UN Habitat 2009 Global Report discusses contemporary urban planning. The long-term objectives that urban plans should encompass include socio-spatial equity, environmental sustainability and economic production in urban areas. The main “new” approaches to planning suggested by the report include, firstly, strategic spatial planning that focuses on aspects or areas that are found most strategic to overall objectives, secondly, participatory processes in planning that would also be integrated in master planning, and, thirdly, planning that is aimed at producing new spatial forms, such as compact cities and new urbanism (Habitat 2009).

Participation of the residents – either directly or through civil society representatives – in urban planning has the potential to empower communities and build social capital. Participation allows the residents’ interests and concerns to be incorporated within strategies, thus leading to better design of urban projects. In neighbourhood level, successful planning approaches include Participatory Urban Appraisals, Participatory Learning and Action and Community Action Planning. Such approaches allow the people
to identify and prioritize their needs, providing valuable information for the professional planners (ibid.).

The report (Habitat 2009) also highlights the necessity of urban planning in addressing post-conflict and post-disaster situations. Planning can contribute to creating a more stable, peaceful and prosperous society, and allow for effective coordination of donor assistance.

2.3. **Housing forms, functions of the house and ways of life**

Individual houses, or *dwellings*, constitute the main unit in settlements. The form of a dwelling manifests a complex interaction of different factors. Dwellings can be viewed as cultural products that reflect social and economic needs and cultural traditions – or the *ways of life* – of the occupants. Some of the factors relating to ways of life are kinship pattern, family composition, ways of earning a living and religious beliefs (Weerasingham 1986). King (2009) uses the term *private dwelling* to describe an activity in which we “use dwellings to meet our needs and fulfil our interests, to such an extent that this singular dwelling becomes meaningful to us”.

Dwellings reflect the physical environment in which they are located. Dwellings are constructed – to some extent – to provide climatic comfort, protection from cold or hot weather, from rain and storm as well as against insects, snakes and other wildlife. The provision of shelter and protection is viewed as the passive function of the house (Rapoport 1969). Availability of building materials and constraints and the possibilities offered by a particular technology are important contributors towards a certain form of dwelling. Rapoport (1969: 25), however, emphasizes that materials and technologies do not determine the form of a dwelling but are better described as modifying factors that facilitate and make certain decisions possible or impossible.

The influence of physical forces on settlement pattern and form depends on the scale of physical constraints. The more forceful the physical constraints are – severe climate conditions, limited materials and technology – the less freedom there is for other factors to act. Rapoport (1969) uses the concept of *criticality* to distinguish between the degree of choice and freedom with regard to the dwelling. When physical criticality is low, socio-cultural factors can operate more freely and vice versa.
The positive purpose of a shelter is to create an environment that is best suited to the way of life of the people. Dwellings have a multitude of functions; they can, for example, be an arena for economic activities; provide privacy and security as well as comfort; display values and achievements and reflect the social status of the residents and their position in the society (e.g. Dayaratne & Kellett 2008; King 2009). Socio-cultural forces, social organization and family structure can significantly affect the form of a dwelling and settlement. The position of women in the society affect, for example, the level of privacy required in the dwellings, and how the dwelling is divided into separate domains of men and women. Caste distinctions create a basis for hierarchical structures that guide the formation of settlements and the type of house. Furthermore, the way social intercourse takes place, where people meet, affects the form of habitat (Rapoport 1969).

Social relationships can also be important in selecting the site for a dwelling. Dayaratne and Kellett (2008) point out that housing and land is not only a material investment providing financial security but also a sign of social prestige. Acquiring a piece of land not only raises the family’s status and provides rootedness, but also “invests authority and control of power relations in the society”. Site itself is not just a physical piece of land, but it may have a history and already established social relations, or at least “the potential for relationships with other places and other people that have significant meanings”.

Economy and livelihoods reflect on forms of houses in various ways. Economic needs can, for example, make collaborative buildings and living more desirable – although this can also be socially motivated. The form of economy can affect the spatial arrangement of settlements and houses. Differentiation of types of buildings and urban space often results from increased complexity of society. In societies where there is little differentiation between work and living, the same compound may serve as a living space, workspace, shop and storage (Rapoport 1969).

Whereas Rapoport’s analysis on house form and functions is best applicable to the vernacular building tradition – where the residents are directly engaged in housing construction – the more contemporary housing production is more constructor-centred. In this context the residents’ needs and optimal functionality of the house can be compromised by cheap, replicable and scalable building solutions. In mass production approaches to housing there is less space for meeting customers’ individual needs and requests. The main approach to meeting customer needs is to offer a wide range of
standardised house types, from which the customer can pick the most suitable one in the given price range (Barlow & Ozaki 2003).

Since the late 1990’s, contractor driven housing has been regaining more customer focus. The opportunities for customisation would range from design and decorative features of the home to the inclusion of housing-related services, such as insurance and maintenance. However, as is pointed out by Barlow and Ozaki (2003), greater customisation in the new homes poses significant challenges for house builders, in terms of, for example, regulatory and funding framework and supply chains that can cater for the flexibility. Furthermore, when the immediate customer is not an individual actor and the future resident (e.g. in social housing), the customer may well have different priorities from those of the user of the dwelling.

2.4. Places as social constructs and home as a specific type of place

While a dwelling or a house relates to the physical object in a certain location, home refers to a place that is laden with meanings and is experienced differently by each individual. This leads us to the notion of places as social constructions. Places, as defined by human geographers and social scientists in the forefront, are laden with a set of characteristics, local cultures and traditions, type of people and uses of languages which make them unique and different from each other (e.g. Massey 1995; Wilkie 2003). Thus, creation of places is not entirely subjective, but it is also influenced by physical, economic and social realities.

“Places are doubly constructed: most are built or in some way physically carved out. They are also interpreted, narrated, perceived, felt, understood, and imagined” (Gieryn 2000). In other words, the concept of place combines the physical world with the social, cultural and emotional worlds of people.

Sense of place is a term closely linked with social construction of place; it is formed as a reaction to a place, affected by each person’s background, personality and previous experiences. The formation of sense of place draws on human senses and sense of aesthetics, as well as intellectual and emotional responses. The reactions and responses to places are not static, but evolve and change over time, influenced by development of one’s life cycle and transformations in the physical landscapes and places. Formation of
sense of place can lead to bonding with places, or to disinterest or rejection and the feeling of placelessness (Wilkie 2003).

Attachment to a particular place or otherwise specific relationship of people and places is recognized to influence identities of individuals and groups (e.g. Massey 1995). Allen and Hamnett (1995) have introduced the concept of social space, which consists of all social relations, interaction and networks. Space is understood as stretched out social relations within which different phenomena or agents operate and spread their influence. Massey (1995) approaches the space of social relations in terms of activity spaces of different phenomena. The activity space is defined through social connections and networks that can vary from a very large local scale to a global scale.

The concept of home has been examined by a multitude of researchers from different disciplines. Even though there are considerable cultural variations, home is an essential concept in most languages and cultures, used to anchor one’s being in the universe (Dayaratne & Kellett 2008). Tuan (1977) has described home as a kind of a referential space that is used as a point of orientation to the rest of the world and around which social and spatial relationships are organized. The concept of home is used to transmit one’s belonging to a place on a wide range of geographical scales, from a plot or a house to a district and a country. Instead of being at once fully acquired, home making is a continuous process that evolves with time. Massey (1992, cit. Easthope 2004) sees that one’s conception of home is constructed out of movement, communication and social relations that stretch beyond the “physical” place one would call home. Saunders and Williams (1988, cit. Easthope 2004) define home as a more physically bounded place; they see it as a socio-spatial entity, a combination of physical unit of the house and the social unit of the household. They also argue that home is a crucial “locale” because it is where basic social relations and institutions are constituted and reproduced.

Each culture has its dominant images and conventions of the home. The choice of architecture and aesthetic choices can enhance a sense of belonging to a place by showing an appreciation for specific cultural values. Constructing a shelter according to the popular, culture-specific images indicates social status and an ability to acquire and conform to accepted tastes. Allocating limited resources on ornamental elements and consumer goods that are rarely used – to keep up appearances – indicates the importance of feeling the sense of home. Most importantly, meeting the popular images is a step
towards achieving social acceptance and inclusion in the society and helps to gain dignity and respect of other community members. Collecting items that represent the values, affiliations and aspirations of the dwellers helps to create personalized spaces and to reinforce their identities (Dayaratne & Kellet 2008). On the other hand, in a developed country context, distinguishing oneself from the mass, for example through ‘achievement of originality and superiority’ – is reflected in the distinctive house styles (ibid.).

As a conclusion it can be stated that the examination of places as social constructs and home as a specific type of place has proven that housing cannot be fully examined without attempting to understand its social aspects and the networks of social relations it consists of.

2.5. Development theories – Trends in development discourse and aid

The concept and forms of development aid or development cooperation keep evolving as the discourse on what is development, who are the actors in development and how development is achieved proceeds. Within a time period of sixty years, development debate has moved on from purely economic thinking towards the search for alternative forms of development.

The economic progress of the more “developed” countries of the North initiated the assumption that they constituted ideal models of development for the less developed countries of the South. Development was understood as a process of modernization where developing countries sought to imitate the developed countries. As a result, the economic, political, social and cultural realities of the developing countries in the South were not recognized as inherent factors affecting their development (Martinussen 1997: 35–36). Consequently, a large share of aid provided in the years following the Second World War constituted of technical assistance; of transferring technical skills and knowledge that resided within donor countries to aid-recipient countries (Riddell 2008: 203).

General dissatisfaction with top-down, technocratic development preoccupied only with economic growth increased in the 1960’s and 1970’s, cumulating in the emergence of diverse schools of thought that gave development a more human face (e.g. ILO 1976; Korten 1992; Pieterse 2002). Concern about the fragility of the Earth’s ecosystems and the limited carrying capacity of the Planet resulted in the launching of the concept of sustainable development that encompasses environmental as well as social and economic
factors (World Commission…1987). The human development approach promoted by the UN since 1990 shifts focus on people and their choices over how they lead their lives, especially in terms of health, knowledge and access to resources (UNDP 1990; Sen 1999). The approach was preceded in the 1970’s and -80’s by basic needs and capacity approaches (Pieterse 2002). Women’s and gender movement has grown since 1970’s and the concept of gender mainstreaming was established in the mid-90’s to promote gender equality (UNDP 2011). Rights-based approach views poverty as an injustice that is imposed on people. The approach focuses on the interrelation between the state and its citizens; the citizens are “rights holders” that need to be empowered to claim their rights, while the states are “duty bearers” that need to be enabled to meet their obligations (Kirkemann & Martin 2007). Common to these conceptions is the recognition that development is heterogeneous and that there is no one development model that can be successfully applied in all environments. Unequal power relations are seen as the main issue in development, and thus development efforts should aim at the social and political empowerment of the poor or marginalised groups.

Humanitarian action is based on our shared humanity and driven by a humanitarian imperative. The broad purpose of humanitarian action is to save lives, to alleviate suffering and to maintain human dignity of those affected by natural and man-made disasters (Riddell 2008). Humanitarian action is legally based on international humanitarian law and on the four Geneva Conventions of 1949 (ICRC 2011).

In the world of aid-giving, capacity building and institutional strengthening have become the latest “philosopher’s stone”. Capacity building is defined as “the process whereby people, organizations and society as a whole unleash, strengthen, create, adapt and maintain capacity over time” (Riddell 2008: 207).

The shift in the focus of development from material well-being towards capacity building and empowering approaches has also contributed towards the new rise of community-based development. Community-based development relies on communities to use their social capital to organize themselves and to participate in development processes. Masuri & Rao (2004) define the three key concepts of community-based development as follows:

1) A community is made up of a culturally and politically homogeneous social system or a group that is at least implicitly internally cohesive, such as an administratively defined locale or a common interest group. However, defining a
community – drawing the geographic or conceptual boundaries of a community – is not always a simple task.

2) Participation refers to active involvement of members of a defined community in at least some aspects of project design and implementation. This would enable the incorporation of local knowledge into the project’s decision-making processes.

3) Social capital refers to the ability of individuals to build bonds within their own group and to connect and network with other groups; group activities are key source of a community’s strength and its ability to work for its own betterment.

Community-based approaches would often promote participation through institutions that organize people in the target communities, and build their capabilities to act collectively in their own interest. For example World Bank has included participatory elements in its development assistance (Binswanger-Mkhihe et al. 2010).

The fields of development and humanitarian aid are occupied by three types of actors; governments and inter-governmental organizations that provide official development aid, local authorities and non-state actors comprising of civil society organizations, private sector actors and trade unions (McCormick et al. 2009). While the amount of aid has grown significantly since the late 1940’s, Non-Governmental Organizations (NGOs) have been contributing to a growing share of all aid – reflecting the shift in the development discourse. In humanitarian assistance the share of NGOs and the Red Cross Movement is often more than half of all aid (Riddell 2008: 48, 317).

2.6. Disaster response – humanitarian assistance versus long term development

The main purpose of humanitarian assistance is indisputable – the aim is to save lives, alleviate suffering and enable those suffering to maintain or retain their human dignity during and in the aftermath of natural disasters and man-made crises (e.g. IFRC 1995). Beyond this general definition the content of humanitarian assistance has been much debated. The question whether humanitarian agencies can seek to address the underlying as well as the immediate causes of conflicts remains unsolved. On the one stand there are those who argue that the essence of humanitarian action requires the agencies to remain neutral and avoid taking sides. On the other stand there are those who think that a failure to speak out against those committing inhuman activities compromises the humanitarian
imperative (Riddell 2008: 327). Development of the principles of humanitarian action has brought some clarity to what humanitarian aid should comprise. For example it is now agreed on that humanitarian aid should aim at reducing future vulnerabilities to disasters, and that “disaster preparedness” requires building local capacities (e.g. IFRC 1995). A major question still without an answer is where the boundary between humanitarian aid and development promotion should be drawn (e.g. Cosgrave & Telford 2006; Riddell 2008).

To understand what constitutes humanitarian assistance it is useful to divide it in different, characteristic phases. The relief phase includes immediate life saving activities, rescue and search that takes place within a time period of the first few days to a few weeks of the disaster. It also comprises provision of food and drinking water, medicine and medical care, clothing, cash grants and temporary shelter. Major urban services are restored and debris is cleared. The length of the relief phase depends on variables such as the scale of a disaster, geographical location and local and international response. Certain relief activities, such as food aid or provision of temporary shelter can continue well beyond the relief phase (Cosgrave & Telford 2006: 30).

Recovery constitutes the most significant proportion of disaster response. Permanent recovery requires incorporating the affected people in mainstream socio-economic development. It involves restoration of livelihoods, reconstructing damaged buildings and building new settlements, provision of social and physical services to the settlements, social rehabilitation and development (Cosgrave & Telford 2006).

The above described set of procedures is depicted in the Classical Model for Disaster Recovery (Habitat 2001: 187–188; Siembieda, W. et al. 2004). The model that is illustrated in Figure 1 presents disaster recovery in four overlapping stages:

1) The Emergency response stage constitutes of the immediate rescue activities, provision of temporary shelter and food.

2) The Restoration stage emphasizes restoration of public facilities and services. For example, the health services are restored and schools reopened and debris removed.
3) The *Return to normalcy or Replacement* stage is characterized by the restoring or reconstructing of houses, commercial and economic activity and capital stock to the pre-disaster level.

4) The *Developmental reconstruction* stage features improvement of previous public and private production and distribution systems that occurs as a part of future growth and expansion.

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**Enhanced Recovery Model**

- Local planning. Empowerment of local authorities, system of re-integration
- Donor groups
- Stakeholder group relief programmes
- Mitigation & Risk assessment
- Site and service location analysis

**Classic Recovery Model**

- Developmental reconstruction – full recovery and improvements
- Replacement: Infrastructure & homes reconstructed, jobs replaced
- Restoration: Utilities restored, debris cleared
- Emergency: Immediate life saving and rescue activities

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**Figure 1: Model for disaster relief and recovery.** (Habitat 2001; Siembieda, W. et al. 2004)

Even though the model perceives disaster and the following disaster response and recovery as an opportunity to improve future development, it does not define through what kind of mechanisms future development can be achieved. It also fails to define how recovery can diminish the risk and consequences of a future disaster. The *Enhanced Recovery Model* takes these aspects into consideration. The Enhanced Model that is also included in Figure 1 includes three general areas of effort that are disregarded in the Classic Model.
5) **Mitigation and risk assessment** (simultaneously with emergency and restoration phases) to guide other development activities. For example water supply, access issues, landslide and flooding risks need to be evaluated before selecting sites for housing reconstruction.

6) Support by special donor groups or clusters that provide for disaster relief and often operate independently from the central government. In the implementation of relief programmes the humanitarian or development organizations have to link their headquarters’ policies and priorities with in-country field elements.

7) **Logical planning and empowerment of local authorities** combine mitigation, risk assessment and issues articulated by special donors. The process aims at initiation of a new national programme for integrated disaster preparedness, driven by special legislation (e.g. coastal building), improved leadership and support from international financing institutions. In this “new period of logical planning” recovery activities are designed to empower local authorities to develop and implement reconstruction plans, which incorporate local realities and allow full participation of all stakeholders.

In practice, reconstruction – and housing especially – absorbs the majority of the funds in disaster response. Housing strategies should be designed so that they improve future local development instead of hindering it (Habitat 2001: 187–188). Freeman (2004), for example, has questioned the current trend of channelling a growing share of reconstruction funds to house reconstruction. Freeman argues that investing in house reconstruction reduces a country’s ability to achieve macro-economic recovery and growth. House reconstruction may take place on the expense of rebuilding infrastructure, which is the main variable determining long-term impact of a disaster. Also the economic elite often manages to draw a large share of funds provided by governments, meanwhile those who are worst affected and most vulnerable are excluded. Thirdly, government support usually discourages investments by the private sector.

In a series of more recent studies disasters have been analyzed as socially constructed events, with a focus on the most vulnerable groups (e.g. Bankoff & Hilhorst 2004). Social processes create inequalities in the degree in which people are exposed to risk, making some people more prone to disaster – or more vulnerable to disasters. Poverty, resource depletion and marginalization are factors directly contributing to vulnerability. In a larger
context, vulnerability is an outcome of “the diversity of risks generated by the interplay between local and global processes and coping with them on a daily basis” (ibid.). The concept of vulnerability thus includes issues such as poverty, social security and sustainable livelihoods. Recovery activities are also understood in a broader sense and are more often directed to the empowerment of vulnerable groups, converting disaster response funds into development work supportive of for example women’s needs. In this case “recovery” is understood as development promotion.

Overall the dividing line between humanitarian aid and development promotion or assistance is very fluid. Many activities, such as disaster risk reduction and livelihood promotion include both types of assistance and, over time, an organization may provide both humanitarian assistance and development aid to the same group of people (e.g. Cosgrave & Telford 2006). In general, development promotion is always planned in long term and, to guarantee sustainability, it should be based on community participation and aim at increasing local capacities.

