The practice of forcibly evicting people from their homes and settlements is a growing global phenomenon and represents a crude violation of one of the most elementary principles of the right to adequate housing as defined in the Habitat Agenda and international instruments. This report is the first research of its kind, it maps out existing eviction impact assessment methodologies globally. While many good practices exist in localized situations, and while some tools have been appropriated to suit the specific needs and contexts, this is the first time such practices been pulled together into a single report. The report is an important step towards understanding the tools and approaches that are required to create a solid evidence base of the actual and potential losses of forced evictions and thus promoting viable alternative policies and approaches.
 LOSING YOUR HOME

ASSESSING THE IMPACT OF EVICTION

ACKNOWLEDGEMENTS

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Contributions: Appreciation goes to all who provided advice, ideas and information and/or reviewed and commented on drafts of this report, including: Claudio Acioly Jr., Julian Baskin, Michaela Bergman, Stephen Berrisford, Natalie Bugalski, Michael Cernea, Laure-Anne Courdesse, Ben Cousins, Talita Dalton-Greyling, Graciela Dede, Alain Durand-Lasserve, Pierre Fallavier, Edesio Fernandes, Anouk Fouich, Francois Gemenne, Bahram Ghazi, Wardah Hafidz, James Heenan, Marie Huchzemeyer, Ursula Jessee, Steve Kahanovitz, Dolores Koenig, Helen Macgregor, Brooke McDonald-Wilmsen, Channe Oguzhan, Helge Onsrud, Rasmus Precht, Susanna Price, Joseph Schechla, Depika Shergan, Remy Sietchiping, Florian Stammler, Kai Schmidt-Soltau, Bret Thiele, Maartje van Eerd, Chris de Wet, Stuart Wilson and the late Tessa Cousins.

English Editor: Roman Rollnick
Design and Layout: Jinita Shah/UNON
Printing: UNON, Publishing Services Section, Nairobi, ISO 14001:2004-certified
PREFACE

The practice of forcibly evicting people from their homes and settlements is a growing global phenomenon and represents a crude violation of one of the most elementary principles of the right to adequate housing as defined in the Habitat Agenda and international instruments. While many communities, grassroots organisations and civil society groups stand up for their rights, many governments at national, district and local levels evict people from their homes every day. These evictions are, often, carried out in the name of the common public good; to make way for the economic development of both urban and rural areas, without following due process and without providing housing alternatives that otherwise would minimize the impacts and losses incurred by those directly affected by evictions.

While UN-HABITAT recognizes and, indeed, advocates for urban development and planning, and acknowledges that this may at times necessitate resettlement, it strongly emphasizes that such resettlement should be a last resort, after consideration of all alternatives, and should be implemented both in accordance with international law and in a sustainable and socially inclusive manner. The Housing Policy Section develops tools and knowledge that encourages and enables national authorities, particularly at the municipal level, to create more sustainable and inclusive urban policies.

The social capital and human development potential of resident communities is often under-estimated and under-utilized. Indeed, the practice of forced eviction entails significant losses to individuals, households and communities alike, from psycho-social impacts to environmental and economic impacts on communities and societies. This report argues that reliable data and a comprehensive analysis of these significant losses are essential for the formulation of sustainable alternatives to forced evictions, and presents the state-of-the-art know-how in this field.

This report is the first research of its kind and maps out existing eviction impact assessment methodologies globally. While many good practices exist in localized situations, and while some tools have been appropriated to suit the specific needs and contexts, this is the first time such practices been pulled together into a single report. The report is an important step towards understanding the tools and approaches that are required to create a solid evidence base of the actual and potential losses of forced evictions and thus promoting viable alternative policies and approaches.

Claudio Acioly, Jr.
Chief, Housing Policy Section
UN-HABITAT
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EXECUTIVE SUMMARY

Forced population displacements are a massive and growing global problem. Millions of people are affected annually. The majority of those evicted are poor and marginalised families and communities living under informal or customary tenure arrangements. The effects of such forced evictions can have a catastrophic impact on their lives.

