An exploration of resettlement and its impact on social services: The case of the Maldives.

Ahmed Shareef Nafees

A dissertation submitted to the School of Development Studies of the University of East Anglia in part-fulfilment of the requirements for the degree of Master of Arts.

September 2005
# Table of Contents

Acknowledgements ii  
Acronyms iii  
Preface iv  

1 Introduction 1  

2 Finding Appropriate Theories and a Conceptual Framework 4  
  2.1 Definitions 4  
  2.2 Causes and Types of Relocation 6  
    Diagram: Types and Causes of Resettlement 7  
  2.3 Significance of Forced Resettlement 7  
  2.4 Relocation in Small Island Developing States 8  
  2.5 Causes and Types of Relocations in the Maldives 10  
  2.6 Relocations and Social Development 14  
  2.7 Theories and Models on Relocation 15  
  2.8 Interpretation of the DIDR Model in the Maldives Context 17  
  2.9 New Risk Factors 20  

3 Policy Analysis 23  
  3.1 Current Policy Objectives 24  
    Table I: Government Expenditure on Education and Health 27  
  3.2 Pace of Resettlement 32  
    Table II: Recent Relocations 32  
  3.3 Resource Requirement 34  
  3.4 Community Participation 35  
  3.5 Chapter Conclusion 39  

4 Project Analysis 41  
  4.1 Assessment of Economic Risk Factors 42  
    Chart: Percentage of Household Engagement by Types of Livelihoods 42  
  4.2 Assessment of Social Risk Factors 45  
    Table III: Status of Pre-relocation and Post-relocation periods 48  
  4.3 Adaptation from Rising Sea-Levels and Climate Changes 48  
  4.4 Chapter Conclusion 50  

5 Overall Conclusion 51  

Appendices  
References 53  
Internet Resources 54  
Additional Sources 56
Acknowledgements

I would like to thank Ken Cole, Paula Kantor and Adrian Martin at the University of East Anglia, The UK, for the guidance given to me in preparing this work. I am also in gratitude of the support extended to me by my colleagues at the Ministry of Atolls Development, The Maldives, in particular Mohamed Zahid and Shathira Abdulla who helped me obtain the necessary data, materials and information from The Maldives. Finally, I thank the Government of the Maldives and the United Nations Development Programmes in the Maldives for sponsoring my studies and providing me with this opportunity for further education. Once again, thank you all!
**Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIDR</td>
<td>Development Induced Displacement and Resettlement</td>
</tr>
<tr>
<td>IDPs</td>
<td>Internally Displace Persons</td>
</tr>
<tr>
<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
</tr>
<tr>
<td>PRA</td>
<td>Participatory Rural Appraisal</td>
</tr>
<tr>
<td>SIDS</td>
<td>Small Island Developing States</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programmes</td>
</tr>
</tbody>
</table>
Preface

During the recent years of my work on rural development, before I came to study at UEA, I have often thought of the advantages of the 200 communities in the Maldives living on a fewer number of islands. We could manage the entire national population of less than 300,000 in three or four strategic locations: strategic in the sense of vicinity to good fishing grounds, higher elevation of land and shallow lagoons for both the expansion of existing land and also as a medium for aquaculture- a new livelihood base yet to be fully explored. I also become more conscious of the difficulties faced when communities live in small numbers and are dispersed; often many of their livelihood activities could not be successful because of the difficulty and also high costs of marketing or exchanging their goods. If communities were to live in a fewer number of locations, a more reliable and an efficient transportation network could be established.

Living as 200 communities and occupying nearly as many islands we are destroying equal number of natural eco-systems when ever more artificial harbours are constructed to address the demands of the communities. Not only are these artificial arrangements costly to establish, but once in place they are also expensive and difficult to sustain. If people were to live on fewer islands more durable protection structures such as those built for the capital could perhaps have been considered to protect the islands and its harbours.

This work not only fulfils the requirements for completing my studies but is also an attempt to better understand how beneficial resettlement can be as alternative in addressing vulnerabilities from global warming. The photographs used in this work, were taken by me during my travels in 2003, with the purpose of recording and conveying information on the changing status of the communities.
1 Introduction

This dissertation analyses the relationship between resettlement and socio-economic development in the context of the small island developing state of The Maldives. Many reviews on past resettlements (in other contexts) demonstrate a tendency towards impoverishment of people relocated. However, within the unique setting of The Maldives, is resettlement a potential means to adapting to the impacts of global warming as well as attaining socio-economic progress for its entire population?

The Maldives with its sparsely distributed small communities, has a unique spatial distribution known to result in increased cost of providing socio-economic services and related infrastructure (Ministry of Planning and National Development, n.d.: 1). Its communities live on small low-lying islands which are extremely vulnerable to the effects of global warming such as rising sea-levels, coastal erosion, flooding from swells and the death of coral from increase in sea-water temperatures. Although one study by Mörner (2004) questions an increase in the rate of sea-level rises in the immediate past, many predictions indicate a rise in sea-levels in the country already affected by severe coastal erosion and flooding and the possible death of the corals. This will leave people with no option but to move to higher grounds. Given that no island in the Maldives is over three meters, people's future movements may not be confined to their national boundaries as the entire nation will vanish if causes of global warming are not adequately addressed. Presently there are no formal commitments on curbing greenhouse gas emissions among some of the major global political powers such as the USA. Furthermore, with the emergence of two major

---

1 It is estimated that the costs are at minimum four times higher than the average for many developing countries.
economies of India and China increasing emissions, it is unlikely that this will be achieved any time soon in the future which does not bode well for people of the Maldives and others living in low-lying small island states or in low-lying coastal areas of the world. Even if commitments on curbing future emissions are achieved, the impacts of historical emissions are predicted to continue for a long time to come. According to a recent estimate, by 2050, as many as 150 million people will be displaced due to the consequences of global warming (Conisbee and Simms 2003: 24). This issue has become so serious that small island nations such as Tuvalu, which already fears its extinction, has requested New Zealand and Australia to accommodate its population (Peopleandplanet.net, 2004).

While research has been undertaken on resettlement resulting from major infrastructure development such as dams and roads, little has been studied on the resettlements or potential resettlements caused by sea-level rise and climate changes within the context of small island states. Bearing this in mind, this work sets out to answer three fundamental questions: 1- What is an appropriate framework to analyse resettlement in the context of the Maldives? 2- Can resettlement be undertaken in time to avoid impoverishment of its communities? 3- Can resettlements improve socio-economic services to those relocated?

Methodology: In the absence of adequate studies and research on adaptation and resettlement for the island states in general (and the Maldives in particular) secondary data and information presented in relevant government publications, including national development plans and statistical reports was analysed to form the basis for this work. Information from some of the few report and studies by external parties available was also examined. To relate the issues in question, and
support arguments presented, a diagram, a chart and tables are formulated based from data abstracted from various literature resources. As a starting point, theories and frameworks were derived from the general literature available for resettlement. Further explanation and the relevance on the adopted methodology are given in the introductions of the chapters of this work.

Given the limitation of studies on resettlements to the islands contexts, the second chapter explores an appropriate conceptual framework to analyse both policy objectives and interventions on national resettlement and internal migration. Using the framework and appropriate theories, the third chapter presents an analysis of national policies in relation to the question whether resettlement can be undertaken in time to avoid impoverishments. The discussions in this chapter focus on past, present and potential future practices and policies, as well as corresponding implications. The fourth chapter analyses a recent policy intervention, exploring how effective it is in improving social services for those relocated. The second and third chapters begin with a brief introduction of their outlay, closing with summary conclusions, whilst the final chapter provides a conclusion of the entire work.
2 Finding Appropriate Theories and A Conceptual Framework

This section focuses on the definitions, types, causes and significance of resettlement throughout the world and particularly in the case of small islands states and the Maldives. The linkages between resettlement and social development are briefly examined prior to an evaluation of the relevant theories and frameworks and the final selection and modifying of a theoretical framework appropriate for this analysis.