2.7. International standards and policies guiding humanitarian practitioners

There is already decades of knowledge in post-disaster response and many lessons have been learnt. The understanding of what constitutes a post-disaster response has become broader. While physical reconstruction and housing is essential to well-being and development, it must be understood that housing is a complex asset, linked to livelihoods, health, education, security and social and family stability (Barakat 2003). Policy makers as well as aid organizations have sometimes held the view that after a disaster has destroyed whole villages or towns, the reconstruction starts from scratch. This is not true though, reconstruction does not take place in a vacuum because social capital remains even if physical assets have been destroyed. More recent literature has started to emphasize the role of the affected population instead of minimizing them to plain victims (e.g. Bankoff & Hilhorst 2004). It has been widely recognized that post-disaster response should build on the capacities of the affected population and aim at creating more resilient communities that are able to survive future events with a minimum loss of life and property. This change of view is visible in the Enhanced Recovery Model as well as in different sets of principles that have been developed to improve humanitarian assistance.
*Build Back Better* is a popular phrase used to describe a recovery. After the Boxing Day tsunami in 2004, Clinton (2006)\(^1\) suggested ten proposals for defining the term. These propositions stress local ownership and management of the recovery and include broad statements such as “families and communities must drive their own recovery”, “local governments must be empowered to manage recovery efforts”, “recovery must promote equity and aim at future risk reduction” and that “different agencies and NGOs must be responsible for the quality of recovery efforts and create partnerships”.

There are several inter-agency initiatives established since the 1990’s to improve the efficiency, quality and accountability of humanitarian action. These different standards have their own focus areas and are intended to complement each other. Five of them are discussed below: The *Code of Conduct* sets the general values, attitudes and principles that humanitarian work is based on, serving as a reference point on a grand scale; The *Sphere Standards* is a more palpable and comprehensive set of minimum standards in various technical sectors that the agencies must aim to achieve; The *Humanitarian Accountability Partnership* focuses on accountability and quality in the non-profit sector. *ALNAP* works towards and facilitates learning from practice to improve performance and finally *People in Aid* promotes good quality in human resources management.

### 2.7.1. Code of Conduct

Code of Conduct is a set of ten principles for disaster relief applied voluntarily by the International Red Cross and the Red Crescent Movements and some other Non Governmental Humanitarian Agencies (IFRC 1995). The first four clauses of the Code emphasize the humanitarian imperative. The prime motivation for humanitarian assistance is to alleviate human suffering. Humanitarian assistance should be available to anyone, regardless of race, religion, nationality or political standpoint, and should be based on the needs of the disaster or conflict victims, while those who are suffering most should get help first. Furthermore, humanitarian assistance is independent from any government; it is not an instrument of the government or foreign policy of the donor government.

The Code of Conduct also assures respect of local culture and customs as well as recognition of local capacities and participation (clauses 5, 6 and 7). Strengthening of

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\(^1\) President Bill Clinton, United Nations Secretary-General’s Special Envoy for Tsunami Recovery.
local capacities can be achieved by employing local staff, trading with local companies, purchasing local materials, working through local NGOs and co-operating with local government structures. The communities should be involved in programme design, management and implementation to assure efficiency and sustainability. Accountability towards both the beneficiaries as well as the donors is achieved through an attitude of openness and transparency (clause 9). The clauses are similar to the principles that guide development promotion in general, but placed in the context of humanitarian aid.

Development principles are also integrated in clause eight, which suggests how to guarantee long term positive effects of relief aid. Relief programmes should aim at reducing the beneficiaries’ vulnerability to future events and help create sustainable lifestyles. Particular attention should be paid to environmental concerns in the design and management of relief programmes. Long-term beneficiary dependence upon external aid should also be avoided. Finally, clause ten emphasizes respect for and dignity of the disaster victims (IFRC 1995).

2.7.2. The Sphere Standards

The Sphere Project was launched in 1997 by a group of humanitarian NGOs and the Red Cross and Red Crescent Movement as an initiative to define and uphold a set of minimum standards for humanitarian assistance and outline the responsibilities of organizations providing assistance. The main output of the Sphere Project is the Sphere Handbook on Humanitarian Charter and Minimum Standards for Disaster Response describing principles of humanitarian action, minimum standards and indicators of response as well as different technical aspects, such as water and sanitation, food security, shelter and health. The project aims at raising the awareness of different humanitarian actors on quality and accountability by providing services, materials and training (The Sphere Project 2010).

The Humanitarian Charter serves as the ethical foundation, describing the core principles that govern humanitarian action, and asserting the right of populations to protection and assistance. The Charter and standards set by the Sphere are based on the recognition that an affected population “has the right to life with dignity”. “The right to life, to an adequate standard of living and to freedom from cruel, inhuman or degrading treatment or punishment” is defined in international law, including the Universal Declaration of
Human Rights. While it is the responsibility of the state to provide assistance when people’s capacity to cope has been exceeded, the states are not always able or willing to perform this role. The agencies’ role in providing humanitarian assistance reflects this reality (The Sphere Project 2004: 16–19).

The Sphere Standards emphasize the recognition of the most vulnerable groups, in particular women, children, elderly people, disabled people, people living with HIV/AIDS and ethnic minorities. The vulnerable groups may need more protection from malnutrition, exploitation and violence and they may face barriers in gaining equal access to services and support, which can result in further marginalization. The standards also highlight the need to recognize and support skills, capacities and coping strategies possessed by the vulnerable groups (ibid.).

The Sphere Common Standards are a set of eight core standards that are meant to be applied in the different technical sectors\(^2\). The first standard is (1) Participation – the disaster-affected population should be enabled to participate in decision-making throughout the project cycle. The next five standards determine best practices for the different phases of project cycle: (2) Initial assessment must be carried out to understand the disaster situation, assess the response by local and national authorities and other actors and to determine the nature of the response. (3) Humanitarian response is required when the relevant authorities are unable or unwilling to respond to the protection and assistance needs of the population, and when assessment indicates that these needs are not met. (4) Humanitarian assistance must be targeted equitably and impartially, based on the vulnerability and needs of the affected population. Changes induced by the programme and the effectiveness of the programme must be (5) monitored and a systematic and impartial (6) evaluation of humanitarian action must be carried out, intended to draw lessons to improve practice and policy and to enhance accountability. The last two standards discuss the aid workers. Firstly, aid workers must possess appropriate (7) qualifications, attitudes and experience to plan and effectively implement appropriate programmes. Secondly, aid workers must (8) receive supervision and support to ensure effective implementation of programmes (The Sphere Project 2004: 22–42).

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\(^2\) Technical sectors are 1) water supply, sanitation and hygiene, 2) food security, nutrition and food aid, 3) shelter, settlement and non-food items and 4) health services.
The Sphere Common Standards provide the best practices for each phase in the programme cycle, including indicators to measure how the standards are met. Standards specifying the minimum levels to be attained are defined separately for each technical sector, which are Water supply, Sanitation and Hygiene, Food Security, Nutrition and Food Aid, Shelter, Settlement and Non-Food Items and finally Health Services.

The *Sphere Standards on Shelter and Settlement* begin with by recognizing that everyone has the right to adequate housing. Key aspects of the right of housing include affordability, accessibility, suitable location and cultural appropriateness. The right to housing also extends to goods and services, such as sustainable access to natural and common resources including safe drinking water, energy for cooking, heating and lighting, sanitation and washing facilities, means of food storage, garbage disposal, site drainage and infrastructure, and to social facilities such as schools and health-care services and emergency services. People should have adequate space and protection from weather elements and from other threats to health, including structural hazards and disease vectors. Livelihood practices and opportunities should be considered when selecting the location and site for the housing. The style of housing, building materials and the policies supporting these must enable the expression of cultural identity and diversity of housing (The Sphere Project 2004: 207–208).

The affected population should be involved in settlement programmes throughout the whole project cycle, as is stated in the first Sphere Common Standard. Especially women should be consulted about a range of issues, such as security and privacy, sources and means of collecting fuel for cooking and how to ensure that there is an equitable access to housing and other services and resources. Settlement responses should be approved by the affected households, and they should also support communal coping strategies and incorporate self-sufficiency and self-management into the processes. The provision of temporary shelter and the construction of new, longer-term dwellings should utilize the skills and material resources available at the affected communities. The response should also minimize long-term detrimental impacts on the environment and maximize livelihood opportunities for the affected communities. Provision of appropriate non-food items, such as clothing, blankets and bedding may also be required to meet essential needs (ibid.).
There are six specific standards with key indicators for shelter and settlement. (1) Strategic Planning constitutes of prioritizing existing shelter and settlement solutions so that affected households could return to the site of their original dwellings or if this is not possible, settle independently within a host community. The households should be supported in repairing existing damaged shelters or in upgrading initial shelter solutions, while assistance to the hosting household may include support to expand or upgrade existing shelter to better accommodate the displaced household. (2) Local physical planning practices are used where possible, enabling safe access to and use of shelters, essential services and facilities and appropriate privacy. (3) People have sufficient covered living space where essential household activities can be satisfactorily undertaken and livelihood support activities can be pursued as required. Protection, safety and privacy issues must be addressed and existing cultural practices in the use of living space, for example the accommodation of extended family members, should be respected. It should be acknowledged that a shelter can serve different purposes, including the establishment of territorial claims or rights or representing a major household financial asset. (4) The design of the shelter must be culturally and socially acceptable; each affected household should be involved in determining the final form and materials used. The orientation of the individual shelter and the sizing and layout of the space should reflect local practices. Access to water supply and sanitation facilities, water storage, drainage and solid waste management as well as vector control measures (e.g. control of mosquitoes) must be taken into account in the design. (5) The construction approach must be in accordance with safe local building practices and locally derived standards of workmanship. Local livelihood opportunities should be maximized by favouring locally sourced materials and labour. The type of construction and materials must be selected so that maintenance and upgrading of shelters is possible using locally available tools and resources. (6) The adverse impact on the environment is minimized when the natural resources are managed in a sustainable way that guarantees that the ongoing and future needs of the affected population are met. Access rights to existing natural resources and the typical use and maintenance of existing land and wooded areas should be identified. Trees and other vegetation should be retained to increase water retention, minimize soil erosion and to provide shade (The Sphere Project 2004: 211–229).
2.7.3. Other guidelines: HAP, People in Aid and ALNAP

Humanitarian Accountability Partnership, HAP was founded in 2003 by a group of humanitarian agencies committed to promote accountability to people affected by humanitarian crises. Accountability is defined as “the means through which power is used responsibly” (HAP 2010). It can be understood as a process of taking into account the views of the people affected by authority and making sure that authority is used as agreed. Humanitarian organizations use significant power when assisting or acting on behalf of the people affected by a crisis. The affected population usually have no formal control, and often little influence, over these organizations. Thus, it is essential that the humanitarian work is done in a way that is accountable to those who are assisted (HAP 2010).

The first four HAP Standard principles of *Humanity*, *Impartiality*, *Neutrality* and *Independence* have been derived from the Code of Conduct reviewed earlier in this chapter. The latter six principles are specifically relevant to accountability. The principle of *Participation* – familiar from the Sphere Standards – refers to informing, listening and responding to feedback from the affected population during all phases of aid programmes. It is also required to meet recognized *minimum standards*, to *report* when the actions of others have a negative effect on the well-being of the affected population and to enable the people to raise *complaints* of inappropriate assistance. Other principles are *transparency* and *complimentary* that aim at ensuring transparent and responsible operation of the organization that works as a member of the aid community (ibid.).

*People in Aid*, established in 1995, promotes good practice in the management and support of employees and volunteers working in relief and development. *The People in Aid Code of Good Practice* comprises seven principles covering different aspects of human resources and management. The Code supports continuous improvement of human resources practices of NGOs, facilitates stakeholder engagement and measures improvement. The agency carries out workshops, research and exchange of information and publishes guidelines to improve the quality of human resources management within NGOs (People in Aid 2011).

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3 Concern for human welfare and respect for individual
4 Providing assistance in proportion to need
The **Active Learning Network for Accountability and Performance in Humanitarian Action (ALNAP)** established in 1997 is an international membership forum which aims to improve humanitarian performance through increased learning and accountability. Among other things ALNAP hosts a comprehensive evaluative reports database, produces papers on 'lessons learned' for particular types of emergencies and produces an annual Review of Humanitarian Action, which monitors the performance of humanitarian action through a synthesis of evaluative reports (ALNAP 2011).

### 2.7.4. Conclusions on the standards

The different sets of standards are in line with each other, sometimes overlapping but mostly reinforcing each other through different approaches (Table 2).

**Table 2: Summary of the four main sets of principles for humanitarian response**

<table>
<thead>
<tr>
<th>Area of guiding</th>
<th>Code of conduct</th>
<th>Sphere standards</th>
<th>HAP</th>
<th>People in Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanitarian imperative</td>
<td>Humanitarian imperative: Aid is given regardless of race, nationality etc.; Aid will not be used to further a political or religious standpoint; Act independently from government</td>
<td>The Humanitarian Charter: Affected population has the right to life with dignity.</td>
<td>Principles of Humanity, Impartiality, Neutrality and Independence</td>
<td>NA</td>
</tr>
<tr>
<td>Field operations</td>
<td>Respect culture and custom; Build local capacities; Involve beneficiaries in the management of aid; Reduce future vulnerabilities; Accountability</td>
<td>Emphasis on the most vulnerable; Community participation; Monitoring and evaluation to enhance effectiveness and accountability;</td>
<td>Participation of affected population; Meeting minimum standards; Complaint and reporting mechanisms; Transparency and Complimentary</td>
<td>NA</td>
</tr>
<tr>
<td>Sector specific</td>
<td>NA</td>
<td>53 minimum standards for 4 technical sectors</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Aid workers/Human resources</td>
<td>NA</td>
<td>Qualifications and attitudes of aid workers; Supervision and support</td>
<td>NA</td>
<td>Principles on human resources strategies, policies and management, consultation and communication, recruitment, training, health, and safety</td>
</tr>
</tbody>
</table>
Considering the high number and diversity of different actors in the field of humanitarian aid, standards and guidelines for best practices are crucial. However, following the standards is completely voluntary.

The value of Sphere Standards lies in their usefulness in practical situations. The Sphere Standards provide a way to turn the humanitarian principles into practice. They also help the aid workers to set priorities for their work. Furthermore, the minimum standards set a practical baseline against which the work and achievements of aid organizations can be evaluated, thus creating a basis for the accountability of humanitarian assistance. One of the weaknesses of the Sphere Standards lies in the strict focus on construction and rehabilitation activities, leaving out aspects related to broader realization of the rights of the affected population, provision of dispute settlement, access to justice and building of harmony among communities. This focus on technical aspects reflects the agenda of humanitarian assistance – which is to save lives and reduce suffering, instead of addressing the deeper causes of injustices.

The validity of Sphere Standards has been questioned based on its claim that the minimum standards are universally applicable. The idea that it is possible to set up universal standards that can be applied in any operating environment has been criticised by various authors and actors (e.g. Dufour 2004). The application of a set of ready-made, universal solutions discourages local and more suitable solutions to local disasters.

Although the standards discuss the best practices in humanitarian assistance (as emergency response), many of the principles are shared with the practices of “long-term development”. The first Sphere Common Standard – participation – which is also incorporated in the specific technical standards is a core principle in long-term development. Participation in the different phases of the project cycle strengthens local ownership of the projects and helps to reduce dependency on aid and to maintain positive changes in the future. Building of local capacities is reflected in the requirements to train and employ local staff and to obtain local materials. The implementation of these standards in practice is challenging because of the rushed and competitive nature of disaster response. Including all stakeholders in the project cycle takes time, which is often a very limited resource in disaster response; displaced people need shelter urgently and home offices of the aid agencies in donor countries are waiting quick results.
3. DEFINING THE STUDY

3.1. Research questions and methodology

At the core of the study is the change in settlement pattern brought about by the post-tsunami construction in Sri Lanka. This change is evident to anyone travelling in the areas affected by the tsunami in Sri Lanka, and it has also been discussed from different angles in a number of studies. The first objective of the research is to specify how the change stands out in a longer history of settlement and development policy, and to identify what the processes are behind the change brought by post-tsunami construction. The first research question is thus articulated as:

- What are the factors or processes that resulted in the post-tsunami settlement patterns characterized by high-density housing or apartment housing?

The second objective of this study is to determine how apartment housing accommodates or challenges people’s ways of life in predominantly rural areas. Ways of life refer to the pattern of life governed by the economy of the country and employment opportunities, social structure of the society, technological advancements, education etc. Ways of life are connected to the values, goals and aspirations of the people and persisting socio-cultural factors. Another way to evaluate the apartment housing scheme is to use the concept of sustainability, which is understood through five types of assets – physical, natural, economic, social and human assets - and to examine how these assets are achieved within the physical setting.

Apartment houses, physically defined as multi-story buildings comprising a number of living units or apartments but whose residents have conveniences, such as heat and lighting, in common, is a new form of housing in Sri Lanka outside the metropolitan area. The new residents are expected to find ways to adapt to the new settlement, and to create an environment that is more appropriate for their ways of life. Apartment housing development is also viewed as a part of disaster response. I will use the Sphere Standards for humanitarian assistance as the backbone against which I review the overall success of the housing scheme. The second research question is:

- How does the apartment housing model cater for the ways of life of the inhabitants? Is apartment housing appropriate to the culture and to the social and economic needs of the inhabitants?
By the *Apartment housing model* I refer to the physical setting as well as to the way it is maintained. Cultural, social and economic needs (or ways of life) refer, for example, to family or household structure, livelihood opportunities, privacy and security requirements, social intercourse and networks of reciprocity. Based on the analysis, the goal is to determine to what extent apartment housing is a socially sustainable model of settlements in semi-urban Sri Lanka.

The research falls within two main paradigms in geographic research: critical realism and humanistic geography (Shaw et al. 2010). Firstly, the analysis of the structural forces and mechanisms behind the post-tsunami settlement patterns aligns with critical realism. The focus of the analysis is on the national scale, but the demands and processes of international aid are also scrutinized. In line with this, the research will consider and critically observe relevant policy papers, national regulations and international agreements. Secondly, the analysis of the appropriateness of the apartment housing model to people’s ways of life draws from understanding and interpreting the various actions and attitudes of people, meanings that the dwellings have for the people, as well as the human reactions to place and the social construction of place. In accordance with the humanistic paradigm, the voices of the community members were heard through interviews, discussions and observations in order to gain the inhabitants’ perspectives on the post-tsunami housing and life in the apartment housing scheme.

Both secondary and primary sources were utilized in the data collection. Secondary sources consisted of planning and legal documents, different guidelines and policy papers. The document analysis aimed at forming an explanatory framework for actors, processes in post-disaster reconstruction and recovery. A comprehensive review of research related to post-tsunami reconstruction and recovery was carried out prior to the commencement of primary data collection.

Primary data collection took place in an apartment housing scheme (case study area) located in Kalmunai, in Eastern Sri Lanka. The scheme consists of several block houses with a high population density compared to traditional villages and is located outside the main population concentration of Kalmunai town. These characteristics are not uncommon to post-tsunami housing schemes in general. The majority of the residents live under the poverty line set by the government. Fishermen are the largest employment group, while the share of wage labourers and self-employed people is also substantial. It
was assumed that apartment housing would be more problematic in a setting with these characteristics compared to a scheme located within a town and whose residents were mostly regular, formal employees. Furthermore, the scheme was funded by the Finnish Red Cross, which also explains my interest towards the scheme.