In this context, important questions arise for anyone concerned with the plight of those affected. How do we develop a thorough understanding of the nature and extent of the impacts of this growing phenomenon on those who are evicted? Is it possible to determine the impacts of specific evictions, not only retrospectively but also in advance of planned evictions? Who has been doing this and what methodologies have they used? How could this contribute to the development of strategies to resist or find alternatives to eviction? In cases where the relocation of people is completely unavoidable, due to genuine, compelling public interest or life-threatening conditions, how could such an understanding be used to mitigate the negative consequences, or even to turn them into development opportunities that will improve the lives and future prospects of those affected?

The research showed that good progress has been made in the past two decades on developing Eviction Impact Assessment (EvIA) methodologies and associated tools. These are being used by civil society organisations, UN agencies, academics, multilateral banks, consultancy firms, lawyers and community representatives for various purposes, including: publicising the consequences of eviction and displacement; planning for resettlement; preventing planned evictions (through campaigns, litigation, negotiations); providing information in debates on ‘public interest’; seeking restitution and reparation (campaigns, litigation, negotiations); formulating alternatives to eviction; planning for resettlement; reducing impoverishment risks of development projects; and creating new development opportunities.

Existing frameworks, approaches and models include: (1) Economic Evaluation as part of broader feasibility investigations to determine relocation impact; (2) a comprehensive Housing Rights Violation Matrix which includes assessing losses incurred through forced eviction; (3) the Impoverishment Risks and Reconstruction (IRR) model, developed in the course of the 1990s and incorporated into the policies of the World Bank and regional international development banks; and (4) eviction impact assessment through Participatory Monitoring and Evaluation. Case-specific methods identified include cases from South Africa, Indonesia and Cambodia, conducted for purposes such as litigation, academic research, development of community-driven alternatives and more general human rights monitoring work.

While existing EvIA methodologies share certain commonalities and broad objectives, they have been developed on the basis of different frameworks, in different contexts and often for quite specific needs and purposes. It is important to note and respect the diversity of frameworks and approaches underlying these methodologies, and to encourage and support the relevant organisations in their endeavours to improve, fine-tune and implement them. At the same time there is great potential for synergies and cross-pollination between the different initiatives, even though many of the actors are currently unaware of the ongoing work of others. More generally, there are possibilities of consolidation and expansion of EvIA as a practice in the field of land, housing and development. Given the diversity of
different applications, and the importance of taking account of the specifics of each local situation, it is important to allow for pragmatic tailoring of methods, depending on specific context and needs of particular cases. Further investigation and consultation with relevant parties would be needed to establish whether or not it is feasible and advisable to combine different methods into a composite EvIA ‘toolkit’.

UN-HABITAT circulates the present report widely hoping that it can be used as a resource document for a forum bringing together key actors who have designed and/or implemented Eviction Impact Assessment methods and procedures. This would help to share and compare methodologies, techniques and tools; discuss gaps and possible improvements and refinements; assess policy and practice implications of Eviction Impact Assessments for governments; work towards agreement on a set of basic, agreed methodological and analytical standards for Eviction Impact Assessments; and promote the development of a ‘toolkit’ that can support training and capacity building, and formulate recommendations for further action.
1. INTRODUCTION
1.1 CONTEXT: THE RELENTLESS RISE OF FORCED EVICTIONS

Forced evictions are a global problem. Every year millions of people around the world are evicted from their homes and land, against their will and without consultation or equitable compensation. These evictions are carried out despite the fact that international law explicitly recognises the right to security of tenure and adequate housing; and has repeatedly declared the practice of forced eviction to be a gross and systematic violation of human rights. The UN Commission on Human Rights, for example, has it its Resolution 1993/77 stated that “Forced evictions constitute a gross violation of human rights, in particular the right to adequate housing”. Furthermore, according to the Committee on Economic, Social and Cultural Rights (in General Comment 4):

Instances of forced eviction are prima facie incompatible with the requirements of the Covenant [International Covenant on Economic, Social and Cultural Rights] and can only be justified in the most exceptional circumstances, and in accordance with the relevant principles of international law.”