2.1 Definitions

Internal displacement, resettlement and migration have no common definitions agreed upon among academics and policy-makers. Consequently, it is not surprising that in the relevant literature, the term resettlement is used interchangeably with migration. According to Mangalam (1968:8), for example, migration is displacement from one geographical location to another resulting in a permanent change of residence, similarly, the Migration Information Source (2005) defines resettlement as:

Permanent relocation of refugees, internally displaced persons or others that have been displaced to a new place that allows them to establish residence. [This] [r]efers to both international and internal relocations.

According to some authors such as Muggah (2003a), however, refugee, migrant and internally displaced person are distinct concepts; migration implies a choice in action while resettlement is a forced movement. Resettlement has a connotation of planned action and is mostly associated with development-induced displacements as a consequence of infrastructure developments. Robert Chambers, one of the first writers in this area, describes resettlement as “[a]
planned social change” encompassing the movement of population (Muggah 2003b: 10).

Forced displacement or resettlement can occur either within the confines of a particular state or across national borders. Those forced across state borders are commonly referred to as refugees and those displaced within a state are called internally displaced persons (IDPs). The United Nations Office for the Coordination of Humanitarian Affairs refers resettlement as:

… transfer of refugees to a country that is neither the migrant's country of origin nor the country where he or she sought refuge.

IRIN (n.d)

The World Bank and the Asian Development Bank as part of their policy on involuntary resettlement refer to the relocation of people who have been displaced by development projects within the same country.

The study of resettlement is based on both anthropological and sociological approaches. Whilst some scholars see displacement as inevitable and unintended, according to Muggah (2003b: 11-12) action researchers believe that it is ‘an unacceptable failure of development’. According to the author, the proponents who believe in the inevitability of development induced displacement seek solutions to the socio-economic impacts of displacement through well-planned and well-managed resettlements, focused on the well-being of those affected. Action researchers however, focus on the causes, social costs and dynamics resistance of resettlement and call for avoiding displacements altogether.
For the purpose of this dissertation, resettlement or relocation is defined as a planned process for the permanent movement of a group of people or community from their original place of residence to a new location within the same country.

2.2 Causes and Types of Relocation

Understanding the causes of people’s movement should clarify the nature and concept of resettlement. The diagram overleaf shows, people’s movement can be viewed under two broad categories: voluntary movement and forced movement. Voluntary movement is observed both within and across national boundaries, and is a result of people seeking better socio-economic opportunities (Conisbee and Simms, 2003: 5-9). Within the boundary of a state this is often observed in the form of rural-urban migration. Voluntary movements across national boundaries are also sometimes attributed to the demands of the global economy for cheap mobile labour (ibid: 4).

People’s forced movements can also be either internal or across national boundaries. They can also be attributed to socio-political upheavals (ethnic, religious and political persecution, and conflicts), natural and man-made disasters and planned dislocations. But, regardless of the causes, Hansen and Oliver-Smith (1982: 3) believe that forced resettlement stems from an inadequacy or deprivation with the prevailing circumstances and a pressing desire to redress the problems faced.

Planned relocations or development-induced displacement are diverse and include both urban and rural relocations. The first is attributed to infrastructure
for water, roads and the latter to forestry, mining, the establishment of reserves and national parks (Koeing, 2001:2).

Diagram: Types and causes of resettlement

2.3 Significance of Forced Resettlement

Development induced displacements have in the last 20 years lead to the relocation of over 200 million people, particularly from South East Asia and Latin America (Cernea, 2000:11). In India alone, the number is estimated at between 20 to 50 million (Conisbee and Simms 2003: 19). In fact, forced
migration from natural disasters is soon to outstrip displacements as a result of wars and persecutions increasing the extent of poverty. This problem, which is partly the focus of this analysis, is likely to be aggravated by the effects of global warming. The movement of people, due to the effects of global warming, is to originate from low-lying coastal areas including cities, to higher safer places. Recent estimates suggest that by 2050 as many as 150 million people are to be displaced (ibid: 24).

2.4 Relocations in Small Island Developing States

Forced resettlement caused by natural disasters is not a new phenomenon. However, the difference in the context of Small Island Developing States (SIDS) is that these disasters are human-induced and quite serious. Global warming and the environmental effects of climate change are believed to be largely anthropogenic and mainly driven by emissions from the burning fossil fuels, needed to drive the economies of the West. The consequent worsening storms, floods, coastal erosion, and rise in sea levels are already affecting low-lying coastal areas of the world, making many parts of SIDS uninhabitable. So serious are these disasters unless greenhouse gas emissions are curbed, five of the small island states including the Maldives are ultimately to become extinct.

Forced movements indirectly caused by global warming are in the form of internal displacements and in cases such as that of Tuvalu\(^2\), across national boundaries. This has raised serious issues such as the redefinition of refugees. Consequently, the present concept of refugee defined under Geneva Convention (1951) is limited to persecutions founded on religious, race, and ideological

\(^2\) (as mentioned on page 2 of the Introduction)
grounds and excluding environmental causes. Therefore, the need for expanding
the definition to include ‘environmental persecution’ has already been proposed
to bring about social justice to those unfairly affected by global warming
(Conisbee and Simms, 2003:26).

For the purpose of achieving social justice it is essential not to limit considering
these displacements resulting from human-induced natural disasters as suggested
in the literature. Instead they need categorizing under a new form of
development-induced displacements. This is because, as explained earlier, the
emissions that cause global warming arise from global economic development,
especially in the West. According to the concepts of globalisation of economies
and politics, almost all nation states are interlinked and influenced, this includes
SIDS which are considered to be some of the most vulnerable. In this sense,
economic development resulting in global warming benefits the more powerful
and rich at the expense of the vulnerable; comparable to the plight of those
displaced in the normal development-induced displacements.

If resettlements in SIDS are agreed to be development-induced, nations
contributing to global warming will perhaps be more obliged to assist those most
affected, such as communities in SIDS. This in turn would contribute to assist the
development of appropriate adaptation measures fit for SIDS which will also
benefit other nations and the global environment. However, whilst the West
subsidizes their energy production spending some $80 billion a year on their
fossil fuel industries they have agreed (as of 2005) to spend $.04 billion annually,
to help developing countries adapt to the effects of global warming (Conisbee
and Simms, 2003:28). Given that major world political players such as the USA
and Australia, influenced by free market ideologies, have been reluctant to accept the link between global warming and emissions from fossil fuel consumption, it is unlikely that such agreements and redefinitions can be reached any time soon. Australia, in contrast to New Zealand, has also declined Tuvalu’s request to accept its people’s resettlement in the country. Tuvalu, fast becoming uninhabitable and predicted to sink below sea-levels within the next 50 years, has started discussions on resettling on the small Pacific island of Niue which is already experiencing storms and cyclones aggravated by global warming. Action is now required prior to the onset of disasters to resettle people in safe places through well-planned interventions.

2.5 Cause and Types of Relocations in the Maldives

The presence of ruins on several currently uninhabited islands such as Gan in Huvadhu Atoll, shows relocations may have been part of people’s lives in the distant past. The reasons for abandoning such islands and possible relocations are uncertain but one explanation is the onset of major epidemics.

In the Maldives, past relocations were influenced by religious beliefs. The people of the Maldives have for the last 800 years or more shared the same religion,
ethnicity and culture. In the 1970s and earlier, regulations based on religious belief determined that a viable community should have minimum of 50 men, sufficient for a congregation for Juma Prayer performed on Fridays. Back then, some small communities owing to accidents at seas, and or high mortality rates experienced decreasing populations and consequently were compelled to move and join other communities. Some of these communities, such as the Kondey community later returned to their original place of residence.

Development-induced resettlements in the past were few and related to the development of an airport on the islands of Hulhule and the leasing of Addu-Gan (in around 1912) to build a British Royal Air Force base. In the first case, those moved (people of the Giraavaru-community) had already experienced resettlement with their first forced movement in 1968 mainly as a result of regulations based on religious beliefs as mentioned earlier. It is noteworthy to recognise that the distinct and peculiar habits and culture of this community were not given due account for preservation when their relocations took place.