The main field method was a semi-structured individual interview, but the range of methods also included a group discussion, village transect walks, sketching and observation. In addition, expert interviews were conducted with local government officials and Red Cross representatives. Such methodological triangulation guaranteed a broad perspective on the subject and contributed to the validity of the study. Choice of methods was also impacted by the language barrier – a translator was required to translate the interviews and discussions. To minimize translation and interpretation issues, participatory approaches such as sketching and village walks were preferred over in-depth interviews, life stories or narratives. The field research and the use of different methods are described in more detail in chapter 5.2.

The field research served primarily the second research objective as it aimed at collecting data to understand everyday life of people at the location, their perceptions on life in the new scheme and their notions on community formation. The apartment housing scheme that was selected for the case study functioned as the arena for people’s lives, experiences, fears and hopes. The field research also contributed to the first research objective through the assessment of the level to which the new residents took part in the reconstruction processes. The data collection and analysis methods were not purely hermeneutic, but also included measurements of objective attributes (i.e. population characteristics).

The broad purpose of the research is to produce scientific knowledge that can guide the formation of informed decisions regarding humanitarian or development assistance in reconstruction, as well as policy formation in the humanitarian and development contexts. The underlining purpose of the study is thus emancipatory in nature.

3.2. Definitions of terms

How the terms way of life and apartment housing are understood and used in the context of the study was explained above. The terms used for disaster response and the target people need further clarification. The terms used for different phases of disaster response
can be confusing, as the terms are used in multiple ways by different authors. In this study I use the term response (tsunami/disaster response) to discuss the whole ‘RRR’ process of relief, reconstruction and recovery, without distinguishing between different phases. The term reconstruction is used only when referring solely to physical reconstruction of housing and infrastructure (as in Cosgrave & Telford 2006). The term recovery is used when referring to the development work excluding the immediate relief.

How are the target people of the disaster response called then? In popular language they are often referred as “victims” of a disaster – a term that is easily disempowering. For donor agencies they are the “beneficiaries” of humanitarian assistance. Technically they often fall into category of “internally displaced”. The United Nation’s Guiding Principles on Internal Displacement (UNHCR 2004) defines internally displaced people as those who have been uprooted within their country by conflicts and human rights violations, or are displaced as a result of natural disasters or infrastructural projects. While these kinds of statuses may provide people with assistance and protection needed, they also affect how others see such persons (as victims that need to be helped) and they also affect one’s perception of oneself (e.g. Cosgrave & Telford 2006). Out of the terms used to describe people who have survived a disaster affected population is the most neutral, which is why it is used in this study. The term is used to describe all the people affected by the Boxing Day tsunami in one way or another, not only people who were displaced, or people who have received assistance.

4. POST-TSUNAMI RECOVERY IN THE SRI LANKAN CONTEXT

This chapter discusses the tsunami disaster, its impact and the following reconstruction, rehabilitation and recovery with a focus on Sri Lanka. I start the chapter, however, by providing a short introduction to the country, and then move on to present the history of settlement planning and urban-rural dichotomy in Sri Lanka, and how these link with general long-term development strategies and changes in the economic structure of the country. This will give a better understanding of the Sri Lankan society and the changes that post-tsunami response has brought to the settlement pattern, placing the post-tsunami settlement or RRR policy in a wider perspective.
4.1. **Introduction to Sri Lanka and housing facts**

Sri Lanka is an island nation located in South Asia, south of India, between the latitudes 5° and 10° N and longitudes 79° and 82° E (Figure 2). The population of 21 million is composed of three main ethnic groups. Sinhalese form the majority, comprising 75 percent, Tamils make up 17 percent and Sri Lanka Moor (or Sri Lanka Muslims) make up 8 percent. Tamils and Muslims both speak Tamil as their native tongue, while Sinhalese, who are predominantly Buddhist by religion, speak Sinhalese (Dept. of census and statistics 2001).

![Sri Lanka location in relation to Boxing Day 2004 earthquake epicentre](image)

**Figure 2: Sri Lanka location in relation to Boxing Day 2004 earthquake epicentre**

For a developing country, Sri Lanka has ranked remarkably high in human development indices, and has also been noted for its achievements in gender equality (UNDP 2010). The achievements in health and education have not been matched by equal economic development. Economic liberalization that has taken place since 1977 has brought economic growth, but has also led to uneven wealth distribution. The country has also suffered from a conflict between a separatist militant organization LTTE (Liberation Tigers of Tamil Eelam) and the Government of Sri Lanka. The conflict went on for nearly three decades and was brought to an end in May 2009, when the LTTE admitted
its defeat. The conflict together with the economic liberalization policies have led to regionally uneven development, with high poverty rates both within conflict-affected communities and across rural Sri Lanka more widely (Ruwanpura 2009).

Sri Lanka is for the most part a rural country. In 2001 14.6 percent of the population were urban, 80 percent were rural and the remaining 5.4 percent was counted as estate population living on plantations. Urban settlements are defined as settlements administered by municipal or urban councils while all the remaining settlements are classed as rural (Dept. of Census and Statistics 2001). This definition does not take into account population or economic characteristics, such as population density, or the main source of employment or income.

Single houses are the dominant type of housing, comprising over 86 percent of all housing units, while row houses (dominant type of housing in the estate sector) make up 5.5 percent and attached houses 3.5 percent. Houses are commonly built with bricks or cement blocks, with cement or mud floors and tiles, asbestos or metal sheets used for roofing. These materials are characteristic to permanent houses, which constitutes 70 percent of all housing units in use. Semi-permanent dwellings that make up the remaining 30 percent comprise of traditional rural dwellings built with sticks, daubed clay and thatched roofs, transitional housing or shelters in IDP camps, and huts and shanties in cities. Most households live in houses that are owned by a member of the household (82%); 7 percent of households live rent free in houses that are not owned by them, and 6 percent live in rented or leased housing units. Figure 3 show some basic statistics on house facilities. It is worth pointing out that as many as 80 percent of households use firewood as the main source of energy for cooking, and that 65 percent of households rely on well water. 80 percent have access to water toilets, while only 4 percent have no access to toilets. The statistics reflect the dominance of a rural lifestyle. Facilities, such as gas for cooking and pipe-born water, are more common in urban households than in villages (Dept. of Census and Statistics 2001). It should be noted that the housing characteristics are not necessarily a sign of poverty, but show people’s preferences. According to Weerasingham (1986), the use of firewood for cooking is a tradition relating to cooking techniques, dishes and taste preferences that have lasted through generations, even within wealthy families.
4.2. Past and future of settlement planning

This chapter discusses the popular settlement strategies of the country that, for the most part, have been based on an agrarian model with family owned and cultivated small holdings (Peiris 2006). Modernization of the production structure and shortage of new land for farming have brought the validity of these settlement policies under question (Braunmuhl et al. 2006; Gunaratne 2009). The new National Physical Plan introduces compact and high-density urban settlements that, in the future, would form the backbone for a spatially even development throughout the country (NPPD 2006).

4.2.1. Strengthening rural Sri Lanka

After the 1930’s, consequent to the beginning of national development efforts, the general development paradigm shifted from the plantation sector to rural development and agricultural production for domestic consumption. Since then, different settlement programmes have been at the core of Sri Lanka’s development policies. The housing construction has been guided by “One National Housing Policy”. The primary objective of the development policies (and housing policies) in independent Ceylon/Sri Lanka has been to elevate the living standards of the landless peasantry. This has been pursued by ambitious settlement programmes under which the settlers have either received small, modest houses on plots around half an acre (0.2 ha) in size, or have been provided with tools and building material for self-construction. In addition, the settler have been
provided with user rights to adjacent farmland (Peiris 2006, Gunaratne 2009). Even though the settlers have been defined as landholders, they have not been granted ownership of land per se. The specific landholder status prevented the settlers from selling the land, which suited the government’s demographic policies (Brun & Lund 2009). On the other hand, the peasant “ownership” of agricultural land was seen to raise the status of the tenant to that of the emancipated, self-respecting and self-employed farmer (Peiris 2006).

_Village Expansion_ (VE) that began in the late 1920’s was the first programme under which available land adjacent to villages within the densely populated wet zone was alienated and small land holdings were provided to the poorest segments of the village population along with financial subsidies for the construction of dwellings and other basic amenities. Expansion schemes came to an end in the mid-1970’s, but several other settlement programmes almost identical to the VE, such as the _re-awakening village_, were carried out until the 1990’s. By 1985, as much as 350,000 hectares had become under VE or village re-awakening schemes (ibid.). Peiris (2006) estimates – based on assumptions of an average allotment size of half an acre and an average family size of 4.5 persons – that the population within these schemes could amount to as much as 7.8 million. The village expansion schemes have sometimes been criticized for creating “spatial concentrations of poverty and deprivation”. The failure is connected to the characteristics of the land; Land available for the schemes was often physically marginal and degraded, the allotments were small and offered little scope for agriculture and were often located in the periphery of old villages with poor accessibility (Peiris 2006).

Parallel to the village expansion schemes the government has also supported a programme that has aimed at reducing the population pressure in the wet zone by relocating people to the sparsely populated northern and eastern parts of Sri Lanka, causing a spectacular geographical transformation in population distribution (Figure 4). This _peasant colonization_ of the Dry Zone has been founded on the same ideology as the VE schemes – an agrarian model where families cultivate individually owned small holdings based on resources available to each family. The schemes were meant to eradicate rural poverty as well as to provide the means for achieving self-sufficiency in rice production in Sri Lanka. Colonization schemes have been established in almost all parts of the Dry Zone although a clear focus has been in the central Dry Zone, consisting of the Anuradhapura, Polonnaruwa and Matale districts (Figure 4). These districts have
the most prominent prerequisites for irrigation, with terrain that is featured by low ridges and valleys, crossed by major rivers running through the area (Peiris 2006).

![Climate zones and location of Mahaweli development area](image)

**Figure 4: Climate zones and location of Mahaweli development area**

The Dry Zone colonization was accelerated since the 1970’s with the start of *Mahaweli Development Programme* that looked at harnessing the major Mahaweli River system for hydropower and irrigation purposes (Figure 4). The agrarian model was still the conventional peasant family farm model in which each settler family was provided 2.5 acres (1 ha) of irrigable land and 0.5 acres of homestead land. In addition, a cashew plantation and some agro-based industrial ventures were established which provided wage labour opportunities (Peiris 2006). The new settlements that were based on the principles of the *Central Place Theory* were different from the traditional villages in the north-central region both in size and character. While the traditional villages of the region comprised only about 20–25 houses and formed tight communities, bonded together by
relationships and shared caste and class, the new resettlements consisted of minimum of hundred houses and were very heterogeneous (Brun & Lund 2009).

It is estimated that about 250,000 households were settled in the Dry Zone settlement schemes during a period of over sixty years. Peiris (2006) points out that not all settlers came from the crowded rural areas of the wet zone, but overall about 35–40% of the settlers – in some schemes even a much larger share – were drawn from the same district where the scheme was implemented. The geographical transformation required a massive investment; it is estimated that settlement development in the Dry Zone has absorbed from 15 to 50 percent of public sector capital expenditure during the last six decades (Peiris 2006). The development of the settlement schemes has taken place centrally under the Mahaweli board (Karunatilake 1989, cit. Brun & Lund 2009).

Sri Lankans are said to be proud to be perceived as a peasant community, and in the social stratification system the farmer or govi caste is equal to the castes of kings. Another social stratification system is based on land ownership, according to which the status of a person is defined either as an insider or an outsider of a community. Outsiders have settled in a village more recently and they are thus considered as inferior to the indigenous settlers of a village (Dayaratne & Samarawickrama 2003).

4.2.2. Changing economic structures and challenges for settlement planning

Recent changes in the national production structure from an agriculture-based economy towards services and manufacture advocates updating in the settlement policy. Garment industry has been the most successful line of manufacturing and garments contribute to about half of all exports (Dept. of Census and Statistics 2011). At the same time, the traditional livelihoods, particularly farming and fishing, have been facing hardships due to changes in government policies. Agricultural policies have attempted to promote growth in the sector by shifting away from low-value paddy to high-value export crops. To encourage the change, the state support to small land-holder farmers in the forms of paddy marketing, low interest loans and other agricultural services has been declining. As a result of the diminishing focus on the agricultural sector the productivity and competitiveness of farmers have reduced, and agricultural labour force has been pushed to seek low-paid and unskilled jobs in the industrial and service sectors. The fishing
communities have faced similar threats, while industrial fishing is promoted at the expense of beach-based operations (Braunmuhl et al. 2006).

Gunaratne (2009) calls for a review and revise of Sri Lanka’s outdated settlement policy. According to him, land has now become a limited resource even in the Dry Zone, where the size of average land holdings has decreased, resulting in diminishing incomes from agriculture. The continuing rural population expansion in the Wet Zone highlands and in the Coastal Belt is not desirable due to the large extent of fragile eco-sensitive areas prone to natural disasters (Gunaratne 2009). New concepts of urban settlements should thus be given consideration.

In the future the urbanization rates are projected to rise, presenting a significant challenge to national and local governments in ensuring that urban development is sustainable (Pinnawala & Van Horen 2006). The National Physical Plan (NPPD 2006) outlines a vision according to which, by 2030, “Sri Lanka will have a sustainable pattern of development made up of a network of cities, towns and villages connected by an efficient infrastructure network”. Urban settlements are planned to be compact in their form and to contain high population densities. This will protect land from urban sprawls and haphazard development and provide more land for other uses. It also enables the appropriate infrastructure and services to be provided more efficiently. Cities that are spread evenly throughout the country will provide a range of employment, education, commercial and cultural opportunities within their spheres of influence. The settlement hierarchy includes, from top to bottom, metropolitan cities, with a population between one and two million, district cities, towns and villages surrounded by rural areas. Concentrations of population in metropolitan cities in the North-Central and Eastern regions will enable a range of higher order services, acting as a ‘counter magnet’ to Colombo, and creating more regionally equal development (NPPD 2006).

4.3. The Boxing Day tsunami and tsunami response

This chapter first illustrates the impact and damage caused by the Boxing Day Tsunami, after which the government response, institutions of tsunami response and plans and policies are examined. The recent economic policies presented in previous chapter help to understand certain aspects of the government response and recovery plans, which seem to contradict with actual losses and primary needs of the affected population. After the
government response the response by non-governmental local and international organizations is scrutinized.

4.3.1. The impact

The 2004 Boxing Day Tsunami caused devastation in fourteen countries around the Indian Ocean region. Sri Lanka was among the most severely hit countries; it is estimated that the directly affected population amounts to about one million. Over 35,000 people lost their lives and more than half a million people were displaced (GoSL 2005). In addition, there were already some 350,000 people who were displaced by the on-going conflict (CARE 2005, cit. Boano 2009). Table 3 shows some of the main human, economic and social impacts of the tsunami. The geographical scale was vast, as the tsunami swept over two thirds of the island’s coastline within 13 districts (Figure 5). According to the official sources, the reconstruction, rehabilitation and full recovery was projected to take three to five years, costing about 2.2 billion US dollars (GoSL 2005).

Table 3: Human, economic and social impacts of the tsunami in Sri Lanka

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Number/Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Human</strong></td>
<td>Number of casualties</td>
<td>35,322</td>
</tr>
<tr>
<td></td>
<td>Number of injured</td>
<td>21,441</td>
</tr>
<tr>
<td></td>
<td>Number of internally displaced</td>
<td>516,150-800,000*</td>
</tr>
<tr>
<td></td>
<td>Number of affected people</td>
<td>2 million</td>
</tr>
<tr>
<td><strong>Economic</strong></td>
<td>Value of lost assets</td>
<td>US $ 900 million</td>
</tr>
<tr>
<td></td>
<td>Number of lost livelihoods</td>
<td>150,000</td>
</tr>
<tr>
<td></td>
<td>Number of damaged or destroyed houses</td>
<td>98,000</td>
</tr>
<tr>
<td></td>
<td>Proportion of destroyed fishing fleet</td>
<td>75 %</td>
</tr>
<tr>
<td></td>
<td>Extent of salinated agricultural land</td>
<td>23,449 acres</td>
</tr>
<tr>
<td></td>
<td>Number of damaged hotels and other tourist related enterprises</td>
<td>511</td>
</tr>
<tr>
<td><strong>Social</strong></td>
<td>Widowed, orphaned and affected elderly and disabled</td>
<td>40,000</td>
</tr>
<tr>
<td></td>
<td>Number of damaged health facilities</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td>Number of damaged education facilities</td>
<td>201</td>
</tr>
<tr>
<td></td>
<td>Number of schools used as camps for IDPs</td>
<td>446</td>
</tr>
<tr>
<td></td>
<td>Number of affected school children</td>
<td>200,000</td>
</tr>
</tbody>
</table>

(GoSL 2005; Boano 2009) *Number of internally displaced depends on source.
Figure 5: The districts affected by the tsunami in Sri Lanka. Number of houses damaged or destroyed within the affected districts and the percentage of displaced population out of total population of the district. Based on Government of Sri Lanka statistics from 2006 (cit. Jayasuriya & McCowley 2010).

4.3.2. Institutions of official tsunami response

In a post-disaster environment, central-level task forces are often required to coordinate the response and manage the relief and reconstruction resources (Lyons 2009). In Sri Lanka, two main presidential task forces – TAFOR (Task Force for Relief)\(^5\) and TAFREN (Task Force for Rebuilding the Nation) – were ad hoc post-tsunami coordination bodies founded by the government and headed by political appointees.

\(^5\) TAFOR was formed in February 2005 by merging two initial task forces - TAFRER (Task Force for Rescue and Relief) and TAFLOL (Task Force for Logistics, Law and Order).
TAFOR had the mandate to provide relief to the affected population and coordinate the relief operations, while TAFREN was the main institutional mechanism to coordinate, facilitate and assist implementing agencies in the recovery and reconstruction (GoSL 2005).

The members or TAFREN belonged mostly to the business elite of the country: out of ten members, two were senior political advisors, two were heads of national banks and the rest six were leaders of some of the largest corporations in the country – almost all having connections to tourism industry. The competence of the task force was questioned, as the members had no experience of recovery processes and little knowledge about the needs or interests of the affected population, who were mostly involved in beach-based fishing, small-scale farming or informal industries. On the contrary, there were existing conflicts between the coastal communities and the investors involved in the tourism industry over the use of beaches and the sea (Braunmuhl et al. 2006).

Following the appointment of president Rajapaksa in November 2005, all institutions involved in RRR were integrated under the newly established Reconstruction and Development Agency (RADA), which was designed to act as a single government agency and focus on the reconstruction and development of tsunami affected areas. The coordination functions of RADA included needs assessment, the identification of donors for projects, and developing tools and systems to monitor the implementation of projects (RADA 2006; GoSL 2010). The Tsunami Housing Reconstruction Unit (THRU), which is placed under the RADA structure, operates on district and divisional levels and works with the Village Rehabilitation Committees that operate at the village level (GoSL 2005).