(CESCR 1991: PARAGRAPH 18)

The problem of forced evictions is growing in spite of the best efforts and struggles of communities and support groups, organisations and institutions (and some governments) who have resisted evictions and advocated for and developed alternatives. No comprehensive global figures are available, but the estimated totals of people forcibly evicted are staggering. According to the Centre on Housing Rights and Evictions (COHRE), forced evictions affecting 18.59 million people were reported between 1998 and 2008 (COHRE Global Surveys, 8-11). This already high number is dwarfed by the calculations of researchers studying the forcible displacement of populations as a result of large-scale development programmes around the world. Cernea has calculated that during the 1980s and 1990s “the magnitude of forced population displacements caused by development programs was in the order of 10 million people each year, or some 200 million people globally during that period”. (Cernea 2004: 6) During the following decade this number reached an estimated 15 million people per year (Cernea 2007b: 36).1 This relentless process has resulted in the creation of huge and growing populations of “development refugees” (Partridge 1989: 374).

These mass displacements are almost never officially referred to as cases of forced eviction. They are, instead, elaborately justified in the name of the broader public good and given developmental process names such as “infrastructural development”, “nature conservation”, “rural development”, “urban renewal”, “slum upgrading”, “eradication of slums” and “inner city regeneration”. This is not to say that none of the projects are genuinely aimed at the public interest. However, even in such public interest projects, the methods of decision-making, design and implementation, and specifically the manner in which the affected people are treated, would in the majority of cases qualify as forced evictions as defined under international law, viz.: “the permanent or temporary removal against their will of individuals, families and/or communities from the homes and/or the land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection” (CESCR 1997: paragraph 3). They would, therefore, amount to gross violations of human rights (Box 1).

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1 See also Cernea and Mathur (2008: 20): “Globally, the WB estimated in 1994 that, over a twenty-year period and counting only three economic sectors, up to 190-200 million people were displaced by public sector projects alone, at an average of 10 million people annually. By now, this estimate is outdated. Considering the pace of displacements not only in three sectors, but in all economic sectors, and not only in public but also in private sector projects, the conservative estimate of development displacements rises to about 280-300 million over 20 years or 15 million people annually.”
BOX 1: FORCED EVICTIONS GROSSLY VIOLATE HUMAN RIGHTS

The Commission on Human Rights,
1. Affirms that the practice of forced eviction constitutes a gross violation of human rights, in particular the right to adequate housing;
2. Urges Governments to undertake immediate measures, at all levels, aimed at eliminating the practice of forced eviction;
3. Also urges Governments to confer legal security of tenure on all persons currently threatened with forced eviction and to adopt all necessary measures giving full protection against forced eviction, based upon effective participation, consultation and negotiation with affected persons or groups;
4. Recommends that all Governments provide immediate restitution, compensation and/or appropriate and sufficient alternative accommodation or land, consistent with their wishes and needs, to persons and communities that have been forcibly evicted, following mutually satisfactory negotiations with the affected persons or groups.


THE GROWING PROBLEM OF FORCED EVICTIONS

Mass forced evictions take place in rich and poor countries, and in urban as well as rural areas. There has been a dramatic increase in urban evictions in recent years. Writing about China, Macdonald has pointed out that “the number of involuntary resettlers has risen dramatically in recent years in response to the increasing number of projects that are financed in cities” (Macdonald 2006: 29). A similar trend has occurred in Latin America. According to Mejia (1999: 148-149): “In the 1970s and 1980s [World Bank-financed] projects involving resettlement in the region were mostly located in rural locales, but by the middle of the current decade the majority of such resettlement-related projects were in urban areas”. However, mass urban displacements are nothing new, nor are they limited to developing countries. Fullilove has described in detail how in the United States the federal Housing Act has since 1949 been used for the ‘urban renewal’ of one thousand six hundred African American neighbourhoods and the dispersal and impoverishment of their communities (Fullilove 2005: 223-225).

Whether rural or urban, or in rich or poor countries, the overwhelming majority of victims of evictions are members of marginalised communities living under informal or customary tenure arrangements. It is often “their very poverty that subjects the poor to processes of displacement and resettlement” (Oliver-Smith 2009: 18). The fact that the poor often lack formal tenure security can make them immediately vulnerable to removal from land that is needed or desired by the powerful. The fact that they lack power or influence can make them “targets of least resistance” during development planning processes (Oliver-Smith 2009: 19). The fact they live under terrible conditions can, in itself, become grounds for their eviction from an area so that, through their removal, the assets of the wealthy are promoted. During her research into urban renewal in the United States Fullilove found that:
Similar processes have taken place in many other cities of the world.²