Recently communities have been forced to move due to physical access restrictions, excessive coastal erosion or other environment degradation making their islands no longer habitable. Relocations undertaken in the past 10 years also include voluntary resettlement encouraged to alleviate population density in some islands such as the capital. Unlike previous resettlement of entire communities, in this case, families from several different communities are encouraged to reside in one location.

---

3 See Table II: Recent Relocations
4 as part of national strategy on internal migration
More recently, after the destruction of their entire physical asset base by the 2004 Tsunami, 12 communities constituting 15 000 people have been displaced (Ministry of Planning and National Development, 2005a:2). Some plan to be resettled in their original place of residence, while the rest will be resettled with host communities. This strongly suggests that displacement and resettlement in the future is likely to be the result of similar natural disasters.

Displacement in the future is certain. According to the latest assessment by the Intergovernmental Panel on Climate Change (IPCC) the Maldives is among those small island nations most vulnerable to the impacts of global warming (Watson et.al 1997: 13-14). This includes rising sea-levels and increasing incidents of tidal swells, coastal erosion, and the death of corals. One report from Möner (2004: 149) provides contradictory evidence regarding sea level changes in the Maldives. According to the author, the impact of climate changes has in the recent past led to falling sea-levels in the Maldives. However, even if true this trend may reverse in the future. In addition, other consequences of global warming (as mentioned) will indeed cause forced movement in the future. Over 40 per cent of the 200 inhabited islands are facing serious coastal erosion and many islands have a history of worsening storms and tidal surges\(^5\) (Ministry of Planning and National Development, n.d.: 19,32). When 80 per cent of total land areas has a mean elevation of less than one meter, and a 50 centimetre sea-level rise is predicted over the next 100 years, and if this occurs in the Indian Ocean, many of the islands will soon become uninhabitable long before they are inundated. This is when sea waters intrude into the fresh water lens of the islands causing severe shortages of water for human consumption and a number of trees and other vegetation will become extinct. Meanwhile, without adequate coastal

\(^5\) such as those experienced in 1987 and 1991
protection, many of the islands are slowly eroding which will soon affect residential areas, forcing people to relocate to other islands.

The future forced movement of people and resettlement should also be considered with the context and nature of voluntary movements or rural-urban migrations within the country. In the Maldives, there is a trend of rural-urban migration causing a population density of 400 persons per hectare in the national capital. People migrate to the capital, not only for the purposes of economic gains but also to access better education and health services.

Malé, the capital of Maldives, only 192 hectares in its size and yet is home to an estimated 80,000 people at a given time. Most of its surrounding lagoon area has been reclaimed reaching the limits of its horizontal expansion.

A part of the focus of this dissertation is to explore the potential of relocation within the context of improving socio-economic status of those displaced. Therefore, it is important at this juncture, to consider the relationship between resettlement and socio-economic development.
2.6 Relocations and Social Development

No significant studies have been undertaken to evaluate the impact of resettlement in the context of Maldives. Given that resettlement due to global warming in the context of island states is a recent phenomenon no such studies seem to be available for other island states either. Consequently, it is difficult to establish a conclusive relationship between resettlement and the socio-economic status of people relocated in the island context.

What has been written is mostly about forced resettlements induced by development such as the building of dams, roads and power infrastructure. Such resettlements are justified as they benefit a large number of people. However, these benefits do not accrue to those relocated and several studies show insufficient attention paid to the process, has often caused impoverishment (Cernea, 2000: 1). Therefore, in the case of past resettlements the socio-economic status of those displaced have been sacrificed rather than enhanced. This does not necessarily mean however, that there is an inverse relationship between resettlement and social development in the case of those relocated in other contexts. Most literature, theories and models on understanding the socio-economic development of displaced people focus on development-induced displacements. Given this focus an examination of a conceptual framework and theories on forced displacement in the SIDS context will begin with the study of existing frameworks. Some aspects of existing frameworks are applicable for SIDS context, as explained in the following discussions.
2.7 Theories and Models on Relocation

According to some authors, such Mangalam (1968:8) mentioned earlier, the process of migration should be viewed in a social dimension as a collective movement of a people with cultural affinities and or family ties. Important in the process is the decision to relocate and where to relocate (Eichenbaum, 1975: 22). Since those relocated have few choices their reactions can be predicted and therefore, the study on relocated populations can be based on a study of various types of stress including physiological, psychological and sociocultural (Scudder and Colson, 1982: 267). Stress from relocation also applies to voluntary migrations.

In the 1960s and 70s the dominant model on resettlement studies conceived by Robert Chambers and Colson, was based on stress, changes and trends of voluntary and involuntary relocation (Muggah, 2003a: 11). Scudder and Colson (1982) built on this model formulating a modified framework which includes four phases: 1) recruitment: the process by people are selected for relocation; 2) transition: the initial few years of adaptation to the new site; 3) potential development: the period in which settlers begin to invest particularly in economic activities; and 4) handing over and incorporation: the period when those relocated integrate with the hosts. However, according to Muggah (2003a: 17), in practice there are three stages in development-induced displacement and resettlement; “relief assistance and transportation to settlements”, “physical resettlement” and “integration”. Scudder and Colson’s model itself was, also, criticized for not being sufficiently comprehensive and confounding problems of both voluntary and forced resettlements (Koenig, 2001:10).
More recently Michael Cernea developed a model called Development Induced Displacement and Resettlement\(^6\) (DIDR) which specifies eight inter-linked risk factors identified to overcome impoverishment. They are; landlessness, joblessness, loss of access to common property and services, marginalization, social disarticulation\(^7\), homelessness, increased morbidity and mortality, and food security. These factors can be categorised into economic, socio-cultural, and socio-welfare oriented aspects. This DIDR framework however, is criticized by action researchers for not adequately considering the causes of resettlement nor accounting for the capacity and resources of those displaced (Muggah, 2003b: 12). The best study of displacement and resettlement is known to be based on dam projects usually undertaken in rural areas. For this reason, some have questioned how relevant it is to other types of resettlement, especially in urban context (Koenig, 2001:2).

According to many analysts, this is the most significant and recent theory formulated and focused on involuntary development-induced resettlement (Koenig, 2001:4). Although limited, this framework is the most relevant available as it examines socio-economic development; the focus of this analysis. In addition, the DIDR model can be utilised for both planning purposes as well as evaluating the impact of resettlements. Once again this is relevant since this dissertation also analyses policy objectives and interventions. The model, however, does need to be interpreted in the context of the Maldives and also identify additional necessary risk factors given the causes and context of resettlement are different in the Maldives.

---

\(^6\) Also referred to as Risks and Reconstruction Model

\(^7\) Relates to networks for mutual assistance and authority systems
2.8 Interpretation of the DIDR model in the Maldives Context

Landlessness: This is a significant factor in a country with extremely limited land\(^8\). If a settlement island does not have adequate space for current and future housing, for agriculture or other common purposes, then those relocated are likely to suffer. In the case of resettlement in already inhabited islands, scarcity of land may give rise to conflict when host communities are forced to share their common land with the new settlers.

Joblessness: This will be related to land if those relocated are pro-agriculture communities who need land to produce for consumption purposes and or for

\(^8\) The total land area of the 1190 islands that make up the Maldives is only 300 square kilometres. Only 33 of the islands exceed a square kilometre and 3 are over 3 square kilometres. The average size is 16 hectares.
livelihoods. If scarcity of land prevents people from following previous vocations, alternative means of livelihoods must be provided. If a community previously located near good fishing grounds is relocated somewhere with difficult access to fishing grounds then many may lose their livelihoods. This could be addressed however, by the introduction of large fishing vessels capable of long-range fishing.

*Loss of access to common property and services:* Some communities need access to common forest areas for raw materials as for example, thatch weaving requires coconut palms leaves. If not acknowledged this will lead to a loss of income and therefore impoverishment. Common space is also required for recreational and sporting activities.