It has been criticized that by mandating TAFREN to design the recovery and reconstruction, the ministries and state institutions that are responsible and have experience in such development were sidelined from the planning processes. In this situation, the role of local governments is determined by the level of their representation in the task forces. In most cases in Sri Lanka the representation has been weak. There were cases when the local administrations did not receive any official information on the plans, but depended on newspapers and NGO field staff who received information from their head offices in Colombo (Braunmuhl et al. 2006).

According to Lyons (2009), this kind of centralization is a common phenomenon in post-disaster environment. There are several general explanations to the centralized approach
that can also be applied to the tsunami reconstruction. Firstly, housing scheme plans must be integrated with decisions on infrastructure and a range of services, which means that central planning is often essential. Secondly, local government infrastructure was damaged by the disaster, diminishing the local government’s abilities to take over the reconstruction properly. Thirdly, the ability of beneficiaries and communities to participate depends on the scale of the project. Donor-driven housing was often carried out in a relatively small number of large-scale projects, rather than as a large number of small-scale projects (Schilderman 2004; Lyons 2009).

4.3.3. Post-tsunami reconstruction, rehabilitation and recovery policies and strategies

The reconstruction and rehabilitation plans presented by TAFREN focus exclusively on infrastructure. Roads were the single largest budget item, including plans for upgrading the main roads into four-lane highways. The budget on roads accounted for about 16 percent of the total financing, despite the fact that the tsunami’s damage to roads in Sri Lanka was minimal. New harbours, anchorages and onshore facilities also got supported (Rebuilding Sri Lanka (2005) cit. Braunmuhl et al. 2006). While harbour development promotes large-scale, high-profit fishing industries along the coast, the livelihoods of traditional beach-based fishermen were placed under threat. Such large-scale infrastructure projects had been previously delayed by local protest and legal challenges, but were pushed through in the tsunami aftermath (Braunmuhl et al. 2006; Klein 2008). This ‘indirect recovery strategy’ relies on the assumption that investment on infrastructure will attract long-term private investments, which will eventually promote development and well-being in the region. The impacts of the strategy should be realized soon, as the large infrastructure projects are nearing completion: the largest port of the country was opened in Hambantota in November 2010, and the first highway in the country, between Colombo and Galle, was opened in November 2011.

In addition to the infrastructure projects, TAFREN had also generated plans to remodel the coast, initially by upgrading 62 existing townships into “modern townships” that were to function as growth centres leading to a balanced development in the country, and by establishing 15 tourism zones. The development of these townships was planned to include the construction of infrastructure, such as administrative complexes, court
buildings and bus terminals, sewerage systems etc. However, these plans had little reference to the actual situation in the affected areas or to the interests of the affected population. Again, these plans have not been put to practice on such a large scale as was intended (Rebuilding Sri Lanka (2005) cit. Braunmuhl et al. 2006).

One explanation for the magnitude of the tsunami disaster was the poor planning and coastal zone regulations that had contributed to rapid population growth and high population densities in the coastal zone. To reduce vulnerability in the future, the government of Sri Lanka made a decision to impose a no-build buffer zone along the tsunami affected coastlines. Along the Northern and Eastern coastlines the buffer zone was originally 200 meters wide and in more densely populated Southern and Western coastlines a hundred meters from the mean high tide mark. With the Revised Tsunami Housing Policy released in May 2006, the buffer zone limits were reduced to 100 meters and 50 meters respectively (RADA 2006). The importance of construction setbacks has been widely recognized by different international institutions that are taking part in the rehabilitation and reconstruction. The guiding principles for reconstruction, which were endorsed by the affected nations and supporting agencies, consider construction setbacks as one important method to reduce vulnerability of coastal communities (UNEP/GPA 2005). The guidelines see coastlines as increasingly hazard-prone, due to rising sea levels and changing weather patterns.

Klein (2008) portrays the buffer zone policies in a more critical way. In her bestseller book “The shock doctrine” she claims that the atmosphere of panic in post-tsunami Sri Lanka was used by foreign investors and international leaders to take over the valuable coasts in order to develop tourist resort areas, at the same time blocking out local communities as elements that would hinder the development of the tourism sector. In fact, the original plans by TAFREN (Rebuilding Sri Lanka (2005) cit. Braunmuhl et al. 2006) did include development of tourism zones on the coasts. Several researches have expressed their concern about the linkage of buffer zone policies and “no-go zones” on the coasts with the promotion of high-end tourist resorts (e.g. Braunmuhl et al. 2006). Undoubtedly, implementation of buffer zones slowed down the resettlement, as donors and government bodies struggled to identify alternative land, and sometimes people refused to move, especially when uncertainties existed concerning the extent of the buffer zone.
The government policy developed two main strategies for housing construction, depending on whether the displaced family previously lived within the newly established buffer zone or not. Under the *owner driven program* (ODP), all affected households located outside the buffer zone and that could prove ownership of land (or had a permit from the house owner) were provided with grants by the state to undertake building work ‘in situ’. The *Donor driven program* (DDP) was targeted at all those people whose houses were within the buffer zone and who had to be relocated to new settlements. Before the changes in the extension of the buffer zones, the shares of the owner driven scheme and the donor built programme were equal. However, the revised buffer zone changed the proportions, to approximately 70 percent owner driven and 30 percent donor driven (RADA 2006).

While both programs are a product of centralized policy making in the sense that they were both designed by the Government and implemented by TAFREN, they present very different approaches to reconstruction. The owner driven programme is an example of decentralized reconstruction. A home-owner who filled the criteria received a cash grant of LKR 250,000 for a completely damaged house and LKR 100,000 for a partly damaged house – the payment was based on damage assessment done on the site by a team comprising of village official and technical staff from THRU or NHDA. The house plans were a subject to approval by the Urban Development Authority (UDA) and had to meet minimum standards (RADA 2006, Lyons 2009). In addition to state grants, home-owners were free to engage with NGOs, who often provided them with other type of assistance, such as additional payments, labour, materials and technical assistance. The scale of support by NGOs has varied from contracts with individuals to contracts with communities, and from single houses to village plans. Despite the involvement of NGOs, much of the site management was carried out by home-owners. Because the houses are mostly located within or close to existing settlements, there was no need for large-scale infrastructure work (Lyons 2009).

The donor driven program comprised a chain of contracts between high-scale actors. At the start of the donor driven reconstruction a Memorandum of Understanding (MoU) was signed between the government and collaborating international NGOs to define the division of labour between them and to outline the institutional relations and responsibilities among them. The primary responsibility of the government was to allocate land for building sites and to provide essential services up to the relocation site.
The donor agencies were in charge of the house construction and internal infrastructure, while the work was contracted to professional construction companies (Emmanuel 2005). Prototype houses and site plans were developed by NGOs and approved centrally by the UDA, in the interests of speed and equity, which suited well the donor agencies that were interested to produce tangible results in short time frames (Lyons 2009). In other words, the construction process was highly centrally planned, top-down, with government holding the ultimate control over the process (Brun & Lund 2009; Lyons 2009).

4.3.4. Response by civil society organizations – the second tsunami wave

Due to high media visibility, the disaster response was funded rapidly and generously. By the end of 2005, USD 2.1 billion had already been committed by the international community and an estimated USD 0.6 billion had been disbursed (GoSL 2005). Generous private funding reinforced the role of NGOs and the Red Cross Movement, which alone often had more funds than the donor administrations (governments) or multilateral organizations (e.g. Cosgrave & Telford 2006).

The immediate relief phase was mostly successful in reaching its goals. There were no records of cases of hunger or epidemics after the tsunami, nor were there any records of death attributable to poor disaster management. The solidarity and mutual help shown by individuals, organizations and government agents on local levels was indispensable during the first days, and could have laid the basis for harnessing community support for relief and recovery efforts that were to follow. Schools, health facilities and services were partly restored within a few months (e.g. Cosgrave & Telford 2006).

All humanitarian aid agencies, whether local, national or international, had to face various constraints and complex situations. In the worst hit Eastern and Northern provinces of Sri Lanka the tsunami response was complicated by the armed conflict, and there were areas that were not reachable due to security reasons. Attempt to form a joint mechanism between the government and LTTE to govern the distribution of international aid ended in a failure in June 2005, and the government remained the official coordinator of aid throughout the country (Braunmuhl et al. 2006). In general, the work of aid agencies was exacerbated by centralized and politicized decision-making, confusing and bureaucratic official policies and procedures, as well as concerns about corruption and distrust of local leaders. Furthermore, the undertakings in permanent recovery often
involve factors, such as land rights and availability, which were outside the control and competence of humanitarian relief agencies (Cosgrave & Telford 2006:17).

Generous private funding resulted in a situation where the absorption capacity of the humanitarian industry was often exceeded, and the sector was flooded with new INGOs, NGOs and CBOs – registered and unregistered. Coordination of the expanded number of actors proved to be challenging. Many of the new organizations suffered from insufficient experience and competence. The constraints within the international and local agencies included lack of qualified personnel, inappropriate programme methods and tools and weak engagement in coordination (ibid.). Braunmuhl et al. (2006) criticizes INGOs for their lack of knowledge and sensitivity regarding the conflict structures in the Northern and Eastern provinces and ill-fitting weak state assumptions stemming from their African experience. Subsequently, according to Braunmuhl et al. (2006), the INGOs “held little respect for local governmental and civil society structures and made even less effort to attune to local mores and preferences…Local government structures were partly deliberately sidelined, partly its personnel bowed to the financial weight of the INGOs.” This is in glaring contradiction with general principles that emphasize the need to support government offices and other public institutions to become drivers of development. According to Cosgrave & Telford (2006), the agencies’ pressure to spend money quickly and visibly, within strict project timelines, also worked against the principles of strengthening national and local capacities and supporting local ownership. In general, beneficiary consultation, accountability and complaints mechanisms were not proportionate with the scale of funding. In this process the citizens in distress became beneficiaries instead of owners or drivers of development. Furthermore, the projects were mostly focused on immediate life and livelihood support, without considering longer-term development (Braunmuhl et al. 2006). Interventions that failed to recognize local ownership and instead excluded the beneficiaries can undermine future development and lead to greater inequalities.

4.3.5. Evaluating post-tsunami reconstruction

It was recognized early on that permanent housing reconstruction would take several years. Emergency shelters that were provided in public buildings such as schools, temples and tents could provide only a very temporary solution. Consequently, it became obvious that transitional shelters that would bridge the gap between emergency accommodation
and permanent housing were required. The Transitional Accommodation Project (TAP) was designed by UNHCR to facilitate the construction of transitional shelters. By the end of August 2005 over 50,000 shelters had been constructed by local and international NGOs, the UN family agencies, private donors and local authorities. The rest of the IDPs had found accommodation in host families – in homes of relatives and friends (Boano 2009).

As the initial effort in the housing sector was directed on building and upgrading transitional shelters, in 2005 only about 5,000 permanent houses had been completed. The Revised Tsunami Housing Policy released in May 2006 was designed to accelerate the housing construction and to provide a house for each destroyed house regardless of land ownership, thereby increasing the total housing needs from 98,500 to approximately 120,000. The ambitious aim of the new policy was to provide a home, whether on site or by relocation, to all affected persons by the end of 2006 – which apparently would not met (RADA 2006). As late as in 2010 there were people still living in the transitional shelters, waiting to receive a permanent house. Table 4 shows the rate of permanent housing construction as of November 2006.

Table 4: Housing requirements and houses completed under different housing programmes as of the end of November 2006

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Requirement</th>
<th>Completed</th>
<th>Completion rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner driven houses</td>
<td>79 184</td>
<td>46 532</td>
<td>59</td>
</tr>
<tr>
<td>Donor driven houses</td>
<td>29 830</td>
<td>14 488</td>
<td>49</td>
</tr>
<tr>
<td>Houses by private donors</td>
<td>5000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self driven relocation</td>
<td>13 416</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>total</strong></td>
<td><strong>109 014</strong></td>
<td><strong>79 436</strong></td>
<td></td>
</tr>
</tbody>
</table>

(RADA 2006, Jayasuriya & McCawley 2010).

The self driven relocation approach shown in table 4 was intended to support relocation of families on their own terms. It consisted of cash grants provided by the government to the affected households located within the buffer zone for purchasing land and constructing a house. The international donors however were mostly reluctant to channel funds in this manner, and donor driven housing remained the second important housing strategy (Jayasuriya & McCavley 2010).
The owner driven programme, which is an example of a community-based development approach, turned out to be more successful in terms of the number of houses repaired and constructed. Table 4 shows that nearly two years after the tsunami, 59 percent of houses under the ODP were completed, while the figure for the DDP was just below half. More remarkable is the number of houses completed under the ODP – which is over three times more compared to the DDP. According to Braunmuhl et al. (2006) this is because, in general, the participants of the ODP were able to start (re)construction or repairing much more quickly and on their own initiative, while the donor driven housing was slowed down, due to the long process of identifying and acquiring available land.

A number of reports have shown that generally, the beneficiaries of the ODP are more satisfied with quality of construction than the beneficiaries of the DDP. This is probably due to the commitment of the homeowners to manage the construction. They were often themselves in charge of hiring labour and purchasing materials, frequently inspecting the quality of work and materials. The donors of the DDP, on the other side, were often not able to provide adequate technical supervision to follow up the quality of work and materials overtaken by contractors. This has resulted in uncertainty over who is responsible for flaws that have been reported in buildings already handed over to the owners (Lyons 2009).

Both programmes have been affected by the rise of construction costs that resulted from the high demand for building materials and labour and underlying inflation. In the ODP the sum received by the government was often inadequate to complete construction, and many of the houses stayed unfinished. The increased costs also put contractors under pressure, which ultimately showed in the quality of the houses (Ingirige et al. 2008, Boano 2009).

As in community-based development programmes generally, the participants of the ODP were in charge of the development efforts throughout the project, and thus reconstruction took place on their own terms. The people under the ODP took responsibility and ownership of the housing programmes, while those who fell under the DDP were often sidelined from decision making. Despite the fact that participation of beneficiaries and their communities in needs assessment and reconstruction planning and implementation is widely acknowledged, the role of beneficiaries of the DDP was often minimal. This also affects people’s ability to address any shortcomings and future challenges; those who
have taken ownership of their own house construction are better equipped to tackle problems and undertake maintenance of the house when compared to those who received ready-made houses without taking part in its planning, design, choice of materials, and construction.

It can be concluded that the DDP has been largely unsuccessful in meeting its development objectives. The number of houses built has stayed short of what was planned, construction has been delayed and costs have exceeded the original budgets. The owner driven program has performed better on both quantity and quality than the donor driven programme (e.g. Lyons 2009).

Restoring livelihoods requires a shift from relying on cash grants and food assistance towards sustainable economic activities. Several studies have proved that it has been problematic to link settlement to safety and livelihood. Boano (2009) has shown how livelihood issues were ignored when relocation sites were selected, and for example fishermen, traditionally living on the coast, were located far inland.

Also the community networks have been disregarded in the relocation programmes. Traditionally the communities in Sri Lanka are settled along ethnic lines (Action Aid 2006). According to Boano (2009), the resettlement process has “resulted in unnatural social settings, where people from different social, cultural and economic backgrounds were brought to live together” in densely populated resettlements. The disruption of community networks and the fact that it has often been difficult for the residents to attain a sense of community in the unplanned resettlement schemes have resulted in increased vulnerabilities (ibid.).

Ruwanpura (2009) among some other researchers (e.g. Cosgrave & Telford 2006) has argued that the existing spatial inequalities in socio-economic wellbeing were often reinforced by the tsunami response. For one thing, due to restricted accessibility, the war affected areas of the Northern and Eastern Provinces often received less assistance and in a slower pace. Ruwanpura draws attention to how the complex ethnic geography played a part in the tsunami aftermath, pointing out how marginalized, politically invisible ethnic communities or social groups easily became neglected. As one example he uses a Muslim community in a conflict stridden Batticaloa district that claimed they did not receive adequate consideration because their voices and concerns did not carry the same weight as those of the Tamils in the area. In this political reality, “the ability of each ethnic
community to garner political patronage was crucial for their social and domestic welfare” (Ruwanpura 2009).

5. APARTMENT HOUSING AND ITS IMPLICATIONS TO RESIDENTS

The findings from the case study area, Periyaneelavanai, are presented in this chapter. Before presenting the analysis of the case study housing scheme in chapters 5.3 – 5.7 I will introduce the case study area, Kalmunai municipality, with some basic demographic and socio-economic facts, and then present the field research and methods in more detail.

The purpose is to answer the research question of how the apartment housing model accommodates or challenges the ways of life and livelihoods of the residents. The appropriateness of apartment housing model to the residents’ culture and social and economic needs is evaluated. The term “apartment housing model” is broken down to more concrete characters, such as apartment layout (layout of a single apartment), housing scheme layout and location, and the way of maintaining commonly owned property. Cultural, social and economic needs refer, for example, to family or household structure, livelihood opportunities, privacy and security requirements and networks of reciprocity. Based on the analysis, I attempt to answer to what extent apartment housing is a sustainable model for settlements in semi-urban Sri Lanka.

Based on the discussion in previous chapters, certain assertions regarding post-tsunami housing can be made. The validity of these assertions in their application to the case study settlement is scrutinized. Most importantly, the donor driven strategy has been shown to be very centralized, with little or no space for participation of the beneficiaries. Lack of participation is known to cause dissatisfaction among residents. The extent to which this is true, and how dissatisfaction is experienced in the case study scheme, is one of the questions in this chapter. Secondly, linking livelihoods to the new settlements has been proven to be problematic, especially in relocation schemes. The livelihood constraints within this scheme are expected to rise from the specific form of housing rather than from the location of the scheme. Thirdly, the community networks are claimed to have been disrupted in the relocation process. Can this claim be extended to the case study scheme, or has the community and social networks remained intact?
5.1. Introduction to Kalmunai Municipality

The case study area is located in the Kalmunai Municipality that falls into the Ampara District in the Eastern Province (Figure 6). Administratively Kalmunai is divided into three Divisional Secretariat (DS) divisions: Muslim Kalmunai DS, Tamil Kalmunai DS and Sainthamaruthu DS (Figure 7).

![Map of Ampara District and Kalmunai Municipality](image-url)

Figure 6: Location of Ampara District in Sri Lanka and Kalmunai Municipality in Ampara District.
The population of the municipality area amounted to close to one hundred thousand in 2007 (Table 5). The population density is as high as 670 people per square kilometre, compared to the district average of 145 people. When measured in population, Kalmunai is the largest city within the Ampara District, while the Ampara Urban Council comes second with a population of 21,713. Muslim Kalmunai and Sainthamaruthu are inhabited exclusively by Sri Lankan Moor (commonly referred to as Muslims), while the population of Tamil Kalmunai consists of Sri Lankan Tamils (90.4%), Moor (6.7%), Sinhalese (0.9%) and others (2%) (Dept. of Census and Statistics 2007).
The 2004 tsunami caused serious damage to the Kalmunai municipality. Over 22,000 families were initially evacuated. The number of displaced families was 17,272. Vast majority (87%) of the displaced families found shelter within host families, i.e. with relatives, while the remainder of the families was accommodated in camps set up for the internally displaced. The number of internally displaced families prior to the tsunami, mostly due to the conflict, was 1,700 (Kalmunai MC 2011).