RESPONSES

This massive, growing, and destructive global problem of forced evictions has been met with a range of responses and strategies by affected communities, support organisations, institutions, individuals and (some) governments, as well as concerned international bodies, research communities and donor institutions. These responses and strategies have included:

• Protest and resistance by affected communities against their eviction, with or without external support;
• Promotion, development and use of international normative instruments on tenure security, housing rights, forced evictions and other related rights;
• Internal and external pressure for policy reform in the major multi-lateral financial institutions;
• Research and advocacy aimed at formulation and improvement of national policies, laws, regulations, guidelines and implementation programmes;
• Collaborative projects with governments and other institutions aimed at promoting alternatives and risk mitigation measures.

If the BMA does take care of the community and allows the community to work with it, then there will be lots of good ideas and solutions – not just removing people from their community. But if the BMA follows its original plan to evict, the loss will be more significant than they think.”

TAWATCHAI WORAMAHAKUN POM MAHAKAN COMMUNITY LEADER, BANGKOK 2003

THE IMPACT OF FORCEd EVICTION ON THE AFFECTEd POPULATIONS

In 2003, an elderly community leader by the name of Tawatchai Woramahakun faced eviction by the Bangkok Municipal Authority from his home of Pom Mahakan, a historical riverside settlement in Bangkok. He warned the authorities that if they proceeded with their plan “the loss will be more significant than they think” (COHRE 2003). These words capture a common theme and driving motivation shared by a broad range of groups, institutions and individuals trying to combat the problem of forced evictions worldwide. Community leaders, civil society groups, national and international NGOs and academic researchers alike have repeatedly warned that the impacts of forced evictions on the people affected are severe, debilitating and far-reaching. As a result of evictions people’s property is damaged or destroyed; their productive assets are lost or rendered useless; their social networks are broken up; their livelihood strategies are compromised; their access to essential facilities and services is lost; and as violence often is used to force them to comply, they suffer severe and lasting

psychological effects as a consequence thereof. Indeed, the prospect of being forcibly evicted can be so terrifying that it is not uncommon for people to risk their lives in an attempt to resist; or, even more extreme, to take their own lives when it becomes apparent that the eviction cannot be prevented (Du Plessis 2006).

The impacts of eviction for family stability and for children’s emotional well-being can be devastating; the experience has been as comparable to war for children in terms of the developmental consequences. Even when evictions are followed by immediate relocation, the effects on children can be destructive and unsettling.”

(BARTLETT N.D.: 3)

While the impacts of evictions are traumatic for all, they are most acutely felt by vulnerable segments of the community, and in particular the children. A study on “Urban Children and the Physical Environment” found that: These impacts go beyond the individual and their family to the entire community. In the words of Mathur (1995: 2): “The labyrinth of broken communities, broken families and broken lives remains beyond numerical calculation.” The consequences can be long-term, entrenching patterns of poverty, exclusion, dependency and disempowerment. According to Cernea and Mathur (2008:5-6): “Displacement involves expropriation and assets dispossession. It de-capitalises the affected population, imposing opportunity costs in the forms of lost natural capital, lost man-made physical capital, lost human capital, and lost social capital.” In most cases, those evicted receive totally inadequate remedies (if any) for these losses:

The considerably expanded research in the anthropology of resettlement has convergently concluded that the dominant outcome of displacement is not income restoration but impoverishment. The accumulated evidence is overwhelming, and it converges in many countries in Asia, Latin America, and Africa.”

(CERNEA 2009: 50)

The social anthropologist W.L. Partridge found that:

From the perspective of displaced people, forced displacement is always a disaster. Lifetimes of investment and generations of achievement are swept away. By destroying productive assets and dismantling production systems, resettlement creates a high risk of chronic impoverishment. Local authority structures disintegrate as political, religious and social leaders lose credibility, either because they could not prevent the destruction or because they assisted in the resettlement operation. Attitudes of dependency on external authorities, combined with the sullen resentment of victims of autocratic action, come to dominate the public culture of the people. In Mexico I have seen persistence of such feelings 30 years after resettlement operations were carried out.”