*Marginalisation:* This is related for example to weavers who, due to lack of access to palm leaves may be unable to use acquired skills in the new locations. In the case of relocating people with host communities it is important to examine if new settlers lose their social status in the new environment due to their inability to use their skills. This could also relate to retailers who after resettlement with host communities may be unable to re-establish themselves among established retailers in the host community.

*Social disarticulation:* People in the Maldives live in close-knit communities and depend on social networks for mutual assistance. They are homogeneous with shared religion, language and culture, however shifting one community into another, if not consciously undertaken to preserve existing social organizations, may impoverish those relocated. For example, communities share transport and
so many people get services free of charge. However, once moved into new communities these free transport arrangements may not be feasible as those relocated may have a lower priority. In larger communities, the number of people in needing transport will indeed be more and therefore the new migrants may be excluded. Also relevant to this point is how resettlements are arranged to promote communication and cohesion of communities as too are the ability for those relocated to bring with them transport assets such as their boats, and operate in the new environment. These are some important aspects which require studying in order to understand past relocations and draw lessons for future exercises which are inevitable given rising sea-levels and coastal erosion.

*Homelessness:* This is relates to the question: Do those relocated have adequate shelter and are their homes safe from sea-level rises in the future?

*Increased morbidity and mortality:* Due to productions and job loss people may become more vulnerable to diseases. The Maldives already has a high level of malnourishment and high rates of stunted growth among children. Even if people are able to maintain their consumption levels it is uncertain how long this can be sustained given the rise in sea-levels which may pollute the fresh water and impact production and consumption.

*Food security:* All communities in the Maldives depend on imports of staple foods; rice and flour. Food security is therefore dependent on people’s capacity to afford imports; yet again emphasising the importance of sustaining their level of income and earning potential. For protein-intake people depend on fish. Therefore it is important that their infrastructure for fisheries is sustained with
relocation. However, as previously discussed if people are moved away from good fishing grounds they need assistance to access new fishing grounds through new investment.

2.9 New Risk Factors

As mentioned earlier, the scope of the above risk factors is limited as they were developed to address impoverishment from development-induced displacements in different contexts. The following factors, therefore, need to be included to better address impoverishment through resettlement within the Maldives context; these arise out of its vulnerabilities to sea level rise and coastal erosion.

Adaptation from rising sea levels, impacts of climate changes and natural disasters: None of the islands in the country exceed three meters in elevation and 80 per cent of the total land area is less than one meter in mean elevation. Sustainability from sea-level rises is therefore important enough to be treated as a separate risk factor as the country is extremely vulnerable to this and other adverse effects of climate changes. A study on the 2004 Tsunami disaster shows that very low-elevated islands are among those worst-hit, suggesting the need to relocate and safeguard communities living on islands with the lowest elevation. It is also important to assess how long each island is likely to be safe from the impacts of rising seas. This particularly refers to the intrusion of salt water into groundwater supplies rather than the time when the land will be inundated. Using this as a benchmark, all habitable islands should be categorised in order of their safety, given their elevation and the predicted rate of sea-level rise.
It is essential to elevate islands in order to prevent their extinction in the long-
term future as sea-level rise is unlikely to cease any time soon and coastal erosion
and tidal swell are becoming ever more frequent. This is an expensive activity but
what is important is surrounding lagoons can provide sand and materials which
can be used to raise land levels. Shallow lagoons can also be reclaimed for
expanding existing landmass, however, considerable areas will be required to
address both purposes. Shallow lagoons, therefore holds the potential for both
elevating and expanding land and providing sustainability from the adverse
impacts of global warming.

Sustainability also relates to protecting land from coastal erosion, as without such
measures the sustainability of communities cannot be assured. The value of land
depends on the present and potential physical infrastructures, and the capacity to
maintain populations. Adequate protection of land and infrastructure by means of
coastal protection structures such as those built around the capital, cost US$ 13
million per kilometre (Goreau et.al, 2004). It is only possible to protect a few of
the islands given the exorbitant costs and therefore those bigger in size, higher in
elevation and with larger shallow lagoons will have to be accorded priority. If
land expansion is necessary for concentrating population and reaching economies
of scale in the provision of social services this implies a relationship between the
size or potential size of land and impoverishment of its occupants.

Access to social services (education and health): Resettlements on uninhabited
islands will require new infrastructure and the re-establishment of service
facilities and personnel. Private service-providers such as those involved in
providing pre-school education will also require financial assistance to continue
their service to the communities. Resettlement with host communities will require existing social services facilities to be capable of absorbing the new populations; otherwise they will need to be upgraded. Another consideration is that given population growth, can these services be developed on the new location? This is also related to land size and the sustainability of the island as previously discussed.

Access to physical infrastructure: If people are relocated to uninhabited islands they need all the necessary infrastructure related to energy, water and sanitation, and communication. When relocated communities are integrated into host communities, the existing infrastructure needs upgrading to cope with additional needs. One of the most important infrastructures is harbour facilities which are vital for travel and transport to and from the new location.

Having discussed a suitable framework of analysis and theories, the following section will now explore the country’s current policy environment to understand the extent it confers to resettlement and the social development of relocated communities.
3 Policy Analysis: Can resettlement be undertaken in time to avoid impoverishment of the communities?

The previous sections discussed the physical and technical issues of resettlement and development and how geography and the spatial distribution of its population influence the country’s governance and politics. Having established the necessity for resettlements and a conceptual framework for their analysis, this section looks into the possibility of undertaking resettlement in order to improve socio-economic services whilst addressing impoverishment arising from the effects of sea-level rises and the consequences of climate changes. Although there are alternative ways to approach this research question, this analysis will focus on national development strategies on internal migration and resettlement, as policy objectives are reflective of the interplay and dominance of interests and priorities on resettlement. These also guide resettlement interventions- the focus of the second part of this analysis addressed in the fourth chapter.

The following discussions, therefore, investigate national resettlement and internal migration policy-objectives highlighting scope of resettlement needs, the extent of resources requirements and allocation, and the degree of people’s awareness and participation in the formulation of resettlement and internal migration policies. All these aspects combined will provide a clear indication of the capacity for undertaking current and future resettlements. Strategies and policy guidelines on resettlement and internal migration where appropriate will also be assessed using the developed conceptual framework, in order to understand how they are geared towards the socio-economic development of those relocated and address negative impacts of sea-level rises and climate changes. The discussions also include an assessment of social policy objectives.
3.1 Current Policy Objectives: Social Services, Resettlement and Internal Migration

The country’s sixth National Development Plan states the spatial distribution of population as a major challenge in providing social services which it states costs 4-5 times more than in other island states and continental developing countries (Ministry of Planning and National Development, 1998: 17). But what makes this spatial distribution a challenge exactly? Was it an issue in the past? Why do we discuss this now?

Current policy-making and development processes will be enlightened through understanding historical aspects related to the current situation linked to the past. Thus the analysis will be presented in the context of past developments, current practices and possible future directions.

In the past, communities were left to fend for themselves in all areas of their development. The exchange of communications between the rulers in the national capital and their officials and the governed in the remote areas could take months. Communities were not generally provided with public services as is the case today, although communal services, such as burial of the deceased and leading of prayers were performed by the administrators appointed by the rulers and governments. Communities were therefore, compelled to become self-sufficient in social services, food security and even economic development. Even the appointed administrators had to be paid from levies charged on fish catches.
by the communities. Communities engaged in direct trade\(^8\) with neighbouring
countries to obtain some staple food items and other necessities whilst most
people produced almost all their basic food items; those accessed by external
trade were mainly for use by the more affluent.

Unlike in the past, the only exportable commodities now relate to fisheries,
which communities sell to the state companies and private exporters mainly
based on the capital island. People, therefore, unable to gain the maximum profit
for their products and as they no longer practice agriculture to the extent they
used to, they are totally reliant on imports to meet basic food requirements and
other necessities. The national capital has become the centre of trade, politics and
social services. These changes occurred through the introduction of a free market
approach to development and specialisation in production and services.
According to the Ministry of External Affairs India (2003) in 2001 the value of
Indian imports to the Maldives comprising agricultural goods and other products,
increased to Rupees 1 886 million (equivalent to approximately US $45million at
the current exchange rate), while the Maldives exports to India were only worth
Rupees 1.31 million.