The number of damaged or fully destroyed houses in the Kalmunai municipality (excluding Sainthamaruthu) was 7,886, comprising 40 percent of all houses. Nearly half of the damaged houses were located within 200 meters from the coastline – in the area of the initial buffer zone (Kalmunai MC 2010). The population is concentrated on a stretch of land bordered by the Bay of Bengal in the East and wetlands and paddy fields in the West. The two distinct ethnic communities live in separate, densely populated concentrations, which are located just one after another along the coastal belt (Figure 7). These characteristics combined with buffer-zone restriction made land acquisition especially challenging in Kalmunai.

Despite urban-like population densities, agriculture and fishing are the main economic activities in Kalmunai. Rice is the primary crop; the extent of land under paddy cultivation is altogether 7,600 acres in the Muslim and Tamil Divisions. Paddy cultivation is dependent on irrigation, which is supported by village irrigation tanks. Kalmunai is also an important trading centre within the Ampara District. Trading activities are concentrated along the main roads. Fish is one of the major trading commodities. There are no large-scale industries in Kalmunai. However, there are over a hundred small and medium scale rice mills as well as other food packing industries, several small timber factories, weaving factories and printing presses. The government is the main single employer in the municipality area (Kalmunai MC 2010).

### Table 5: Population characteristics for Kalmunai Municipality

<table>
<thead>
<tr>
<th>Divisional Secretariat</th>
<th>Population</th>
<th>No of families</th>
<th>Area (Sq. Km)</th>
<th>Population Per Sq. Km</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muslim Kalmunai</td>
<td>42,852</td>
<td>12,119</td>
<td>67</td>
<td>640</td>
</tr>
<tr>
<td>Tamil Kalmunai</td>
<td>29,025</td>
<td>8,059</td>
<td>69</td>
<td>421</td>
</tr>
<tr>
<td>Sainthamaruthu</td>
<td>25,147</td>
<td>6,943</td>
<td>9</td>
<td>2794</td>
</tr>
<tr>
<td>Total</td>
<td>97,024</td>
<td>27,121</td>
<td>145</td>
<td></td>
</tr>
</tbody>
</table>

(Dept. of Census and Statistics 2007)
5.2. **Field research and methods**

Qualitative field research was conducted in Kalmunai between 14\textsuperscript{th} and 25\textsuperscript{th} of November 2010. Being the implementing organization, the Red Cross (RC) Ampara office provided me with an indispensable entry point into the housing scheme, the residents of which were the target population. The initial introduction to the active members of the community was provided by the local RC field officer. An interpreter was necessary to translate the interviews conducted by me, from English to Tamil and vice versa.

While individual semi-structured interviews were the primary data collection method, other methods – observations and village walks, group discussions, sketching exercises and expert interviews – were used to support, question and complement the data gathered through the interviews. This kind of methodological triangulation ensured a wide range of angles or standpoints to the topic and increases the validity of the results. The sketching exercise and the SWOT\textsuperscript{6} analysis were the two Participatory Rural Appraisal (PRA) methods used in the field.

**Table 6: Sample size per primary data collection method**

<table>
<thead>
<tr>
<th>Method</th>
<th>Sample size</th>
<th>Sampling frame and approximate size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual semi-structured interviews</td>
<td>20 (11 women, 9 men)</td>
<td>Adult population permanently residing in the scheme (100 – 340)</td>
</tr>
<tr>
<td>Sketching exercises/discussions</td>
<td>12 women</td>
<td>Female adult population permanently residing in the scheme (50-170)</td>
</tr>
<tr>
<td>Group discussion</td>
<td>6 (committee members)</td>
<td>Housing co-operative committee (total of 12 members)</td>
</tr>
<tr>
<td>Village transect walks</td>
<td>9 (active community members)</td>
<td></td>
</tr>
<tr>
<td>Key Informant Interviews</td>
<td>4 (Committee president, village officer, District Secretariat, Red Cross officer in Ampara office)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>51</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 6 shows the sample sizes and sampling frames for each data collection method. Those apartment owners who are not permanently residing in the scheme and whose apartments are empty were excluded from the sampling frame. This was due to

\[6\] Strengths, Weaknesses, Opportunities and Threats
practicality and sampling difficulties – it would have been challenging to reach such former or irregular residents. The sampling method was based on access to target population (convenience sampling, e.g. Jensen & Shumway 2010), i.e. those who could be approached in the courtyard area. However, attention was paid to ensure that the sample is as representative of the sampling frame as the conditions (time constraints, lack of demographic data of the residents) allowed.

Semi-structured interviews of the residents created the backbone for the study. The purpose was to collect information on the residents’ current living conditions, their perceptions on different aspects of life in the scheme, including livelihood opportunities and the functioning of the community. The original questions were delineated based on the observations from the ground, and further probing was done as the interviews proceeded. The open nature of the interviews helped to gain a deeper understanding and minimized the chance of misunderstandings. The interviewees were selected and invited by me from among the residents. The respondents were filtered to ensure that the sample consisted of both women (11 respondents) and men (9 respondents) and represented all adult age groups and different employment categories. There were no statistics available to structure a sample that would be fully representative of the community. As the sample size of the interviews is only twenty, it is not adequate for a statistical analysis – which was not the intention either. Instead, in line with the hermeneutic interest, the purpose was to allow the residents to tell about their life within the scheme and to speak out their reasons for contentment or disappointment, their problems, challenges and successes related to their life in the scheme.

The age of the interviewees varied between 18 and 75, average age being 38. The number of members in the household varied between one and nine, average being four. About half of the interviewees were members of a nuclear family consisting of a mother, father and their offspring sharing the living quarters. Others consisted of combinations of relatives – referred to as extended families – for example families with grandparents and their grandchildren, a family of three siblings and families with married daughters and sons-in-law and their children etc. The composition of a household was very flexible: There were many families with only one parent living permanently in the scheme, as the

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7 See Appendix 1 for interview guideline
spouse had migrated elsewhere to work, or children had been sent to stay with relatives for better schooling.

Village walks were carried out to get familiarized with the area. Community members who are most active in community matters guided the village walks on my request. During the walks, observations were made on different economic and re-creative activities, on household chores carried out within the blocks, as well as on different uses of land and space within the scheme. I was informed about recent shortcomings and current problems regarding the maintenance of the scheme and the infrastructure.

The qualitative methods also included a group discussion with six committee members of the housing co-operative, called the “Periyaneelavanai Finland Red Cross Housing Scheme Society”. The discussion was initiated by me and was open to all committee members. All the participants resided in the scheme and were united by a common interest in the housing committee. The participants were provided with the main discussion topics, but otherwise the discussion went on freely. Because of the fast pace of the discussion, it was sometimes challenging to translate the discussion simultaneously. The discussants’ reactions to discussion topics were also noted down and the discussion was moderated accordingly. A SWOT analysis was also facilitated to assess the state of the Housing Scheme Society (HSS).

Another sample of 12 women (in three groups consisting of four participants) was drawn from among the residents for a sketching exercise. In order to map out the services available to the residents, and their importance, the participants were asked to draw sketches of places and services within their life circle. Only women were chosen for this exercise, because they are more often involved with the upbringing of children. The women were instructed to place their home in the middle, and different places they visited on outer circles. The distance to the centre presented how easily that place was accessible or how close or far it was located, and the size of the symbol presented the importance of the place and how often in was visited. Each woman did her own sketch, and the drawings were viewed together.

The data collection methods also included Key Informant Interviews which were conducted with the local Red Cross officer, the Grama Niladhari (GN, village level government officer) and the Tamil Divisional Secretariat. The exchange of information with RC worked in two ways, as I reported my finding back to the local Red Cross.
Especially the Grama Niladhari turned out to be an important informant, as he had followed very closely the residents’ adaptation to the new housing scheme.

The importance of adhering to research ethic, particularly in the context of prevailing power differences between the target population and the researcher, was noted from early on in the study (e.g. Smith 2010). Firstly, to guarantee the legitimacy of the study, a permission to carry out fieldwork within the scheme was obtained from the Grama Niladhari. Secondly, the purpose and academic nature of the study was carefully explained for the research participants, and any misconceptions that the study is related to possibilities of receiving development assistance were corrected. Confidentiality and anonymity of participants was ensured.

5.3. Periyaneelavanai housing scheme characteristics

5.3.1. Introduction to the scheme

The Periyaneelavanai housing scheme is located at the northern border of Kalmunai municipality bordering Batticaloa district in the north. The site is located on the coast, 200 meters inland from the sea. The distance to Kalmunai city centre is about five and half kilometres. The housing scheme is composed of two parts; Islamic Relief funded scheme with 360 apartments in 34 blocks, and the Finnish Red Cross funded scheme with 240 apartments in 20 blocks (Figure 8). The latter is also known as the Periyaneelavanai 01B 28. The total land area extends for 250m x 210m. Periyaneelavanai 01B 28 covers an area of 210 metres by 100 meters. The study was limited only to the Finnish Red Cross funded scheme (Periyaneelavanai 01 B 28).

The local Red Cross, with its head office in Ampara, was a local implementing partner of the Finnish Red Cross. The land was provided by the Kalmunai municipality. The 240 families who received an apartment within the scheme were selected by the local government officials. According to a local Red Cross representative, block houses were chosen over single houses due to scarcity of land and the large amount of internally displaced, homeless people. Consultancy of the housing scheme was given to Hairu Engineering Consultancy, whose headquarters are located in Kandy, Sri Lanka. Conmix, a construction company based in Kandy, was in charge of the construction. The residents were able to move in in August 2009.
Although both apartment housing schemes comprise of three-story blockhouses, they are different in architecture and layout. The Islamic Relief scheme was completed already in 2007 and there are more signs of shortcomings in maintenance of the houses and people’s adaptations to the environment. The two housing schemes are seemingly the largest block housing schemes in Kalmunai municipality. The area is surrounded by undeveloped grasslands and sand dunes. In north and south, the closest settlements are about 500 meters away, while the immediate surrounding is a combination of sandy beach and short grassland (Figure 9). The area between the housing scheme and the main road comprises of scarce single houses with large yards and home gardens and empty, barren lots, some with signs of houses that used to exist there. The neighbourhood is rather scarcely populated compared to the high population densities characteristic to Kalmunai town. The housing scheme stands out explicitly in this environment. On the sea side, the site has been fenced by a wall of tall bushes that functions as a wave barrier.
5.3.2. Infrastructure and services

The housing scheme is connected to the main road by sand roads (Figure 10). Two of the access roads are accessible by vehicles; others are footpaths across sand dunes. The access roads are dotted with potholes and the area is hardly accessible by normal vehicles during the rainy season. The maintenance of the access roads is a responsibility of the municipality. Despite complaints by the residents there had been no action to improve the road conditions. Public transport by buses is available along the main road. There were buses to and from Kalmunai town in about every ten to fifteen minutes, depending on the time of day.

The nearest elementary school is located about 500 meters from the scheme. A temple and church are also close by. Health services, including a base hospital, are located in Kalmunai town. Kalmunai town is also the place for commercial and financial services.

The scheme is connected to the national electricity network for household electricity needs. Electricity is used for lighting and running commodities such as refrigerators, radios and televisions, although not all households owned these items, and even fewer owned all the three commodities. The lighting in the common areas is operated with solar power, reducing the electricity bill that would otherwise fall on the residents. A few
streetlights provide light to the public yard in the night-time and solar powered lights are also found in the common bathing area and in the corridors.

Figure 10: The main access road to the scheme (Pellinen 2010)

The water and sanitation facilities are arranged according to modern standards. All apartments have tapped water for the kitchen sink and a bathroom with water toilet and shower. The scheme has its own waste water storage and treatment centre, located on the coast next to the scheme (Figure 11). Garbage collection is carried out by the Kalmunai municipality. The residents were trained in sorting their waste and provided with waste baskets by the Red Cross.

Figure 11: Waste water storage and treatment system. Green ‘wave barrier’ in the background (Pellinen 2010)
5.3.3. Population characteristics

According to a local Red Cross official, the population of the scheme consists of about 1,200 persons. The estimation is based on an assumption that the scheme accommodates 240 households with an average of five members. The residents as well as the Grama Niladhari claimed this to be an overestimation. Depending on the source, the number of apartments that in fact had permanent residents was said to be between 50 (according to some of the HSS members) and 160 to 170 (according to the GN). Thus the population is likely to range between 250 and 850. The wide range in the estimation can be explained by a different understanding of what a “permanent resident” is. The Grama Niladhari based his estimation on the number of households that are registered in the scheme and, for example, receive their social benefits through him. There are several households who live in the apartments for a part of the week or for weekends only, who were not counted by the HSS members as permanent residents. The fact that there were many vacant apartments could be easily observed during the field visits. The question of empty apartments created tension among the residents.

The housing scheme was constructed in an area that before the tsunami consisted of three single housing schemes that together made up the village of Periyaneelavanai. The houses were washed away by the tsunami and the area was banned as a buffer zone, where reconstruction was not allowed. Later the ban was relaxed, and a part of the area was granted by the government officials for the apartment housing scheme. The majority of the apartment owners, about 140 households (58%), come from the village of Periyaneelavanai. The apartment they received in the scheme could be seen as a compensation for the land and house they lost. The rest of the residents come from the neighbouring division of Pandirippu (36 families, 15%) and Kalmunai town (64 families, 27%). All of the people interviewed had spent at least some time in local tsunami camps in Periyaneelavanai, Kalmunai or Pandirippu while waiting to receive the apartments, which took place in August 2009, over four and half years after the tsunami. However, not all residents were victims of the tsunami; also other homeless or displaced people received apartments from the scheme.
5.4. Relevance of the apartment housing form to local culture and family life

The evidence collected during the field work proved that the majority of the residents are satisfied with their current housing conditions, and consider the scheme to be “a good place to live”. Despite the level of satisfaction with the quality of housing, many residents are looking to move out of the scheme, and a high proportion of people have already left the scheme. It is clear that contentment with housing conditions – good and solid housing with facilities such as tapped water and electricity – was not enough to keep the scheme populated. Below, I will discuss some characteristics that affected on how people perceived the housing scheme – both in good and bad.

5.4.1. Layout and architecture of the scheme

Adaptation to climatic conditions is one major requirement for building design. The low-lying coastal areas of Sri Lanka have a tropical monsoon climate, which is one factor that has to be considered when selecting building style and materials. High roofs and gaps in the walls are natural features to improve ventilation, while trees provide shadow for houses and yards. These adaptations are visible all over the island. In Periyaneelavanai, the open corridors as well as large balcony doors and open grills allowed natural ventilation and cooling breeze from the sea, whereas shades over windows prevented heating from sunlight. While the yard area and surrounding coast areas lacked trees to provide shadow, people utilized the shadows of the inside yards within the blocks as places where to gather and conduct household duties (Figure 12). There were clear compromises as well when considering climatic adaptations; for example the ceiling height was distinctively lower than the national recommendation of 2.8 metres (NHDA 2005).
Using different colours and varying architecture are some of the ways in which distinctive landscapes are created to enforce local identity and a sense of belonging to a place. The openness of the houses, open corridors and inside yards as well as soft colours, windows, grills and shades created variation in the scheme that otherwise consisted of similar houses placed in rows around a square yard (Figure 13). However, it is obvious that the apartment housing does not present a type of housing that meet the popular images or preferences; in fact the houses were sometimes noted to resemble hospitals more than dwellings meant for living.

5.4.2. Apartment layout and facilities

The layout of the apartment adheres to cultural norms. A Sitting room in the front is the most public space of the house and is used for receiving guests. To ensure a good image the room is kept clean and tidy and it also facilitates the display of possessions and achievements. The small kitchen and toilet located at the back of the apartment are private areas and out of the sight of guests. The door opening from kitchen to the common hallway facilitates women’s domestic activities, such as bringing in fire wood and cooking items and taking out garbage. In addition to the sitting room, there are two other rooms, of which one is commonly used as a utility or storage room and the other for
sleeping. Furnishing in different households varied depending on available funds and personal liking. While some apartments were furnished with matching chair sets, display cabinets and beds, others had hardly any furniture at all: cooking and dining is carried out on the floor and a woven mattress is laid on the floor for sleeping.

According to a common understanding, the household space requirement mostly depends on the number of household members. All apartments in Periyaneelavanai follow the same layout and are equal in size, and subsequently there is no flexibility in adapting to different household sizes. The number of household members varies between one and nine, the average being four members. However, only three of the 20 interviewees (households with seven or more members) viewed the apartment as being too small. Members of extended families were equally content with the apartment size and layout as members of nuclear families. In other words, as long as the number of household members was reasonable, the apartment could accommodate relatives from outside the nuclear family. Instead, problems with the strict layout arose from adjusting to the requirements of different income opportunities (discussed in chapter 5.8.).

In addition to contentment with layout and size of the apartment, good condition of the apartments and modern facilities, especially sanitation facilities (attached toilet) and tap water in kitchen and toilet explained the residents’ contentment with current living conditions. In fact, majority agreed that their living conditions had improved when compared to the time before the tsunami.

### 5.4.3. Domestic tasks and food security

Moving into a ‘modern’ type of residence has not led into transforming residents’ domestic behaviour; on the contrary, the physical surroundings are being transformed to better fit into traditional ways of living. Cooking practices provide an excellent example of this.

As in Sri Lanka generally, the residents of the apartment houses prefer firewood as the source of energy for cooking. Cooking techniques and utensils, such as round-bottomed pots, are suited for cooking on fire. Gas and electricity are found to be too expensive for cooking purposes, while firewood is more economical. Firewood is bought from shops or firewood sellers or collected from the scarce bushes or trees in the neighbourhood, and dried and stored in corridors and balconies. Built-in fireplaces had to be installed by the
request of the residents in all apartments after the buildings were completed. The fireplace was fitted in the kitchen window, with connected exhaust horns leading to the roof (Figures 14 and 15). The poor functioning of the fireplace is considered one of the main deficiencies in the apartment. In some cases the chimney did not work correctly and the smoke came inside the apartment; a sign of poor natural draught, which can pose a fire or health hazard. Another drawback was water leaking into the kitchen through the chimney. Also the size of the fireplace was thought to be inadequate for cooking. Due to these shortcomings many households have given up using the fireplaces and installed wood burning cookers in the corridors.

Figure 14: Kitchen with tap water and fire place (left) (Pellinen 2010)
Figure 15: Fire place installed in kitchen window (right) (Pellinen 2010)

The traditional pattern of extending cooking activities to the back garden was continued in apartment houses as many household chores had shifted outside the apartment, in a similar way as when living in a single house. Barrels used for cooking and other cookers were placed in common corridor spaces or balconies of the apartments (Figure 16). Other food preparations, such as washing and chopping vegetables or making dough were sometimes carried out in the corridors. Some preferred doing their dishes on the ground with buckets of water instead of using the kitchen sink; sometimes blocks and leakages in the pipes encouraged this type of practices (Figure 17).
Cooking activities were not the only domestic activities that had extended outside the apartments to areas that would be considered as public spaces; bathing and laundry was also carried out in the yard. Water from the wells located in the yard was used for these purposes. Some old customs were not suitable to be carried out in apartment houses and caused disputes between neighbours. For example the residents from upper floors would throw water out through the kitchen grills or carry out their morning brush-up and washing in the balconies, causing annoyance for those living downstairs. Complaints by downstairs neighbours had not so far brought a solution.