(PARTRIDGE 1989: 375)

The impacts of forced evictions are felt even wider, in society as a whole. South African society is still reeling from the effects of the forced removals of millions of people to their various ethnic ‘homelands’ or ‘group areas’ during the Apartheid era. Fullilove further points out that the urban renewal process that destroyed so many poor communities in the United States amounted to the “dismemberment” of American cities, with
disastrous long-term negative consequences for African Americans in particular, but also for American society as a whole. “How we are diminished as a nation because we permitted the rich to remake the city by sending the poor and the colored away from downtown” (Fullilove 2005: 225).

1.2 OBJECTIVES

Against the background described above, focussed research and analysis of the impact of forced evictions (or Eviction Impact Assessments – EvIA) can serve as an important and valuable resource for the endeavours of various actors to deal with the problem of forced evictions. Such information can and has been used for various purposes including:

- Testing or contesting the feasibility of proposed resettlement projects and/or planned or implemented evictions, e.g. through providing vital information needed in negotiations on a proposed resettlement process (and, where appropriate, forming the basis of free, prior and informed consent by affected parties);
- Promoting the development of creative, viable alternatives to planned evictions and resettlement projects.
- Formulating legal, political and other challenges to planned evictions and resettlement projects;
- Formulating risk mitigation and remedial strategies as part of the planning of unavoidable resettlement programmes;
- Calculating losses as part of restitution or reparation claims by victims of implemented evictions;

This review focuses on existing EvIAs and their underlying methodologies, with the following three objectives:

1. Document progress made by existing initiatives in developing and applying EvIA methodologies;
2. Assess the functionality, usefulness and impact of these existing methodologies;
3. Develop recommendations on the feasibility of making an EvIA toolkit available to governments and other stakeholders.

The assignment was tackled through a desk review of readily available documentation on EvIAs, on the basis of which a set of key issues was identified for further investigation. At the same time the author located, liaised with and obtained inputs and information from organisations, networks, initiatives and actors involved in the development, application and promotion of EvIA methodologies. As part of this process a list of contacts, including a short-list of key resource persons for future reference was compiled (ANNEX A). A number of follow-up interviews and correspondence were then conducted. In light of the collected information, existing methodologies were reviewed, and specific advances, gaps and opportunities were identified. The author formulated a set of recommendations for improvement and further development of EvIA tools for use in eviction, displacement and resettlement cases and assessed the possibility of promoting an EvIA toolkit through the work of UN-HABITAT. Drafts of the report were circulated for comment and an advanced version was presented at the International Resettlement Conference: Economics, Social Justice, and Ethics, in Development-Caused Involuntary Migration, a sub-conference of the 15th International Metropolis Conference that took place from 4 to 8 October 2010 in The Hague, where valuable comments and suggestions were also received. This report is the result.

Section 2 of the report deals with key issues and debates related to EvIAs and highlights the need for a reliable and effective predictive model. Section 3 documents progress made in development and use of EvIA methodologies, and describes and
analyses these in some detail. A distinction is made between generalised frameworks, approaches and models, and methods designed around particular situations and cases. In the conclusion (section 4) the author discusses convergences between these various approaches, as well as differences, gaps and opportunities for improvement. This is followed by recommendations on the way forward.
2. KEY ISSUES RELATED TO EVICTION IMPACT ASSESSMENTS
2.1 FROM COUNTING TO IMPACT ASSESSMENT COUNTING NUMBERS

Counting and measuring are important tools for international human rights groups, organisations and institutions seeking to confront the problem of forced evictions. These actors include Amnesty International (AI); the Centre on Housing Rights and Evictions (COHRE); International Alliance of Inhabitants (IAI) and the Housing and Land Rights Network (HLRN) of Habitat International Coalition (HIC); the Asian Coalition for Housing Rights (ACHR); and the Advisory Group on Forced Evictions (AGFE). Much of the initial emphasis in reactions to evictions is on the total number of people affected. The estimated totals are usually combined with descriptions of the evictions process, an indication of the human rights violated in the process, and reference to the various adverse consequences of the eviction for those affected. This information forms the basis of advocacy initiatives such as letters of protest, internet petitions and media releases, issued to draw attention to a planned or implemented eviction process, in the hope that public reaction and protest at the scale of the operation would act as a deterrent against the implementation of the planned eviction; an incentive for the formulation of alternatives; or as pressure for the provision of compensation, reparation or other remedies for those already evicted.