Dependency on food imports is partly attributed to changes in land use resulting
from population growth, in which housing needs take preference over agriculture.
In the meantime, communities can access ready cash by selling their fish-catches
to floating markets, enabling them to purchase imported items. People are

\(^8\) In the past remote communities produced copra, coconuts and fish products that formed the bulk
of trade with the neighbouring countries. These were exported by local traders or by those from
nearby communities unlike now the businessmen based on the capital handling all exports.
therefore are no longer compelled to grow crops for own consumption. However, their earnings from fishing and other livelihoods are barely sufficient to fulfil basic food and shelter requirements and therefore communities have become dependent on free public services for their health and education needs.

Unlike in the past, with modern communications and transport facilities, the national public administrations are now capable of physically reaching any of the communities within a day or in just hours and at the same time also maintain constant contact with all communities using telephone, radio and internet facilities. Local administrations are enhanced by facilities and support staff. This expansion in civil service machinery is largely owed to the growth in tourism and fisheries bringing tax revenue which the state uses to provide a primary level of free social services to the communities, as will now be explained.

*Education and health services:* All communities receive a limited level of free health and education\(^9\) services from the local and regional public facilities. The government also assists community and private initiatives on education services by providing salaries for teachers. The expansion of services witnessed the introduction of a formal educational structure replacing the past informal institutions. Table I (overleaf) shows the extent of resource allocation for health and education in 1995 and 2005.

Achievements in primary health care and the near universalization of primary and middle school education are comparable to or better than those available in many

---

\(^9\) According to the President’s Office (n.d.) in 1999 there were 82 public secondary schools out of 314 schools providing education for the 200 communities that make up the Maldives.
of the neighbouring developing countries. Public expenditure and resource allocation on education is higher compared to developing countries but similar to small island nations in the English speaking Caribbean countries (World Bank 2002: 42). Table I shows that expenditure on health and education as a percentage of total public expenditure, increased from 23 percent in 1995 to 27 per cent in 2000.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure</td>
<td>223.5</td>
<td>541.2</td>
<td>172</td>
<td>299.2</td>
</tr>
<tr>
<td>Expenditure as a percent of total government expenditure</td>
<td>13</td>
<td>17.8</td>
<td>10.2</td>
<td>10.2</td>
</tr>
<tr>
<td>Expenditure as a percent of GDP</td>
<td>4.7</td>
<td>7.7</td>
<td>3.6</td>
<td>4.4</td>
</tr>
<tr>
<td>Recurrent expenditure as a % of total government recurrent expenditure</td>
<td>19.2</td>
<td>22.7</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Employees(Number)</td>
<td>3046</td>
<td>4952</td>
<td>1791</td>
<td>2444</td>
</tr>
</tbody>
</table>

Sources:
1: (Ministry of Planning and National Development, 2005b)
2: (World Bank, 2002)

There are, however, significant differences in the level of services and distributional inequalities between the rural and urban communities. Even though the island communities form 72 per cent of the population and account for 74 percent of enrolments, their share of educational expenditure has been falling and in 2000 was found to be 40 per cent of the total public expenditure on education (ibid: 40-41). Educational development beyond primary and middle school grades has been concentrated in the capital too; this is partly due to the population concentration in the capital.
At primary healthcare level (received by all communities) there is no clear link between needs and provision. More equitable and efficient allocation of resources and need-based planning is also suggested by past reviews of health services; expenditure on secondary and tertiary healthcare outweighs that of the primary care (ibid: 55, 58). The report by the World Bank (2002: 58) highlights the need for transparency when it also calls for improvements in financial information on public expenditure on health services to enhance informed decisions.

The national development objectives aim to redress these differences, but one of the main restrictions is resource constraints. The only source of public fund is through taxation from a narrow economic base involving two industries; that of fisheries and tourism, which are constantly volatile to major global events. The second hindrance is as already suggested the spatial distribution of the population. Most of the 200 communities are separated by seas and as many as 70 per cent of them have populations less than a 1000 people\textsuperscript{10}. Despite these small numbers, each requires and demands increasing standards in free social services. Communities (including those with less than 300 people) need to be provided with separate socio-economic infrastructures including schools, health facilities, developed harbours and jetties. However, if the entire national population of less than 300 000 were living on the same land mass it could be served by a single large public hospital, and a few health facilities including small hospitals. The same is true with schools; instead of 264, the communities could be well served with fewer educational institutions. In the remote communities private undertakings for most social service provision is

\textsuperscript{10} Only 6 communities have a population of over 3000. The national capital on the other hand has a population in excess of 70,000.
discouraged because of the diseconomies of scale associated with such small communities.

Internal migration, resettlement and urban development: The National Population Consolidation Strategy forms the resettlement policy adopted to significantly reduce the number of communities within a period of 10-15 years. A list of focus islands and primary islands are to be identified and in the latter, the social service provided will be maintained at a primary level. The idea is to encourage people seeking better services, to relocate to focus islands.

The reason behind this policy objective is the government’s inability to meet communities’ demand for improved social services. This includes the establishment of higher-level education and health infrastructure to all of the 200 highly scattered and very small communities. Due to the highly dispersed and sparsely populated nature of the population, the government is finding it difficult to justify the high cost of delivering and also maintaining and improving social services. This explains why some people are migrating to the capital where the desired level of services is available. Thus, while population dispersion is a problem in rural areas, increased population density needs to be addressed in the capital and few other communities.

The Regional Development Strategy drawn up by the government is linked to the National Population Consolidation Strategy. It aims to develop selected growth centres across the country to counter migration to the capital. Two islands, Kulhuduffushi and Hithadhoo, have already been identified as growth centres, which will be developed with second-tier education and health facilities and
provide support services to communities moving to the focus islands (Bertaud, 2002: 1-2). The aim is to reduce migration to the capital from primary and focus islands arising out of the necessity for further education and health services. However, with the development of new suburbs on islands nearby (to alleviate density in the capital) there is a possibility that the well-off living on primary and focus islands may relocate to the capital. This is evident from statistics showing a growth of 25.5 per cent to 27.4 per cent during the period from 1995 to 2000, in the capital’s population (Ministry of Planning and National Development, 1998), which exceeds the natural growth and indicates continued internal-migrations. Although people are in need of higher level of social services even now, the pace of both the establishment of regional centres and voluntary resettlement in focus islands has been modest.

With relation to the two islands\textsuperscript{11} identified for growth centres; that of Kulhuduffushi and Hithadhoo, the first is almost fully occupied with no capacity to accommodate additional housing plots or infrastructure. This means the only option left is to construct high-rise buildings. It is unclear if the island’s elevation was considered when it was made a growth centre. According to a study done in 1989, Hithadhoo is about 70 centimetres above high tide (Titus, 1989: 3) is also comparatively low in elevation and consequently will be among the first islands to be affected if sea-levels rise. However, this island\textsuperscript{12} has unused land and also

\textsuperscript{11} Although these two islands are not meant for places of internal migration they are centres for higher-level social services, which implies that they will require additional land for social infrastructure development. However, as centres for higher social services, people from other communities will require temporary residence on these locations (as is seen in the case of the capital, Malé) which in turn will necessitate additional land.

\textsuperscript{12} Hithadhoo is linked by causeways to several other islands which combined form one of the largest land masses in the country and are home to three other communities.
lagoon space that can be reclaimed to expand its size or provide materials to elevate existing land when the need arises.