Home gardens with a wide range of useful plants, including fruits, spices, timber, yams, medicinal plants and vegetables, are found surrounding homes all over the island. The products of a home garden provide security in the case of fluctuating food prices. Some products, such as mangoes or avocados, are deliberately grown for the market, or are brought to the market when the produce exceeds the household need. Keeping poultry or cattle not only amounts to more balanced diets, but is also a common source of additional income. Thus, it is not a surprise that restrictions on home gardening and keeping poultry or cattle are a major source of discontent in the apartment housing scheme.

Home gardens within a block house scheme are not impossible, though. According to the residents, gardens were allowed within the narrow stretch of land between the houses and
the bordering fence. Those spaces were used efficiently for growing vegetables and other plants, such as bananas, tomatoes, green leaves and pumpkin (Figure 18). Gardens were prohibited in the open yard areas, which were meant to be kept open as tsunami evacuation routes. A few households had started gardens in plots owned by them next to the scheme. External gardens had to be protected from stray cows, and water for irrigation was fetched from the wells. People living on upper floors had created their own individual, green spaces by growing plants in pots placed in corridors, balcony fences and hanging between pillars.

**Figure 18: Small-scale home garden (left)** (Pellinen 2010)

**Figure 19: When two lifestyles collide (right)** (Pellinen 2010)

### 5.4.4. Privacy in the apartment house context

Privacy is often more difficult to attain in an apartment housing compared to single houses. Altmant (1975, cit. Mee 2007) provides an explanation for this by examining how privacy operates in different, interrelated territories. In apartment houses the primary area over which the resident attempts to have complete control is limited to the inside of the apartment (primary territory). Hallways and common yards are public spaces (public
territory), while the areas that are partially under the control of the occupant, are semi-public (secondary territory). Residents in apartment houses have to negotiate their privacy and the definition of appropriate behaviour in each of these territories.

In Periyaneelavanai the hallways and inner yards, commonly defined as public spaces, had become semi-public spaces used for individual territorial needs – such as the household tasks described above. This kind of control over spaces was not found to be a nuisance as long as it did not increase the burden of others to clean or repair these spaces. Also the first floor residents living next to the fence had taken over the narrow stretch of land for cultivation, which was mostly approved by the other residents.

The visual aspect of privacy had been considered in the design of the building when placing windows; there were no windows opening to the hallways, and people inside the apartment remained out of sight for people outside. However, the placing of the apartment doors was found cumbersome as the doors were facing each other across the hallway, providing exposure to the living room of the neighbouring apartment.

Despite the advantages in design of the scheme, lack of privacy was perceived as an issue by many residents. People were generally concerned about how well the neighbours were aware of what was going on in their private lives. Thus, living in such a close setting did not provide enough privacy for everybody. In addition, closer physical proximity means that noises and smells will travel more easily between dwellings. Excessive noise in late hours and smoke coming from other apartments were some of the nuisances mentioned by the residents, causing discomfort and disputes between neighbours.

5.5. Social life within the apartment housing scheme

Community evolves through local forms of social interaction. In a community, people come together and work towards common objectives. Social capital can be measured in people’s participation in formal community groups. A community forms an important social network, in which members provide social security to each other. The community members of Periyaneelavanai were selected by divisional officials. At the time of the fieldwork, the residents had lived together for over a year, and social networks had been formed in varying ways. Neighbourhood and social networks also affect on people’s perception of safety. A coherent community can create a feeling of security.
5.5.1. Social networks and roles of neighbours

Practically all of the residents studied were involved in community interaction, although the intensity of interaction differed. The number of people or households the interviewees knew and visited within the scheme varied between just one and ‘everybody’. Visiting friends or relatives from the neighbourhood is a common past time activity especially for the women. Many of the residents had relatives other than the household members living within the same scheme. The two grocery shops were local centres where residents stopped to exchange information as well as to buy groceries. Public area facilities, particularly the playgrounds, also provided an arena for social interaction (Figure 20).

Much of the interaction between neighbours took place in the open hallways and inner yards. The community hall served for official community meetings.

![Figure 20: Children at playground](Pellinen 2010)

It is evident that there are differences on how people’s social networks were built between people originally from Periyaneelavanai on one hand and people from Kalmunai and Pandirippu on the other hand. While people from Periyaneelavanai estimated that they knew or visited “most people” or “everybody”, people from Kalmunai and Pandirippu had much fewer acquaintances and visited or knew on average nine households. Social connections between those originally from Periyaneelavanai had often been formed already before moving to the apartment housing scheme, whereas residents originally from Kalmunai and Pandirippu had much fewer “old acquaintances”, as they came from different communities.
The people originally from Periyaneelavanai are often united by similar caste – either fishermen or labourers – contrasting to civil servants or skilled labourers originally from Kalmunai town. Divergent value and norm systems between neighbours with different origins exacerbate the forming of a coherent community. The people from outside Periyaneelavanai have clearly more difficulties to adapt to the community, and have less social connections. This gives an explanation to why many have deserted the scheme and found accommodation elsewhere – to live with people with shared value systems and existing social networks.

Reciprocity among neighbours in Periyaneelavanai takes place in many ways. The neighbours’ roles get accentuated when a household faces difficulties. When times are hard, neighbours offer their help in the form of financial help or loans, or by looking after when members of the household fall ill. It is also common to share or borrow food or some other items from the neighbours. Other forms of assistance include looking after children or elderly or help with kitchen tasks or other labour help. Sometimes neighbours would look after an apartment when the owner goes away for a longer period. However, in the case when the all or most of the neighbours had moved out from the scheme, the residents felt they had lost this important connection and were left without neighbours’ support.

Despite networks of reciprocity among neighbours, only a few interviewees feel responsibility towards the whole community and commonly owned property. This is demonstrated especially in lack of participants in *shramadana* – shared work to keep the property clean. While each household maintained the front of their house clean, the effort was not extended to playgrounds and other areas that “belonged to no one”. Common festivities within the neighbourhood were rare. Religious ceremonies, weddings and birthdays were celebrated privately within households in the apartments and corridor.

### 5.5.2. Safety issues in the housing scheme

Safety is a significant concern in eastern Sri Lanka that has suffered from decades of internal conflict and more recently the tsunami disaster that affected practically all residents of Periyaneelavanai. The safety concerns of the residents were related to both social security issues, including health, as well as physical security. Surprisingly few people were concerned of a new tsunami as a safety issue despite the scheme’s location
next to the coast. Overall, the residents perceived the housing scheme as a relatively safe environment. Less than one out of three interviewees considered the scheme to be quite unsafe. Women viewed the safety of the scheme in slightly more negative terms than men.

There is a noticeable connection between the number of acquaintances or friends a person has within the housing scheme and how safe or unsafe he or she perceives the area. When comparing the questions it is evident that people with more friends or acquaintances also feel safer within the scheme. The outcome confirms the earlier notion that social connections within a neighbourhood can increase the sense of security, although it’s not the only factor.

People’s safety concerns or reasons why they felt safe within the scheme were most often connected to social connections within the neighbourhood. The feeling of safety was often attributed to good neighbour relations. In the absence of formal social security system, neighbours take over some of its functions. Neighbours would for example look after children when parents are away, guard the house when the owners are absent, or admit the neighbour to hospital in the case of illness. Knowing the neighbours and other community members also reduced people’s concerns over thieves in the neighbourhood. On the other hand, absence of neighbours and not knowing the neighbours were identified as reasons to feel unsafe. Clashes and disputes between neighbours as well as acts by drunkards were also considered a safety issue; sometimes the police had to be contacted to solve arguments.

Dengue fever, which was spreading within the area in such a rate that the scheme was declared a dengue outbreak area, was identified as one of the main safety concerns of the residents. Empty apartments (e.g. toilet tanks and floor gullies) provide an undisturbed breeding ground for dengue spreading mosquitoes, which is another reason, why lack of neighbours and empty apartments within the block were considered to be a security issue.

5.6. The role of the residents in housing development and residents’ legal status

Beneficiary participation has been acknowledged as a key element in successful housing projects, but it has been difficult to actualize in donor driven programmes. The consequences of lack of participation have, at the worst, resulted in the abandonment of houses. The residents of Periyaneelavanai housing scheme were informed by the
government officials about receiving an apartment from Periyaneelavanai already in 2006. Only later were they informed exactly to which scheme they would move. This came as a disappointment especially for those who were not from Periyaneelavanai in the first place, and who had wished to locate closer to their original houses or to receive dwelling from a single house scheme.

“People who failed to receive houses from elsewhere received apartments from here”
– A woman member of the HSS committee

An initial committee for housing scheme society was formed during the construction, with a representative from each GN division where the future residents were from. After the construction had been completed, the committee was asked to make suggestions or to report changes it would like to see in the scheme. The changes included fireplaces that were installed in each kitchen window. To improve security, iron bars were fixed on windows. The same participants later formed the committee of the Periyaneelavanai housing scheme society.

Before moving in, a workshop was conducted where all residents were advised on practical matters such as how to use the kitchen fireplace, kitchen sink, bathroom and garbage disposal. The fact that the residents’ voices were not heard, when the decision to build apartment houses instead of single houses was made, caused bitterness among some of the residents.

“The housing scheme was constructed without consulting any future residents. Now it’s not suitable to our needs and customs. We don’t know how to use different facilities. All the toilets are linked together and if the common pump stops working, we can’t live here anymore. If our opinion was asked, things would be much more convenient” – Man 32 years old.

The lack of residents’ participation has led to the current situation where shortcomings are often seen as results of improper planning. The waste water system is an excellent example of this. The waste water treatment centre requires constant maintenance to operate properly. As the residents very well know, the toilets are linked to each other, and misuse by one can easily cause cumulative problems to many residents. This system was found to be unsuitable by the residents, and proof of inappropriate planning. Instead of the community working together to maintain the treatment centre in operation, they
expected a solution from outside. The residents had not approved of the way the toilets and waste water centre function, and did not take the matter in their own hands.

Apartment ownership is an asset that can provide security and economic stability to the owners, while ambiguity in the legal status and rights works against the empowerment of people. The 240 original households were not granted actual deeds, instead, they received certificates as a proof that the apartment belongs to the household. The certificates include a condition according to which the residents are not allowed to sell the apartments. This restriction was set by the divisional officials. The explanation, according to the residents, was that as they were selected beneficiaries and were granted the apartments for free, they had no right to sell it. The local government officials justified the limitation by arguing that if a sales right was granted, households would sell the apartments for cash and become homeless once again. There was also a concern that if the owners were allowed to sell the apartments freely, there would be no control over who moves into the area, and the community would suffer from inappropriate new residents.

The legal rights of the “apartment owners” regarding shifting the usage right of the apartment are rather obscure. According to the committee members, renting within family is permitted, but renting to people outside the family is prohibited. On the other hand, because empty apartments were thought to be causing a health hazard, the health officials together with the police encouraged people to rent the unoccupied apartments. It was even threatened that apartments that stay empty would be taken over by the officials. The regulations and recommendation given by different officials were in contradiction in this case. The unclear situation gave space to rumours and assumptions of illegal transfers of ownership or usage rights. It also complicated the situation when families broke up.

“My husband left me for another woman. The title of the apartment is only in his name and now he is threatening to move me out so that he could settle here with his new woman friend. The case has been on trial for reconciliation but there is no solution yet” – Woman, 48 years old.

According to Tamil customary law, Thesavalami, the hereditary property, whether a house or a piece of land that belongs to the wife, is transferred to her daughter as her dowry when she gets married. The law has provided Tamil Hindu women with legal protection and social equity for centuries (Hans 1997). Even though the customary law is
not legitimate as such, this matriarchal form remains strong in the hereditary systems of Tamil communities. In fact, many fathers who were interviewed told that the apartment would be given to a daughter when she marries, and eventually the rest of the family should find accommodation elsewhere.

5.7. Maintenance of commonly owned property

The Periyaneelavanai housing scheme has been registered as a jointly ruled management housing scheme in the National Housing Development Authority. Managing and maintaining the public properties is the responsibility of the Housing Scheme Society (HSS). The initial committee of the Periyaneelavanai Finland Red Cross HSS with twelve members was appointed by the Finland Red Cross at the time when the housing scheme was nearing its completion. These committee members were advised on how the HSS should function and what are its responsibilities. All 240 families are members of the HSS, even if they do not reside in the area. Committee members are elected in a HSS meeting once a year. While public meetings open to everybody are rare, the committee meets once in every two to three weeks.

The primary responsibility of the committee is to look after the finances and maintenance of the scheme. The committee collects monthly charges from apartment owners and shop keepers\(^8\), maintains budgets and monitors the maintenance of the buildings, the waste water treatment centre and the compound. Renting out the community hall and chairs donated by the Red Cross are another possible source of income for the HSS. However, the committee responsibilities are extended into mediating disputes and solving problems that arise within the community, looking after security within the scheme and to conveying a tsunami warning to the residents. In addition, the committee is in charge of organizing Shramadana, to gather the residents to work together for example to clean up the compounds.

Gathering of necessary funds for maintenance after the financial assistance from RC ended has turned out to be a problem. Recently only a fraction (one fourth) of the households has paid the management charge. This is attributed to the inability of many of the residents to make the financial contribution – high proportion of the residents live under the national poverty line – as well as to the lack of commitment by those who no

\(^8\) The monthly charges are LKR 100 (€ 0.7) per apartment and LKR 500 (€ 3.5) for shop premises.
more permanently reside in the scheme. Some of the shop or workshop keepers refused to pay their rent claiming that the other shop-keepers were breaking their contract or causing disadvantage to them.

The HSS itself was an arena of an internal power struggle. The president of the HSS was forced to resign from the post due to anonymous threats presented towards him. He was told to be incompetent for the post because he travelled a lot in his work and was rarely available for meetings. The ex-president gave a different explanation why he was threatened:

“Should the power be held by people originally from Periyaneelavanai, or can people from elsewhere hold the power, that’s the issue here. How can a minority rule the majority?” – ex-president of Periyaneelavanai Housing Scheme Society, 23.11.2010.

The power struggle has had an adverse impact on the functioning of the committee. It was not certain whether the HSS at its current status was authorized to collect the fees from the residents, nor was it able to carry out any maintenance work. Transparent accounts are necessary for people to follow how the fees they have paid are used, and to maintain trust towards the committee. The recent failure of the committee to present accounts for the previous five months was causing suspicion among the inhabitants. According to the committee members, the relevant government authorities had refused to approve recent accounts, and had requested for further clearance. The treasurer’s task is complicated due to the absence of many committee members who also should approve the accounts. For the community to regain the trust towards the committee the reports have to be sorted out and the new committee should be organized and registered properly.

The concept of a housing cooperative is not yet well established in Sri Lanka – in fact such a word does not exist in the Tamil language. Thus, it is no wonder that the legal framework for the functioning of a housing cooperation is not very clear.

The disputes and mistrust have resulted in a situation where expenditures exceed income, collective decisions are difficult to reach and, subsequently, maintenance cannot be carried out sufficiently. Maintenance of the water storage and waste water treatment centre was found to be especially difficult and, due to this, some failures had already taken place. The residents were quite well aware of the problem and felt threatened by the possibility that the centre would collapse completely, in which case the residents thought
they would have to abandon the apartments all together. Other shortcomings – although less serious – included broken or missing light bulbs in the corridors, broken windows and doors, broken wiring and emptied fire extinguishers.

Another serious shortcoming is the garbage collection, which did not operate at all. The scheme had been equipped with common garbage bins for different types of waste in the yard, but at the time of the visit in 2010, these facilities were no more in place. Instead, people were supposed to store their garbage on their own until the garbage was collected by municipality workers less than once a week. When the intervals got too long people had to dump or burn the waste on the yard and road sides. Garbage lying on the yard was thought to be a possible source of dengue fever and a health hazard for children playing on the yard.

5.8. **Livelihood opportunities of the residents**

Employment opportunities should also be paid attention to when planning a new residential area. The location of a scheme is the main feature that affects employment opportunities available for the residents. A scheme that is located far from towns and is difficult to access would create challenges for people working in service or industry sectors. The size of the scheme is an integral factor especially in an isolated location; large settlements provide livelihood opportunities and may become self-sustaining in job creation (Barakat 2003). The layout of a scheme and the form of housing is important in the case when the home is also an arena of productive tasks. It is essential that the space requirements of home industries, services or any livelihood support activity as well as storage needs are accommodated.

Official employment statistics for Periyaneelavanai are only directional. According to the employment statistics from 2009, the number of employed persons is 263. The number of persons of working age is unknown, but assuming that each household has on average two adult members, the employment rate would be 55 percent (263:480). This is almost equivalent with the average employment rate of Kalmunai Tamil Division, which is 56 percent. A majority of the residents are self-employed, accounting for 70% of the employed population. In addition, 25 percent work for the government or semi-government organizations and the remaining 5 percent are in other types of employment, including private companies (Unpublished statistics received from Tamil DS).
Out of the twenty interviewees, six represented households whose member(s) were occupied as fishers. Describing the villagers as “fisher folk” – as was done by some officials – ignores a large share of households that are not engaged in fishing. Fishing is done in groups of three men, usually formed of relatives. It was not unusual for boys aged below 16 to practice fishing. Boats and fishing nets were provided by NGOs to replace those destroyed by the tsunami (Figure 21). The daily catch is sold raw to the fish dealers, as the catch is usually inadequate for any value addition to be profitable. The location of the scheme next to the coast was considered suitable for practicing the profession, although there were alternative views as well. Those fishermen who were originally from Kalmunai or Pandirippu and had their fishing partners there, travelled to these destinations.

“I go fishing late at night, by 2 am. My two brothers who live in the neighbouring scheme come with me, we form a team. Now I live far from the sea and from my mates so it is difficult to know when to leave for fishing. We throw the fishing nets in the deep sea. Now we have not been able to go for one week because our nets are broken”. – Fisherman, 28 years old.

Figure 21: Fishing boats on the beach in front of the housing scheme (Pellinen 2010)

Work in constructions sites, as masonries or carpenters, is a common line of employment for men. When the sea is too rough for fishing, some of the fishermen would also look for work in the construction sites. The availability of employment varies: Sometimes there is no work at all and at other times there is overtime work. Underemployment, working only two to three days in a week, is more of a rule than an exception.
“There are no opportunities for masonries in Periyaneelavanai and it is difficult to find work in Kalmunai as it is far. There are too many masonries and too much competition”. – Masonry labourer, 40 years old.