Given the scale of many evictions worldwide and the sheer brutality of their implementation, this emphasis on numbers to attract global public attention is understandable. There is no denying its ability to drive the point home, particularly when used in conjunction with other information and forms of representation. A compelling and visually powerful example is the 2006 report Zimbabwe: Quantifying destruction – satellite images of forced evictions, produced by Amnesty International (AI), concerning the forced eviction of an estimated 700 000 people during the Zimbabwean Government’s “Operation Murambatsvina” (Operation Drive out Rubbish) carried out in 2005. As indicated in the report:

Between May and July 2005 some 700,000 people in Zimbabwe lost their homes, their livelihoods or both as a direct consequence of the government’s Operation Murambatsvina, a programme of mass forced evictions and demolitions of homes and informal businesses. In some areas entire settlements were razed to the ground. While the demolitions took place right across the country, the majority of the destruction occurred in high density urban areas in Harare, Chitungwiza, Bulawayo, Mutare, Kariba and Victoria Falls. In these areas tens of thousands of poor families lived in what are known as backyard cottages or extensions – these were small, often brick, structures built on residential plots around the main house, sometimes attached to the main house, and sometimes a little way separate from it. They varied in size from one to several rooms. In urban areas these backyard structures were the only source of accommodation for poor people, who could not afford to buy a plot of land and build their own home. The government and local authorities in Zimbabwe provide almost no cheap rental accommodation.
FACT-FINDING MISSIONS

In certain cases the human rights organisations concerned also follow through with more detailed research or “fact-finding missions”, during which both qualitative and quantitative information is obtained from actors in the process, including testimonies from some of the many people directly affected (see UN-HABITAT 2005). In the case of Operation Murambatsvina, AI also produced a more analytical and qualitative fact-finding report entitled Zimbabwe: No justice for the victims of forced evictions (Amnesty International 2006a). The rationale and process followed is described in the introduction:

Amnesty International investigated and documented the human rights violations that took place as a consequence of Operation Murambatsvina, and raised the organisation’s concerns with the government of Zimbabwe, the UN, the African Commission on Human and Peoples’ Rights (ACHPR) and the African Union. One year after the mass forced evictions Amnesty International returned to Zimbabwe to investigate what, if any, action had been taken by the government of Zimbabwe to restore the human rights of the hundreds of thousands of victims of Operation Murambatsvina. The delegation found the government has failed to ensure adequate reparations to the victims. The victims’ own efforts to secure effective judicial remedies have been frustrated by the authorities’ repeated disregard of court orders and obstruction of access to the courts. Despite numerous public statements about a reconstruction programme to address the homelessness created by Operation Murambatsvina, almost none of the victims have received any assistance from the government. On the contrary the government has repeatedly hindered UN efforts to provide emergency shelter and subjected some of the most vulnerable people to repeated forced evictions.”

(AMNESTY INTERNATIONAL 2006A: 1-2)
Between 1993 and 2008 the Centre on Housing Rights and Evictions (COHRE) produced more than 20 fact-finding reports on housing rights violations in a range of countries including the Philippines, Latvia, Brazil, South Africa, Ghana, Kenya, Burma and China. Based on in-situ visits by small teams of housing rights experts, such reports typically include some description of the background to the eviction, estimates of the numbers of people affected, a description of the evictions process, an analysis of international and national human rights violated, and reference to the impact of the evictions on those affected. References to the impact of evictions generally echo the well-known list given in Fact Sheet No. 25 issued in 1996 by the UN Office of the High Commissioner for Human Rights:

“The human costs of forced evictions are indeed substantial and can involve a wide range of additional negative impacts on the lives and livelihood of those affected, including the following: multiplying individual and social impoverishment, including homelessness and the growth of new slums; physical, psychological and emotional trauma; insecurity for the future; medical hardship and the onset of disease; substantially higher transportation costs; loss of livelihood and traditional lands; worsened housing conditions; physical injury or death resulting from arbitrary violence; the removal of children from school; arrest or imprisonment of those opposing an eviction; loss of faith by victims in the legal and political system; reduction of low-income housing stock; racial segregation; loss of culturally significant sites; the confiscation of personal goods and property; substantially higher housing costs; absence of choice of alternative accommodation; criminalizing self-help housing options; increased social isolation; and tension with dwellers already at resettlement sites.”