To alleviate population density and growth, especially in the capital, the government formulated the Selected Islands Development Policy in the late 1980s. This included the development of a suburb in a near-by island formally used as a resort. As part of this policy, the government has also started providing residential plots from three selected islands; Mafilaafushi, Hanimadhoo and Laamu-Gan. Of these three islands the first is an uninhabited island while the others have space to accommodate additional communities. However, this policy of density alleviation does not seem successful as many of those who initially accessed land are reluctant to relocate to these three islands where facilities and services available are inadequate and where job opportunities are limited in comparison to those found in the capital.

In 1992, the cabinet decided to undertake the resettlement of entire communities who for various reasons requested relocation. These programmes are generally categorised as voluntary resettlement owing to the initiation of relocation by the communities. However, as Table II shows, the communities in fact are forced to move for physical access restrictions, environmental reasons and or because of inadequacies with the present and potential level of social services provision given the small size of populations. The resettlement procedures drawn up by the government specify that if a community is relocated to an uninhabited island they will be provided with facilities and social services equal to the provision at their current location. However, whilst many of the relocations are geared towards larger islands with natural harbours, the elevation of the land and other risk
factors identified in the conceptual framework are not given due considerations. Thus the relevant guidelines need to be strengthened to reduce the risk of impoverishment in the future.

3.2 Pace of Resettlement: Urgency for Adaptation Measures from Effects of Global Warming

Table II shows resettlements\(^{13}\) undertaken since the 1992 cabinet decision to allow communities to relocate due to their vulnerability from ‘environmental causes’ and the inability to reach economies of scale due to small populations. During the course of 12 years since 1992, five communities have been relocated while work on the sixth is in progress. The average time taken for a resettlement is two years or 43 households a year.

In the meantime, according to Ministry of Atolls Development (2005c) 18 communities have already requested relocation. Among them are those living on

---

\(^{13}\) These programmes are supervised by the Ministry of Atolls Development, (equivalent to rural development department in other countries) which oversees the construction of houses and social infrastructure and coordinates with other relevant government agencies.
the islands of Nadella and Dhiyadhoo, which according to The Maldives Vulnerability and Poverty Assessment 1998, are some of the poorest and most vulnerable communities in the country (Ministry of Planning and National Development, 1999). The 1989 study on the elevation of selected islands, mentioned earlier, also states that Thaa Atoll islands are extremely low. They are among the worst hit islands from the 2004 tsunami. This again emphasizes the urgency for resettling communities on islands with in-built protections from natural disasters.

The current pace of resettlement is too slow and if not improved, is likely to lead to impoverishment. Coastal erosion will force people living at the seaside, to relocate as a durable solution costs over US$ 13 000 per meter of protection wall as that is built around the capital. This is clearly unfeasible for a large number of the islands and beyond their means. Many living closer to the periphery of eroding islands also have no option but to move to other islands if the land is already fully occupied. When entire communities are not resettled together quickly, the people are at the risk of impoverishment and marginalisation by a break up of social networks and family ties, as implied in the framework of analysis.

The pace of relocation is also determined by the extent of the annual budget allocated for resettlement. However, this poor pace is also partly due to the unavailability of resources, which is typical of small islands developing states further explained as follows.
3.3 Resource Requirement

In the country the state owns most of the land and provides housing plots to families who in turn has always been responsible for constructing their own houses. Due to population density, however, the government undertakes housing schemes in the capital, building flats which are rented out. These housing schemes, according to World Bank (2002:62-3), do not benefit the disadvantaged people.

In resettlements significant resources include land and finance. The relocation of entire communities since 1992, come with free plots and housing. The cost incurred for housing per family alone is quite high. In addition, resettlement to an uninhabited island requires the building of new social infrastructures. Even in the case of resettling with host communities, upgrading existing social infrastructure may be required. As table II shows, since 1992, the total spent for resettlement is Rufiyaa 160 million.

As mentioned earlier, attempts have been made by the government to secure donor funding for resettlement studies. However, the recent experience of attracting funds for the tsunami-reconstruction and resettlements shows this is no easy task. The local daily newspaper Haveeru (2005) reported that only 10 per cent funds required for reconstruction requirement had been gained by July 2005, and a large part of commitments by external donor agencies has yet to be fulfilled.
3.4 Community Participation

Although the country’s national development plan recognises the need for participation, there is still scope for improving people’s involvement in policy making. Community participation was promoted by the government as a means to develop the Vision 2020 statement (expressions of long-term development objectives). But the same level of participation was not found in the development of the strategies and policies on internal migration, including the selection of regional development growth centres, focus islands, and in the formulation of selected islands development policy to address population density. These decisions were all made by government policymakers.

People’s participation improved in the resettlement interventions since 1992 as mentioned in Table II. Those relocated chose where to resettle. The Makandoodhoo community, for example, were given the choice of resettling on any island nearby. They chose Milandhoo, an uninhabited island. As mentioned in the second chapter, according to resettlement theorists this is one of the important decisions in the resettlement process (Eichenbaum, 1975: 22). People’s participation and their decisions will not be effective without proper awareness and information: their judgment on where to move is made without adequate knowledge on the possible future threats of global warming. Apart from the 1998 study by Titus and that of Möner mentioned earlier (which are limited to few of the inhabited islands) no other studies have yet been undertaken to understand the specific elevation of islands and when rising seas will start to infiltrate fresh water lenses. Without such information, communities are unaware when they have to abandon their island due to sea level rises and or the current rate of coastal erosion among some communities. Limitations in up-to-date information
are not specific to the Maldives, but are the case globally. Despite predictions of an 80-centimetre rise in sea levels within the next 100 years, studies to assess the number people to be displaced are yet to be undertaken (Conisbee and Simms 2003:17).

It is relevant here to question why such studies, which are of great importance, have not taken place. Firstly, there is lack of financial resources and expertise within the country, as is typical of small-island developing states. Secondly, as previous discussion on policies indicated, there is lack of priority given to this issue perhaps because the serious effects from sea-level will occur 30 or 40 years from now, when most development plans are usually limited to five years ahead. The priority on resettlement may appear secondary to alleviating population pressure and housing in the capital given that an investment of over US$ 30 million\textsuperscript{14} has been made to develop a satellite town around the capital and less than US$ 12.5 million (Rufiyaa 160 million) has been spent on housing aspects of resettlement programmes (see Table II). Although the capital houses about 25 per cent of the national population it has some of the most influential people as it is both the hub of the administration and economy of the nation. Another reason for the focus of urban development is that with population density a number of pressing social problems have surfaced including substance abuse, deteriorating living conditions and health issues. And given the largest concentration of population in the country, the community here are at advantage of putting political pressure on the government.

\textsuperscript{14} The government, however, plans to recover the investment by selling land from Hulhumale’, unlike the usual practice of providing free land for housing. According to government estimates this expensive project is expected to provide housing for a population of 150 000 by the year 2020 (Bertaud, 2002: 1-9). According to the author, the capital region will represent 65 per cent of the national population in the future.
Thus, in a context of limited resources there is a conflict of interest between providing for the needs of other island communities and those in the capital. Predominantly, the latter is being accorded priority. Those in the remote islands who can afford to move to the capital will benefit from the current urban development policy, while the rest have no choice but to stay where they are. However, if people realise that the greater percentage of population is at risk without resettlement to safer locations, they are likely to exert political pressure, which will change the development priorities. For example, if coastal erosion is seen as a precursor or reminder of future threats of sea-level rise and inundation people’s reactions would be more intense, potentially resulting in changes in political priorities favouring resettlement.

At international meetings and forums on global warming, the Maldives has been vocal in bringing to world attention its vulnerability from sea-level rises. This is also evident from it being the first country to ratify the Kyoto Protocol and also from its efforts to harness external financing for studies and projects on resettlement proposed during its interaction with donors in the Round Table Meetings. The same level of focus, however, is not seen in the plans and documents produced for local use. Even the National Development Plan and the Vision 2020, has no direct mention of the necessity for large scale resettlement strategies to counter future threats from sea-level rises. The Population Consolidation Strategy is presented only as a mean of achieving economies of scale in service provision. One reason for the limited focus of these plans and visions are that they are short-range covering a period from 5 to 20 years while the impacts of sea level rise are expected 40 years from now. Countries such as
Singapore, however, which is known to embrace a strong planning culture, has not mentioned strategies to combat sea-level rises in its 50 year plan (Conisbee and Simms, 2003:18).