Many self-employed run their own businesses offering services or running small industries. Within the scheme there is space for three shops and three workshops. During the field work period, three of them were in operation. Two shops that sold common groceries and vegetables, run by two women, were usually open from early morning until late evening, serving the residents of the area (Figure 22). Competition was increased by mobile vegetable, fish and bakery product sellers who came to the scheme to sell their products from the back of lorries, motorbikes or bicycles (Figure 23).

Figure 22: Premises for three shops and three workshops (Pellinen 2010)

Figure 23: A mobile bread seller on a motorbike visiting the scheme (Pellinen 2010)
Home-based business ventures are popular within the scheme. Most families are struggling to continue in a business they had operated previously and in which they are skilled, but are often unsuccessful due to lack of proper facilities and space. In such business ventures there is little differentiation between work and living, and the same compound serves both purposes. Examples of the enterprises include a hair salon run in the front room of the apartment, a tea shop arranged in the apartment, baking and selling of different short eats, shop keeping in the front room and sales of various products such as firewood, coconuts or other groceries and items without a regular stand. The success of the enterprises varies depending on how well the premises are suited for these ventures and how well the entrepreneurs could attract customers. However, all entrepreneurs have been affected by more and more residents moving out of the area, resulting in a steady decrease in (potential) customers. Also the regular visits by the outside sales people have increased competition. Despite the challenges, most of the residents who had business ideas thought there would be enough customers for their services. Some had managed to attract customers from outside the scheme as well.

“I used to own a hair salon in Periyaneelavanai (destroyed by the tsunami). Now I keep a salon in my apartment but people don’t like it because it is not a proper salon. I don’t have proper space or facilities, even though there would be enough customers”.
– Man, 36 years old with wife and four children.

The tea shop and the grocery shop in the front room had also failed for similar reasons. The tea shop entrepreneur had attempted to set up a small hut for the business outside the compound (Figure 24). He had not been able to open the shop yet as he had no capital to buy tea leaves, cups, sugar, chairs or tables etc.

“We would like to keep a hotel (a tea shop) as that’s what we used to do before and we have skills for it, but there’s no proper space for a hotel” – Man, 26 years old, practicing fishing instead.

“There would be a market for bakery products, now people get those items from outside. But there’s no space here, even the two shops that do exist here are in constant quarrel with each other” – Woman, 28 years old. Husband works in a bakery in Sainthamaruthu.
Capital to start up a business, suitable premises and storage space were the main hindrances for self-employment. When six people already occupied an apartment of two bedrooms there was no space for a hair salon or a tea shop. On a smaller scale, the kitchen could be used to prepare short eats that were sold from house to house or to visitors to a close-by temple, hospital or school. Not owning a refrigerator meant that food could not be stored for a long time, complicating the business ventures. Instead, in a household of two adults, one room could be spared for organizing tuition classes for school children. Storing firewood for sales on the third floor was found difficult, not to mention keeping cattle within the premises. Small loans for starting up small-scale businesses were available for women by an organization operating in Kalmunai. However, the majority of the interviewees had no access to loans and only few knew they were eligible for loans from such an organization or had already taken a loan.

Due to difficulties in continuing the old business ventures, the income levels of most of the residents had reduced when compared to the time before tsunami. Only four out of 18 interviewees, including the two shop keepers, reported that their income level has increased. Lack of employment opportunities other than fishing was identified to be among the main reasons why people were moving out of the area. People moved to areas where there were jobs and better schools for the children. On the other hand, decreasing population reduced the demand for different services or items within the area, making it more difficult for current service providers to earn an adequate income.
5.9. Conclusions on the scheme

What are the conclusions that can be drawn on the apartment housing model and how well it suits the local context and caters for people’s ways of life in the case study area? The flats itself did not turn out to be a problem in Periyaneelavanai. People were mostly content with their living conditions, they appreciated the facilities that were available and found the apartments to be spacious enough. Additional space for household tasks, socialisation and recreational activities was found by extending the activities into hallways and inner yards, which had become semi-public spaces that served the purpose of “back garden” found in single houses. The architecture of the scheme was found pleasing and the building structures agreed with the tropical climate.

The main deficiency in the apartment houses when compared to single houses was the lack of flexibility. It was not possible to extend the apartment according to the size of family, nor to move into a larger apartment, as all apartments were of the same size. The opportunities to use or customize the apartment for home industries or services were also limited. Space limitations and regulations within the yard prevented establishing home gardens in a larger extent.

Poverty and the employment structure of the population make these restrictions more severe and difficult to overcome. Many residents and households carried out small-scale business ventures either as a main or an additional source of income, which highlights the role of shelter as a business asset. Obtaining other business premises than the apartment was rarely possible due to financial difficulties. Gardening and keeping poultry or cattle contribute towards healthier diets, help to overcome fluctuations in food prices and provide extra income. Thus the restrictions posed by the house form easily result in increasing the vulnerabilities of the residents already living on the verge of survival.

The people’s attitudes towards living in close proximity to neighbours were rather paradoxical. The fact that neighbours lived close by and would come for help when needed created a feeling of safety. Socializing with neighbours was a common pastime activity, while lack of neighbours in case of unoccupied apartments was perceived very negatively. On the other hand, the residents felt there was a lack of privacy and unnecessary nuisance from the neighbours. The disputes over correct behaviour and equal participation in maintenance and cleaning created tension between neighbours.
The maintenance of commonly owned property was another challenge. Gathering the maintenance fees for jointly ruled property was difficult. Obscurity in the housing committee’s budget and a power struggle between the members created further hindrance for the functioning of the society and ability to make decisions and take action regarding maintenance of the scheme. Furthermore, the type of building design and structures complicated maintenance. Especially challenging was the maintenance of plumbing and the water treatment centre. These concepts were found unpractical and unsuitable in the local context. Instead of working together to maintain the common property, the residents were inclined to blame inappropriate design for all the shortcomings they were facing.

6. DISCUSSION

This chapter recalls the research questions and attempts to provide answers to them. Factors and processes behind the new settlement pattern and how they were realized in Periyaneeelavanai are presented first in chapter 6.2, followed by an analysis on how the apartment housing model accommodates or challenges the ways of life in Periyaneeelavanai, and to what extent the findings can be generalized (chapter 6.3). Residents’ participation in the housing development, discussed in chapter 6.4, rose as a critical issue to the success of the scheme.

6.1. Conceptual model for post-disaster reconstruction

Successful rehabilitation and reconstruction is a result of combining local knowledge with technical expertise guided by national goals (UNEP/GPA 2005). The chart below (Figure 25) visualizes the contextual framework for the housing development that took place as a “recovery from crisis”, showing the basic factors and actors, and how they influence the process and the outcomes as understood by the writer. At the base, housing construction as a response to a crisis is an interplay between national authorities and international humanitarian and development organizations. The role of the “beneficiaries” in these processes depends largely on the type of assistance.
Figure 25: Framework for housing development in the tsunami aftermath

The response by humanitarian organizations depends on the scale of the crisis and the capacity of local governments to respond to the needs. Humanitarian agencies cooperate with local and national authorities to a varying degree; in housing construction the site, infrastructure and beneficiaries, as well as some guidelines for housing construction are often provided by the authorities. The response of agencies is guided by agency policy and the various standards and principles that the agencies have often agreed to comply. At the same time they are often driven by donor expectations regarding the spending of the funds.

Depending on the type of assistance, there are two major approaches or strategies on post-disaster housing reconstruction, called the owner driven and the donor driven approach. In the donor driven approach the government or agency that is funding the project leads the construction process with the help of consultants and contractors procured for the project. In the owner driven approach the affected population
reconstructs their houses themselves, while the role of the external agencies is limited to the provision of financial and technical assistance.

### 6.2. Factors and processes behind the new settlement pattern

Housing development has been a part of Sri Lanka’s development strategy since the independence. For most part of the 20th century focus was on providing land to the landless peasantry for small scale cultivation and housing in the border areas of existing villages and in the new colonies in the dry zone. These housing programmes resemble the post-tsunami owner driven housing in the sense that the participants received cash grants from the government, and were responsible for the construction of houses for themselves. The post-tsunami settlement pattern imposed, however, a change towards more compact settlements, where a high number of people live closer to each other compared to the traditional villages. While this is, for most part at least, a result from the situation where a large number of people had to be suddenly relocated, combined with the scarcity of land for relocation, it does coincide with the recent government policies that emphasize well managed urbanization and modernization.

Relocation is not a new phenomenon in Sri Lanka. People have been uprooted in vast numbers due to large scale development projects, such as the dam projects (Mahaweli), and due to the armed conflict between government and LTTE that lasted for nearly three decades. In fact some of the inhabitants of the Eastern and Northern provinces were initially displaced due to the conflict, then by the tsunami, and, lastly, because of the created buffer zone.

The first research question regarding factors and processes behind the new settlement patterns applies only to the donor driven programme, as it is the programme that created the new settlements. Below, I present four main beliefs that became to control the reconstruction under the donor driven programme, and how these beliefs were put in practice in Periyaneelavanai.

**Belief no 1. A buffer zone is essential in order to reduce vulnerabilities**

In the first place, it was the decision to establish construction restrictions, which were incorporated into Sri Lanka’s regulatory system in the form of buffer zones that created the need to relocate over thirty thousand households to completely new settlements.
According to government parties, as well as some main international development agencies, the buffer zones were essential to prevent a similar disaster in the case of another tsunami, and to reduce people’s vulnerability to such a disaster. On the other hand, a voluntary return of the IDPs to the place of residence or, alternatively, voluntary resettlement in another location have been recognized as a basic right of IDPs (OCHA 2004), and the buffer zones clearly violate this principle. It has been proven consistently that relocation, especially when it is involuntary, increases the structural vulnerabilities of people as they are deprived from their land tenure or rights of residence and lose their economic and social assets (UNEP/GPA 2005). In the tsunami aftermath, vulnerability was strictly understood as vulnerability to tsunami and sustainability, on the other hand, was understood as constructing in tsunami resistant ways, while other aspects of vulnerability and sustainability were ignored (e.g. Ruwanpura 2009).

The housing in Periyaneelavanai is located about 200 meters from the sea shore, while the closest structures belonging to the scheme lie only about 100 to 120 meters from the sea shore. The coastal relief is low; the site is about five meters above the sea level. The construction of the site became possible only after the buffer zone regulations on the East coast were relaxed.

In this case, the resettlement of the majority of the people took place within the area of the original villages, only the form of housing changed from single houses to apartment housing. It could be summed up that in the case of Periyaneelavanai, the residents were saved from awkward relocation further inland, at the price of remaining vulnerable to another tsunami. However, the residents were not noticeably concerned of the risk – everyday worries weighed more. The dependence on the sea for livelihood for many of the residents can explain this attitude. To carry out fishing efficiently it is necessary to live close to the sea. Thus, the threat the sea poses is not taken seriously, as it would be harmful for the livelihood to live far away from the shoreline. Even if the threat is felt, action is not taken because of fear of losing the livelihood.

On the other hand, those residents who were relocated to Periyaneelavanai from other areas are in a different position. Their social networks have been disrupted and their means of livelihood – whether members of the fishing team or business assets and customer base – are not found in the area. They find it difficult to fit into the community.
and to bond with the new place. Their discontent with the new location and feeling of placelessness is reflected by the high rate of moving out of the scheme.

**Belief no 2. Land availability guided the relocation**

The location of resettlements depended on the availability of land for reconstruction. Generally, there was a scarcity of land available for construction close to the original settlements. However, when the government was able to obtain small plots of land within or adjacent to existing settlements, provision of infrastructure and services became easier. Local services, livelihoods and markets existed at least to some extent, but they had to adapt to a greater demand as the settlements expanded. Also the local infrastructure could be utilized (e.g. Lyons 2009).

Large scale housing projects that provide housing to a maximum number of people required large plots, which were often available only in distant locations. As a result of this, the majority of the DDP housing was developed in new suburbs or villages. Provision of infrastructure and services to distant settlements has been challenging. When services and livelihood opportunities are absent, people have been unwilling to relocate to these distant settlements (e.g. Boano 2009).

Land availability affected the form of housing in Periyaneelavanai as well; the land area made available by the officials was relatively small while the number of people to be resettled was large. High density housing in the form of apartment housing was seen as a solution to this problem.

**Belief no 3. A centralized, large-scale approach is advantageous**

Large donor driven housing programmes were based on contracts between international NGOs that provided funding and implemented the programmes, government institutions that provided land and infrastructure up to the site and construction and consultancy companies. In large scale projects the ability of beneficiaries to participate in the reconstruction process is minimal. When development sites and housing were designed centrally in Colombo, the local knowledge could not be utilized and local preferences were ignored.

Within the Periyaneelavanai scheme the beneficiaries’ participation was limited at best. Firstly, all residents had been unanimous on the choice of housing – which was single
housing. Secondly, there were only a few representatives chosen to give feedback on the buildings, representing all 240 households. Most households had no saying at all. Thirdly, the opinion of the representatives was asked only after the scheme had been nearly completed. Undermining the role of beneficiaries has had its consequences which are discussed in chapter 6.4.

Belief no 4. Building numbers (houses) instead of homes

Huge resources were directed to the aid community to be used in housing reconstruction – even in such a degree that the agencies’ capacity to manage it efficiently suffered. The funds were to be spent under tight timelines dictated by the donors – in an environment that was extremely challenging. Also, the conditions in transitional settlements were often poor and the maintenance became expensive – thus, there was a high demand for permanent housing, the sooner the better. Consequently, as for example Kennedy (2008) has shown, Build Back Better became synonymous to Build Back Faster. In this setting, the success of the intervention was measured in speed and quantity of housing delivery, other aspects left aside.

The anxiety to spend money rapidly and produce houses in high quantities resulted in monotonous and often unsustainable settlements with high population densities. There were only few house prototypes and village layouts that were repeated in a strict and inflexible manner. At the same time, there was no time to consult beneficiaries or to structure the housing so that it would better meet the needs of the communities and the residents. Boano (2009) describes the process succinctly: “new relocation settlements were shaped by aid policies: prescribed standards, conventional dimensions and costing, targeted numbers of beneficiaries and agency visibility”.

Even though the land availability and high number of IDPs meant that the form of housing in Periyaneelavanai had to be compromised, the architectural choices and scheme and apartment layout were mostly successful. The quality of housing in Periyaneelavanai is better than what could be expected based on the research by Kennedy (2008), Boano (2009) or Lyons (2009). Open hallways and inner yards offer spaces for neighbours to socialize together, strengthening neighbour relations and the sense of community. Many of the single house schemes in fact missed this opportunity (Munasinghe 2011). This is, however, not to say that there is nothing to improve. There are clear shortcomings in the original design resulting from ignorance of local ways of
life. The needs of different family types could be better met if there was variation in apartment sizes and flexibility in the layout. Other improvements would include compounds or workshops for small-scale businesses and land plots and other necessary facilities for gardening or farming.

Agencies that came up with more flexible housing schemes and understood and respected local construction patterns better were often more successful in creating sustainable communities. One such approach was to hire a construction company to build a site with standard first floors of a single house (usually comprising two bedrooms), with a reservation on the roof for the residents to extend the house to the second floor. This approach gives the residents better control over their housing and allows them to improve their housing on their own terms, based on their capacity, wishes and needs. The practice is quite common in the Sri Lankan building culture – the houses are extended according to the availability of funds and needs of the family.

6.3. The apartment housing model and ways of life

The main objective of the research was to determine how apartment housing accommodates or challenges the ways of life of people in areas that are predominantly rural. The goal was, in other words, to evaluate the extent to which apartment housing is appropriate to the cultural and social values and economic needs of the inhabitants. I attempt to answer the question by examining, firstly, how the particular house form suits local socio-cultural values, secondly, how the size of the housing scheme affects community life, and thirdly, how the size and location of the scheme affects livelihoods. I also draw lessons learnt from Periyaneelavanai case study regarding what constitutes successful housing.

6.3.1. House form, family structure and everyday life

Family and household structures are diverse in Sri Lanka. Extended families are a common family structure. The household composition varies greatly with time, for example when a spouse migrates elsewhere to work, when a family is looking after a relative’s children, or when in marriage the daughter’s husband moves in with the parental family.
The apartment housing allows a traditional family formation with more distant relatives, as long as the family size remains reasonable. However, the limited space challenges the formation of larger family units. The restriction posed by apartment housing, as opposed to single housing, is the inability to expand living spaces according to family requirements. The inflexibility to accommodate large family units was accentuated by the fact that all apartments were equal in size.

The apartment layout was successful in responding to the privacy requirements of the residents. The sitting room in front, with the main entrance, was used for receiving guests and for showing family status, accomplishments and aspirations. Two smaller rooms, used for sleeping and storage, could be closed to provide privacy. The kitchen and toilet, located in the back of the house, were hidden from the eyes of a visitor.

In traditional pattern of living, cooking activities carried out by the women of the household, as well as other chores, are extended to the back garden entered directly from kitchen (e.g. Weerasingham 1986). The residents of the apartment house scheme had adapted to the loss of back garden by claiming the hallways and inner yards to this use. The ancillary door that connected kitchens to hallways was ideal for the purpose. Moving from a single house to an apartment house with limited outdoor space had not changed the traditional way of living in this sense. On the other hand the household tasks carried out in hallways had become more public as hallways were shared with other households from that floor.

The residents on the ground floor, however, had an advanced position as they had more space to expand and could claim the adjacent land for home gardens. Residents from upper floors lacked this opportunity to have home gardens, although green spaces were created by using potted plants. While space for home gardens was very limited, keeping poultry and cattle were completely restricted. The negative impact on food security and loss of additional incomes gained by selling the produce were accentuated by the fact that the majority of the residents live under the official poverty line, and any extra income or way to save money would have been welcome.

6.3.2. The size of the housing scheme and community formation

Traditional Sri Lankan villages consist of a few dozen of houses whose occupants are commonly united by family relations and shared caste group. New large housing schemes
that bring together people from different villages and caste groups have broken this pattern (e.g. Munasinghe 2011). In the Periyaneelavanai housing scheme, people originally from the villages of Periyaneelavanai, Pandirippu and Kalmunai town and with different backgrounds were brought together and had to learn how to live together in a very densely populated, compact setting.

The case study revealed a society with a rather vigorous community life when measured by the number of acquaintances and friends, social interaction, networks of reciprocity and neighbourhood help. Neighbours played a significant role in people’s lives; they were trusted in times of difficulties, offered help in everyday tasks and provided pastime entertainment. Architectural characteristics of the site, such as shaded courtyards, open staircases and hallways, playgrounds and the square with shops and workshops, provided a suitable environment for interaction between the residents.

Social contacts were most abundant among the residents who were originally from the region. No distinction was made based on from which village in Periyaneelavanai the residents came from. The residents who had moved from Pandirippu or Kalmunai had fewer connections to neighbours and were most often among those who left the scheme. This reflects the difficulty of the ‘outsiders’ to fit into the society.

On the reverse side of the compact form of settlement were the disturbances caused by neighbours, such as loud noises and unsuitable behaviour that led to disputes and quarrels between the neighbours. For some residents, the quarrels and disturbance with neighbours were a reason to look for some other form of housing, while for some it was just a way of entertaining and passing time.