At the community level too, the issue of coastal erosion and environmental degradation is often taken as a natural cause and no link is made to global warming\textsuperscript{15}. Nor is it widely felt that in the future the situation is likely to worsen and so, communities are more pre-occupied by addressing their current needs for soci-economic development, such as building of social and economic infrastructure. However, there is no hindsight for the future sustainability of such infrastructure given threats from climate changes linked to global warming, thought to be arising from natural cause. Even with the Maakandoodhoo community, (see Table II) the main reason for relocation was the expansion of the lake in the centre of their island resulting in their collapse of their infrastructure. Without technical studies, the exact cause of the expansion cannot be determined. However, there is a possibility that it was due to rises in groundwater lens and therefore, an impact of sea-level rises.

\textsuperscript{15} Möner (2004: 149-55), in his study on sea-level flooding in the Maldives assumes that communities live under constant fear of flooding from rising seas. Although living under such stress is unhealthy, personal observation made during several interactions over the past ten years with communities in the Maldives (whilst facilitating their future development plans) questions the accuracy of Möner’s assessment. Especially given the fore-mentioned point that people lack the necessary awareness and information on the threats of climate change for them to take informed decisions on future adaptation. Möner mentioned that sea-level rises in the country has in effect been falling in the past 30 years due to a higher rate of evaporation and changes in the monsoon in the central Indian Ocean and that sea-levels in the Maldives have not changed during recent years. However, future scenarios cannot be assured and it is likely that the trend may reverse. Besides, awareness of the other impacts of global warming (including coastal erosion and death of corals from rising temperatures) will likely increase demands for relocation (requested by communities) as it may be one of the few sustainable and long-term adaptation measures available.
The new political developments with the recent establishment of multi-party democracy in the country have resulted in indications that the communities’ voice must be heard. The interplay among the new parties to win membership has led to the promise of more subsidies and cost reductions in service provisions for the communities in the rural areas, which form the majority in the country. In spite of this, whilst currently more sensitive to the needs of rural communities, no parties have yet discussed the issue of global warming and subsequent mass resettlement in the future.

Presently, reductions in electricity tariffs are being offered by the party in power. Such new developments will indeed put additional pressure on the governments to reduce the number of communities by means of resettlement with the reality of limited resources. Otherwise people’s increasing demand for improved services will not be met.

3.5 Chapter Conclusion

The new democratic reforms are likely to promote increased transparency on resource allocation and sharing between the urban and rural communities. Future climate change impacts of coastal erosion, inundation from tidal swell and sea-level rises will also become more apparent if new studies are undertaken as they will highlight that unless resettlement occurs soon many of the communities will be at great risk in the future. This is likely to make rural communities who are the majority in the country, to influence pro-resettlement policies. Even without such political pressure, the present trend in policies of offering utility subsidies and improved public services by the newly formed political parities, will compel those in power, to bring communities into more concentrated pockets of
populations, given resource constraints and the need to lower cost of providing social services. Therefore, future national development strategies and policies are more likely to focus on resettlement to improve social services, in the view of addressing vulnerability from rising seas and other impacts of global warming.
4 Project Analysis: Can Resettlement Improve Socio-economic Services?

This second and final segment of the analysis looks into the potentiality of resettlement programmes in sustaining and improving socio-economic services for relocated communities. The following discussion, based on the Cernea’s modified framework, evaluates the results achieved so far, from the latest resettlement programme in the progress of its implementation - the relocation of the Maakandoodhoo community as mentioned in Table II. There are no comprehensive studies undertaken on past resettlements in the country, however, this analysis, referring to some of the past experiences will present alternative resettlement scenarios for the Maakandoodhoo community in order to elaborate on the issues being addressed. The reason why this community was chosen is that it reflects the latest policies and strategies on resettlement programmes. In addition, as families are being moved they are in one of their most vulnerable periods during the course of resettlement. This intervention, which began in 1997, had by the end of 2001, moved people from 66 housing plots to an uninhabited island called Milandhoo; to-date families from 174 houses have been resettled 111 more are yet to be relocated (Ministry of Atolls Development 2005c). The following is an assessment of this intervention, based on the 11 risk factors identified in the second chapter.
4.1 Assessment of Economic Risk Factors

Chart: Percentage of Household Engagement by Types of Livelihoods: Maakandoodho Community at Pre-Post Resettlement Periods

Source: (Ministry of Atolls Development, 2001)

Joblessness: The chart above is prepared using base line data collected from a Participatory Rural Appraisal (PRA) undertaken in 2001 by the Shaviyani Atoll Development Project and from information supplied by the Milandhoo Island Administration (Ministry of Atolls Development, 2001). It shows that 36 per cent of the 142 families/houses yet to be relocated in 2001 were engaged in weaving.
This was one of the most important means of income in which women participated. Other important livelihoods were based on contractual construction work and civil service, which engaged 46 and 32 per cent of families respectively. Construction work largely specific to the tourism industry, was exclusive to men while employment in the civil service was open to both genders. At present, as the Chart indicates, a greater percentage of the 174 resettled families are involved in these three principal means of income, with a notable increment in construction work in which all the relocated families are engaged. As indicated in Chapter-two, impoverishment and social development is linked to livelihoods as income earned enables people to access much of their basic necessities, especially food. This also enables them to access higher levels of education services and healthcare which only available in selected locations of the country.

The newly constructed jetty at Milandhoo (the site of the relocation) is invaluable to those relocated facilitating their travel and marketing of products.
The PRA data also shows the community at their original location, in 2001 with ten of its families undertaking small-scale retail businesses running at a profit. Today, 16 relocated families are known to be involved in small-scale businesses. The level of sales of general merchandise is indicative of the purchasing power of the entire community and as such shows the strength of people’s income generating capacity now. In the absence of detailed studies carried after the relocation this is a good indicator for assessing people’s wealth-status and understanding their capability to access and afford a higher level of social services.

At first glance, the larger land area available for those relocated appears to be an asset for increased livelihood with agriculture. However, as Table III shows, none of the resettled families are involved in agriculture. It also shows that many fishing boats have been shifted to the new location. However, until recently many of the fishing operations were still based in the old location and those resettled were in fact buying fish from fisherman neighbouring communities who visited the island to sell their catch. These aspects highlight an important omission in the current programme, which is also typical of all previous resettlements in the country, that of the formalisation of a component on sustaining the lively hoods of those relocated.

*The loss of access to common property and services:* The community has land in excess of residential purposes that are used as a common property. This is evident in the continuation of thatch-weaving activities for which families access
raw materials from the common land\textsuperscript{16}. If this community were to resettle on Funadhoo (one of their choices for relocation with a host community) they would not have access to such a large common area. In the case of resettlement with host communities the people’s participation in decision making may delay the programmes or bring them to a halt. For example, in moving to a host community the new residents may demand an equal size of residential plots to those they used to possess. In situations where land is scarce this could lead to conflict with host communities who may have to give up or share their common land assets. As land is publicly owned however, the government can redistribute it. But, resolving such issues may lead to disagreements and consequently social disarticulation and isolation of the newcomers. Resettlement on uninhabited islands would reduce such conflicts, but may not always be possible as large plots higher elevated land are scarce. Participation of those affected and fair compensation, however, are needed so as to prevent communities facing impoverishment. If the issues are discussed and consensus reached it is likely people will become aware of the limitations and share the burdens together.

\textbf{4.2 Assessment of Social Risk Factors}

Marginalisation is not considered a major issue with the programme intervention here as the entire community is being relocated to an uninhabited island and as stated earlier, people are able to continue their main income generating activities and able to use most of their skills on the new island. However, fishing operations have not yet been re-established among the resettled community.

\textsuperscript{16} The community is also known to access raw material from nearby uninhabited islands as that which is available from the common land area is insufficient. This insufficiency, however, does not negate the point made earlier on selecting an appropriate location by the community, as people would have considered the available resources from neighbouring islands, when they chose the place to relocate.
perhaps due to the slow pace of relocation. Some resettlements pre-dating the 1970s were unsuccessful and people returned to their original islands. This was mainly because of marginalisation where those relocated were treated as outsiders and therefore failed to integrate with host communities.

In terms of social disarticulation there is limited impact as the entire community is being moved and people can maintain their informal networks and organisation. However, the slow pace of relocation where a few families are moved at a time and may temporarily affect their informal networks and would indeed have long-lasting effects were they relocated to a host community.

Prior to moving people to the new location they are provided with free houses. Each family is provided with at least a three-bedroom house and so become better off in housing terms. Their residential plots have space for home gardens to grow fruits and vegetables for home consumption. Additionally, families are compensated for trees (including the coconut trees) they owned; coconuts are an important ingredient in the preparation of local dishes. The main income earning activities are unaffected and apparently slightly improved; sustaining livelihoods activities are perhaps more relevant to avoid morbidity and mortality.

If this community were relocated to live with a host community, the situation would be very different. Those communities already resettled on Funadhoo, for example, have limited residential space implying there will be some sacrifices in terms of vegetable intake due to a reduction in home gardening. This is likely to worsen the already poor nutrition status normally found among communities. Poor nutrition among children is evident from high level of stunting and wasting
which according to a 1998 study was found to be 36 per cent and 45 per cent respectively among children of one to five years (Ministry of Planning and National Development and UNDP, 1999: 64). Those resettled with host communities, may also be devoid of their previous earnings from sales of home-grown vegetable and fruits including coconuts\textsuperscript{17}. Thus, many of those resettled on Funadhoo with host communities, would have lost earning capacity and at the same time have to buy some food items which they are unable to grow themselves.

Food security, as implied earlier, is dependent on people's ability to access food imports including the staple food items such as rice and flour. Thus, what is more relevant in this context is people’s capacity to earn and purchase imports, as discussed above. Since people’s livelihoods are maintained even after resettlement, the level of their food security can be assumed to remain the same as before. A study conducted in 1998 on vulnerability and poverty of communities in the Maldives also shows that the main reason for food insecurity is the lack purchasing power (Ministry of Planning and National Development and UNDP, 1999: 61).

\textsuperscript{17} This is a crop, which many communities are able to get from trees growing in the home compounds and or in the common land in their original place of residence.
Access to social service: Table III shows that the programme has provided infrastructure for social and economic services, in addition to free housing and public administration facilities. This is in compliance to the current policy guideline of offering equal or improved social and economic services to that which the community enjoyed prior to its resettlement. As also evident from Table III, primary and middle school education along with primary healthcare are now provided. However, until recently only primary education was available on the new location: Middle education services were not relocated as the resettlement programme could not be completed even seven years after its inception in 1997. If not for their close informal social networks, children, especially from the disadvantaged families would be deprived of their middle school education. Fortunately the relocated families were able to keep their children with relatives and close friends at their original location.

4.3 Adaptation from Rising Sea Levels and Climate Changes
As discussed earlier, elevation and size of land are important in providing safety from impacts of global warming and from vulnerabilities resulting from natural
disasters. This is evident from damages caused by the recent tsunami. According to reports, the 2004 tsunami completely destroyed all houses and social infrastructure of 13 island communities (Ministry of Planning and National Development, 2005a: 2). The elevation of Milandhoo where the Maakandoodhoo community is relocated was not technically assessed, however, from observation it is clear that the island is not among the lowest in the country. However, an extensive lagoon area is not a feature of this island so it is limited in further expansion by reclamation. This also implies that in the long-term future in order to address sea level rise, the existing land cannot be raised as the lagoon may not provide adequate sand and materials; additionally, accessing such materials from far away islands would be too costly and time-consuming.

Children swimming at their new island, Milandhoo. No technical assessment of the elevation of the island is known to have made prior to resettlement here. Observation from this harbour side shows its elevation may not be among the lowest in the country.
Access to social and economic infrastructure: As mentioned earlier the community is provided with education and health infrastructure. In addition, a jetty was constructed to facilitate physical access to the island which has a natural harbour. The electricity infrastructure has also been established with electricity being provided 12 hours a day.

4.4 Chapter Conclusion
This programme intervention focused on housing development. It lacks an important component in sustaining livelihoods, which could impair the community's capacity to access and higher level of education and the secondary levels of health care available from other regions in the country. However, the community did chose where to relocate and moved to a place able to provide raw materials for one of their most important livelihoods; weaving. Families relocated, are also able to sustain other important livelihoods in the construction industry and civil service. This provides them with the means to purchase their basic necessities such as fish, and to access higher level social services. Much of the previous investment and fishing operations have been gradually shifted to their new location and so families had to purchase fish from sellers who come to this new location. However, when all the families and physical assets have been relocated, this problem is likely to be solved. It is, therefore the speed of resettlement that is vital as a slow pace can result in the loss of livelihoods and consequently affect food security. The slow pace of the intervention also forced some children remain at the old location with relatives so as to complete middle school. Therefore, it can be argued that with enhanced implementation and added components securing and sustaining livelihoods, resettlement interventions can improve access to social and economic services for those relocated.
5 Overall Conclusion

Many important decisions made by the government and communities in the Maldives are being taken in the absence of much needed in-depth studies on future impact and vulnerabilities from rising seas and coastal erosion and other effects of global warming. In the immediate future, resettlement policies are likely to continue to compete with urban development in the context of limited resources. However, with an expected increase in people’s awareness of the consequences of global warming and impacts of climate change, combined with new political developments and a demand for improving social services, more and more vulnerable communities are likely to put pressure on the government so they can be resettled. The political influence of the remote communities, who form the majority in the country, will increase with the new democratic developments within the country.

Resettlement on uninhabited islands has potential for improving the socio-economic status of those relocated and provides a safer location in the medium-term future. What makes such relocations more permanent depends on the potential to accommodate more communities in a similar fashion at same location, sustaining their livelihoods and social services received as well as the relative elevation and potential expansion of existing land. Unless more communities are accommodated on the same basis at the same location, then the objective of reaching economies of scale in providing social services cannot be achieved.

Impoverishment from resettlement is closely linked to people livelihoods as all communities are dependent on imports for almost all their basic needs. It is
difficult to generalise impoverishment patterns for all communities as the livelihood patterns differ from community to community. Communities with agricultural-based livelihoods for example, will be more impoverished if relocated to a place without adequate land. The pace of relocation, in terms of limited number of people moving to the new location every year may affect informal support networks which enhance access to social services. It may also affect the livelihoods pursued, especially if people are resettled in host communities.

Resettlement can, (as is seen from the case study assessed) be effective in improving social services given proper attention to addressing vulnerabilities from global warming, sustaining livelihoods and speeding up the resettlement period. It is therefore important that all future development including strategies and policies on social development of the country be based on a clear strategy of relocation and adaptation from rising sea-levels. Thus in the unique context of the Maldives, participatory resettlement based on informed decisions on the realities of rising seas and other climate changes, can improve socio-economic services of those relocated.
References


Ministry of Atolls Development (2005c) Dhiriulhen Faseyha Bodethi Rahrashah Kudhi Rahrashuge Meehun Badhalukurumuge Mashroou [Relocation of Communities Living on Small Islands to Larger and More Accessible Islands].


Internet Resources


55
**Additional Sources**

Zahidh, Mohamed (Mohamedzahid@hotmail.com) (National Programme Coordinator for Atolls Development Project at the Ministry of Atolls Development, Male’, the Maldives) (2005, July 4). E-mail to Ahmed Shareef Nafees (ashareefn@yahoo.com).

Abduallah, Shathira (projects@atolls.gov.mv). (Staff at the Ministry of Atolls Development, Government of Maldives, Malé) Relocation Information. (August 7). E-mail to Ahmed Shareef Nafees (ashareefn@yahoo.com)