Tensions between different groupings of people were dividing the community. The shattering of the community was affecting the functions of the HSS in charge of making decisions regarding commonly owned property. On one level the struggle of control of HSS was based on whether the president had to be originally from Periyaneelavanai (the majority), or, whether a person representing the minority group (a person from Kalmunai town or Pandirippu) could lead the HSS. Power struggles on who can control the HSS, the dysfunctioning of the HSS, and residents moving out of the scheme all contributed towards the break-up of the community coherence and residents’ reluctance to disburse their share on the maintenance of the commonly owned property.
6.3.3. The size and location of the housing scheme and livelihoods

Apartment housing is considered to be connected with residents with regular jobs in the manufacturing or service sector. Apartment houses can accommodate large amounts of workforce in a population concentration with easy access to public transportation that carries it to workplaces (e.g. Kortteinen 1982). This, however, is not the case in the apartment housing schemes created after the tsunami, and that is what is so peculiar with these settlements. In the case of Periyaneelavanai, the majority of the residents were self-employed, particularly as fishermen, or carried out home-based businesses. Only a few commuted to regular, full-time jobs in the town. How did the settlement suit other livelihoods?

Table 7 lists the capacities and assets of the residents of the Periyaneelavanai housing scheme in the framework of the sustainable livelihoods approach. The Sustainable livelihood approach is a mechanism for understanding the needs of local populations. The approach combines five assets – human, social, financial, physical and natural – which are the main resources that help people to survive and thrive. Human capital contains resources such as skills, knowledge and good health. Social capital is determined by relationships and networks existing within families, communities and other groups, and it further influences the way in which people access and make use of assets. Natural and financial capital refers to the availability of natural resources and financial resources and to people’s level of access to and control over the resources. Physical capital comprises of the basic infrastructure such as transport, shelter, energy, communications and production equipment. The ability to enhance these assets is the fundamental requirement for improving livelihoods (e.g. Mayer et al. 2002; De Silva & Yamao 2007).

For the fishermen, location next to the sea was the most important factor affecting their ability to carry on with their livelihood. The main forms of financial capital were fishing boats and equipments donated by NGOs. Social capital in the form of fishing teams did exist, although difficulties arose when other members of the fishing team had been settled to other schemes. However, there were no representative groups that could have looked into the development of livelihoods, including value addition processes. Fishing is a seasonal activity and during the low seasons the fishermen looked for casual employment outside the scheme.
Table 7: Foundation for sustainable livelihoods in Periyaneelavanai, based on the sustainable livelihoods framework.

<table>
<thead>
<tr>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical</strong></td>
<td></td>
</tr>
<tr>
<td>Good, solid housing</td>
<td>Poor condition of the access road</td>
</tr>
<tr>
<td>Safe drinking water and sanitation facilities</td>
<td>Inadequate garbage management</td>
</tr>
<tr>
<td>Connected to national electricity grid</td>
<td>Lack of space for enterprises (shops, workshops)</td>
</tr>
<tr>
<td>Climate smart building, ventilation</td>
<td>Inflexibility in apartment layout</td>
</tr>
<tr>
<td>Safety and privacy (fencing, outdoor lighting)</td>
<td>Difficulties in maintaining wastewater storage and treatment centre</td>
</tr>
<tr>
<td><strong>Natural</strong></td>
<td></td>
</tr>
<tr>
<td>Fish in the sea provides the main livelihood</td>
<td>Lack of land for farming or keeping cattle or poultry</td>
</tr>
<tr>
<td>Potential to utilize surrounding ‘waste land’, if landownership is solved and support facilities are provided</td>
<td>Garden plots small and only available for the few living on the ground floor</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td></td>
</tr>
<tr>
<td>Fishing boats (owned) and equipment</td>
<td>Majority live under the official poverty line</td>
</tr>
<tr>
<td>NGO programmes on livelihoods with limited results so far</td>
<td>Limited access to credit</td>
</tr>
<tr>
<td><strong>Human</strong></td>
<td></td>
</tr>
<tr>
<td>Professional skills (masonry, fishing, bakery, hair dresser etc.)</td>
<td>Lack of capital to invest in livelihoods</td>
</tr>
<tr>
<td>Hospitals and health care facilities available</td>
<td>No ownership of the apartment (no collateral, limitations to renting)</td>
</tr>
<tr>
<td>Primary school close by</td>
<td>Dengue outbreaks in the area</td>
</tr>
<tr>
<td>Tuition classes for school children organized by a resident</td>
<td>Education standard in the local school poor</td>
</tr>
<tr>
<td><strong>Social</strong></td>
<td></td>
</tr>
<tr>
<td>Share values and culture</td>
<td>Lack of fishermen’s cooperative societies that would look into development of the livelihoods</td>
</tr>
<tr>
<td>Strong networks of reciprocity within neighbours</td>
<td>Disputes between residents</td>
</tr>
<tr>
<td>Residents provide a market for small scale business ventures</td>
<td>Tension between people from Periyaneelavanai and elsewhere, reflected on the management of HSS Dysfuntioning of HSS</td>
</tr>
<tr>
<td>Fishing teams</td>
<td>Quarrels between residents over acceptable behaviour in the apartment house environment</td>
</tr>
</tbody>
</table>

For home based businesses – whether practiced as a primary livelihood or as a way to earn some extra income – the apartment housing model was often a hindrance. On account of having the necessary skills and experience from running a successful business prior to the destruction by tsunami, many residents were eager and motivated to run their own businesses. However, practically all of the residents would lack financial capital to invest in business premises, and thus imagination was used to alter the housing premises to better suit micro enterprises. Generally, enterprises that required customers to come to
the apartment were not successful. In this aspect, the residents on the ground floor had an advantage. However, the apartment could be used for producing and storing items that were sold outside, with certain limitations. Enterprises that required large storage spaces were perceived difficult to carry out in apartment houses. The flight of residents from the scheme had the most severe consequence on all business opportunities, as the number of possible customers reduced drastically.

The limitations that apartment housing presented on small-scale enterprises hampered especially women, who often gained their income from home based businesses. Domestic duties, especially looking after the children, often limit women’s employment possibilities outside home. Thus, with regard to employment, apartment housing can increase the structural vulnerability of women, in particular.

For the people who found employment on a daily basis in different construction sites or odd jobs, the settlement pattern did not have much effect. The main deficiency was that the scheme located far from work opportunities. The post-tsunami construction boom had, however, slowed down and there was a lack of work opportunities in construction. New or additional sources of income were highly needed. Moving away from construction would also require skills development.

There is some potential capital that has not been utilized by the residents. The housing scheme lot is relatively large and there is some land that could be taken into productive use, for example to build workshop or storage spaces, or a community farm. Water facilities (wells) are available in the area. Similarly, there is plenty of unutilized land in the immediate surroundings of the scheme. Many residents possess professional skills that they are unable to put into practice due to lack of capital for necessary investments. Also, there is potential for building up social capital to form small enterprise groups. Furthermore, there is a ready customer base for both shops and services, given that suitable premises can be organized.

6.4. Participation and empowerment of the residents

To what extent has the process of ‘building back better’ supported people-centred and rights-based development that most international agencies and the civil society development community are committed to? The study has proven the importance of the principle of participation of the affected population in all phases of project
implementation. Resulting from the lack of participation the residents of Periyaneelavanai had no sense of ownership or ability or willingness to take responsibility over the maintenance of the housing scheme. Flaws or shortcomings that naturally appear over time were seen to result from improper planning. The whole concept of apartment houses was found unsuitable and culturally inappropriate by the residents – contradicting with the general satisfaction the residents had with the apartment and housing layout and facilities. Instead of working together to repair the flaws and to maintain the scheme in shape, the residents were looking for outside assistance to correct them.

It thus seems obvious that empowerment – a common goal of development practitioners – was not achieved in the case of Periyaneelavanai. Empowerment can be considered as inner sense of power that a person perceives in social contexts, in relation to others (Järvinen 2010). When the affected population are denied a chance to participate and are viewed only as victims of a disaster or passive beneficiaries of a development intervention the environment becomes suppressing in terms of empowerment. This easily results in an increasing dependency on international aid instead of strengthening the local capacities to take a lead in their own development.

The problem of empty apartments implies on a huge waste of resources that has resulted from the lack of consulting the residents properly and assessing their real needs. The residents of the ‘empty apartments’ are in a position to use the extended family structures or other assets – or their class base – to live in places that are more suitable to their needs. They visit their apartments in the evenings, weekends or holidays, remaining as nominal residents of the scheme, so that they would not lose the benefits provided by the apartment. The remaining residents belong often to economically deprived classes, not having a capacity to relocate. They are mostly aware of the waste of resources and their unequal position. An example of an impoverished family of nine members who share an apartment with two bedrooms, living next to a line of empty apartments whose owners have used their advantageous social networks to move elsewhere, portraits well the situation how inequalities were, in some cases, reinforced instead of being reduced.

6.5. Culture in transformation

It has been noted that the house form is a result of the interplay of social, cultural, economic and physical factors. As cultural and social values and economic needs – or the
way of life – change, the house form often responds to the change. Some features of a house or settlement lose their meaning and are replaced by other features (Rapoport 1969). What, then, is the impact of an alien house form – a house form introduced from outside – to the people’s way of life and traditions? Some examples of this, i.e. family structure and household chores were already examined in the previous chapters.

Modern settings of living, facilities, such as tap water, electricity and sanitised sewerage, bring new stability to life and make everyday life easier and safer. According to Giddens (1991), this is descriptive of modernity. The same facilities were highly appreciated by the residents of Periyaneelavanai, and the main reason for the positive image the residents shared on their living conditions.

The style of construction of apartment buildings, or “modern buildings” in general, is such that people depend on outside expertise on any repairs. Houses are planned, constructed and repaired by specialists instead of the owners and less specialized tradesmen. This reliance on outside expertise is also part of modernity (Rapoport 1969; Giddens 1991). This concept, together with joint ownership and management, has been difficult to accept by the residents in Periyaneelavanai.

The apartment housing form has brought limitations to self-employment in cottage industries and home-based businesses. The concept to build a larger settlement with employment opportunities within has failed in this sense. Also, there is no space for self-sustenance in the form of home gardens and cattle. The residents of the scheme are expected to adapt to the work for money-routine. This requires, however, an environment where employment is available. When measured in numbers and density of population, Kalmunai appears to be a major town. However, the employment opportunities in the town are limited. The economic setting does not promise a bright future for the residents of Periyaneelavanai. The same problems are likely to appear in other apartment housing schemes with similar characteristics.
7. CONCLUSIONS

7.1. Lessons learnt from the Periyaneelavanai housing scheme.

The main lessons learnt from the case study scheme that need to be taken into consideration to create housing that is socially sustainable are listed below. The ‘corner stones’ of successful housing are listed under physical constructs, domestic spaces, social spaces and economic assets. The four areas are inherently linked with each other, and thus failure in one area easily leads to multiplying of the problems.

Physical constructs and building practices

- As was proved by the case study, solid housing and conveniences alone do no guarantee residents’ satisfaction and acceptance.
- More ‘customer-focused’ approach in housing provision that allows space for customisation, in order to better satisfy individual requirements, is needed.
- Relevance of the building concept and architecture to local context is vital for survival of a scheme. This includes understanding of the cultural norms and fulfilling the various functions that are expected from a dwelling.
- Provision of modern housing and facilities does not automatically lead into transforming the traditional way of living. Thus, space for adaptations and changes is required.
- Building solutions and technologies that are otherwise not locally available complicates the repairing and maintenance and increases dependency on outside expertise.
- Linking apartments, houses and facilities together in the same system increases people’s interdependency as well as their vulnerability.
- Monotonous housing schemes can be turned into distinctive landscapes that enforce local identity and a sense of belonging to a place by creating variation by building structures, colours, materials and details.

Domestic spaces

- There should be flexibility to adapt to different household sizes and family situations, particularly when children marry and prefer to stay close to the parental
family. This is usually beneficial for both parents (security for old age) as well as the new family (child-care and domestic help).

- Domestic activities are frequently extended outside the main dwelling. Provision of appropriate space for such activities, as well as facilities, such as public wells, increases people’s satisfaction and helps to reduce conflicts between neighbours.

- Dominant fuel sources should be taken into consideration when designing kitchen facilities and ventilation particularly; improvised solutions easily lead into increased risks and discontent.

- A dwelling should be dividable into public and private domains; cultural norms determine the level of privacy needed for example for girls and women.

**Social spaces and importance of community**

- Architectural design can either encourage or discourage social interaction in space. Open, spacious corridors and shadowed inner yards are optimal spaces for neighbours to interact. Playgrounds and shop fronts are other spaces where people gather together.

- Shared socio-cultural background, profession, caste and previous experiences as a community attribute towards formation of a coherent community. For those who do not share these characters it is difficult to find a place in the community.

- The existence of social networks plays a significant role in defining one’s satisfaction to life in a scheme. Lack of social networks within current residence, and existence of such networks in the previous residence, is a valid reason for abandoning a dwelling that otherwise has all necessary conveniences.

- Social networks are vital as they provide social and economic security in the form of, for instance, neighbourhood help in times of illness, child-care help, economic support and alliances. Social networks also increase the feeling of physical safety.

- Housing scheme societies would be one culmination point of social capital in the community. The ability of the society to take collective decisions and actions plays a significant role in determining the future of a commonly owned property.

**Dwelling as an economic asset or economic space**

- Restrictions in the apartment ownership and confusions in the rights of the nominal owners result in dwellings not being fully utilized as economic assets;
instead, when a resident moves out of the scheme, the apartment is left empty. Restrictions in ownership also disqualify the dwelling as collateral for bank loans.

- Home gardens and animal rearing increase food security and self-sufficiency and can provide an additional source of income particularly for women. This function of the dwelling and the surroundings should not be forgotten when designing housing schemes.

- A relatively large size of a scheme and dense population can be a positive factor for the creation of livelihood opportunities, as a market for various products and services can be found within the scheme. Flight of residents away from the scheme will be detrimental for such livelihoods.

- Provision of shop and workshops premises within a housing scheme is an efficient way to support local livelihoods. This can also serve gender equity, when women are enabled to carry out livelihoods close to home.

- Ability to modify dwellings according to livelihood or home-based business needs increases the dwelling’s value as an economic asset.

7.2. Conclusions

This research has examined housing as a particular type of humanitarian or development assistance. The importance of housing from development perspective is indisputable; permanent housing provides an attachment point for the inhabitants. A home provides a unit around which daily economic, reproductive and social activities take place and are arranged. Shelter, water and sanitation are among the most basic needs, and only after the fulfilment of such needs people can fully focus on other activities, including livelihoods.

This research has applied the theories in human geography, particularly those related to sense of place and placelessness, in the context of housing research and shown that such theories are fundamental in explaining the success or failure of a housing scheme. More than physical features and conveniences of a particular type of housing, it is often the features of the community, social networks and interaction that support or hinder people’s bonding with places and the formation of sense of place and home. The failure to ‘fit into a community’ and to be part of the networks of reciprocity also increases the vulnerabilities of people.
Donor driven housing is an example of constructor and donor driven development, the weaknesses of which the research findings have highlighted. Despite being guided by humanitarian principles and guidelines that promote the concepts of local capacity building and participation, in reality donor driven development has provided limited space for community consultation and participation in the design, implementation and monitoring of development projects. Subsequently the development processes do not support the building of social capital or ownership. This can have devastating effects on the sustainability of the project outputs, as shown in the case study.
REFERENCES


APPENDICES

Appendix 1: Guideline for individual interviews

Semi-structured interview for village residents (15-20)

Date:_______ Time:_______

1. Personal information
1.1 Sex:__________ 1.2 Age__________ 1.3 Marital status__________
1.4 Household size__________
1.5 Household members____________________________________________________
1.6 Does the whole family live in the same apartment? yes____ no____
   if not, where do they live?________________________________________________

2. From displaced to a house owner
2.1 Where did you live before you moved here/before tsunami?_________________
2.2 In what type of housing did you live before tsunami?_____________________
2.3 Describe the process that preceded granting this apartment?_____________
2.4 Was there a chance for you to participate in the planning of the new house and the
   residential area? yes____ no____
   If yes, at which phases participation was possible?________________________
2.5 Was total ownership granted? yes____ no____
   If not, what are the conditionalities?____________________________________

3. Housing needs
3.1 In scale 1 (very satisfied) to four (not at all satisfied), how satisfied you are with
   current living arrangements? 1____ 2____ 3____ 4____
3.2 What are the main deficiencies:
a) in the apartment?______________________________________________________
b) in the residential area?________________________________________________
3.3 What are the things you are most content with:
a) in the apartment?______________________________________________________
b) in the residential area?________________________________________________
3.4 How would you describe the layout of the apartment (its functionality/how practical it
   is – e.g. is there enough space for all members of household, is there division of ‘public
space’ and ‘private space’?)

3.5 How would you describe the layout of the residential area (is it socially appropriate etc.)?

3.6 What do you think about the architecture of the scheme?

3.7 How would you describe living in a blockhouse settlement (as opposed to single house)?

3.8 What mode of living would you prefer most – single house, row house or block house?

3.9 If you compare to time before the tsunami, has your housing situation improved? Why so?

3.10 Do you feel safe in your house or in the residential area (e.g. able to move in the yard at any time of the day or night)? yes____ no____

3.11 What are your main safety concerns?

4. Community

4.1 Estimate the number of acquaintances/friends/relatives (people you know by name) you have within this scheme?

4.2 Describe the roles that your neighbors play in your life?

4.3 Do you participate in any community organizations within the area? yes____ no____
   if yes, what are these organization and what are their roles?
   if not, who not?

4.4 Are there common celebrations or other happenings within the residential area?
   yes____ no____
   if yes, please describe them?

4.5 How would you describe the venues that are available for neighborhood get together/community meetings?

5. Services

5.1 Name the services that are most essential to you/you need most frequently?

5.2 How would you describe your access to these services (distance, how affordable they are)?
5.3 How satisfied you are with the quality of services? ___________________________
5.4 If compared to time before tsunami, is there any improvement in the availability and quality of these services? ___________________________
5.5 What transport do you use? ___________________________
5.6 How would you describe the availability/access to transport services? ____________
5.7 How would you describe the basic infrastructure, such as availability of water, electricity and garbage disposal? ___________________________

6. Livelihoods

6.1 How many income earners there are in your household?
Full-time: _____ Part-time: _____

6.2 What are the main occupations or different sources of income in your household? ___________________________

6.3 Is there any change in the occupations when compared to time before tsunami?
    yes____ no____
    if yes, please describe________________________________________

6.4 Is there any change in the income level compared to time before tsunami?
improved____ no change____ worsened____

6.5 How do the living surroundings cater for your preferred source of livelihood (e.g. is there space for home industries or storing equipment or goods)? ______________________

6.6 Do the living surroundings prevent or hamper you from carrying out your preferred livelihood? yes____ no____
    if yes, why so?________________________________________

6.7 How would you describe the suitability of the location of the housing scheme for carrying out the occupations? ___________________________

6.8 Would you have access to credit if needed? yes____ no____
    if no, why so (e.g. lack of collateral)? __________________________