(UN OFFICE OF THE HIGH COMMISSIONER FOR HUMAN RIGHTS 1996: 5)

In some cases such references to impact are illustrated through information obtained locally, through individual or group interviews conducted during missions. For example, through locally supplied information and testimonies, a COHRE fact-finding team which investigated 2004 evictions in Nairobi, Kenya, learnt inter alia that:

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3 There are also thematic reports describing the effects of evictions on specific categories and groups, such as women. An example is Violence: The Impact of Forced Evictions on Women in Palestine, India and Nigeria (COHRE 2002b).
• The demolition and evictions took place on a Sunday morning when many of the evictees were in church. They were therefore unable to salvage much of their belongings. Property was also stolen and looted;
• No alternative housing was provided to those affected;
• Since the evictions, there has been no provision of legal remedies, no legal protection of the affected in their attempts at obtaining legal redress, and no offer of compensation;
• There has been no post-eviction support of any kind. Instead, institutions – including the churches – have been left to pick up the pieces;
• The evictions have negatively affected the neighbouring communities. For example, the facilities demolished included a clinic that had served the wider community;
• The evictions impoverished the affected persons, worsening their already precarious existence. One man interviewed by COHRE related that upon visiting the area he found people living in extremely inhuman conditions, with up to ten people (of all sexes and ages) in one room;
• Families have been separated and social ties strained;
• Rents in the area surrounding the demolition sites have increased, effectively creating even greater economic hardships for other poor residents;
• In October 2003, the ministry concerned – now the Ministry of Roads and Public Works – prepared a resettlement policy for communities on other sections of the Southern Bypass that was to be funded by the World Bank. However, the Ministry was not prepared to extend the same policy to cover Kibera (COHRE 2006a: 55).

Fact-finding missions seeking to investigate evictions are by their nature rushed, limited processes which seldom produce very comprehensive and accurate research results. Their main aim is to draw urgent attention to crisis situations and to form the basis of joint remedial actions. While they often refer to and describe the impacts of forced evictions on the people affected, they seldom dwell on the specifics of this in properly researched detail. First-hand accounts such as those cited above can serve to confirm the occurrence of known trends in particular forced eviction cases. They can also reveal important local variations (in this case including the effect on neighbouring communities, total absence of post-eviction support, separation of families) that would otherwise get lost in the more generic statements. Further, skilful use of such information can even allow for qualified quantitative inferences and estimates, particularly in the case of smaller, more contained settlements. For instance, in its investigation of a brutal eviction of around 150 families in Taguig City in the Philippines in 2001, COHRE found that:

Instance of forced eviction in Nairobi, Kenya May 2005
Photo: UN-HABITAT
Most of the affected families lost some or all of their personal belongings and business stock in the demolition, whether through the act of demolition itself or through confiscation, theft or loss after the event. According to the affected families, the average cost of the demolished dwellings (materials and labour) was approximately 20,000 PHP (Philippine pesos) [USD 392]. The average cost of personal and business belongings destroyed or lost in the demolition was approximately 10,000 PHP [USD 196], making the average total loss per family approximately 30,000 PHP (total for all affected families approximately 4,500,000 PHP). [USD 88,200].”

(COHRE 2002A: 5)\(^4\)

This approach was taken a step further in a 2003 COHRE fact-finding mission to Ghana, to investigate the threatened eviction of the Agbogbloshie / Old Fadama settlement adjacent to the Korle Lagoon in Accra. In order to assess the levels of investment by residents in their own settlement, and so by inference the losses they would risk in the event of an eviction, COHRE consultant and urban expert Dr John Abbott used first-hand accounts combined with existing secondary research data as follows:

Housing represents a significant economic investment for the community of Agbogbloshie. […] Discussion of materials costs (predominantly timber for general construction, doors and windows, and roofing materials) indicated that the current cost of construction of a medium grade dwelling in Agbogbloshie is on the order of 100,000 cedis per m2 of floor area. This equates to just over US$11 at the current exchange rate (8,850 cedis = US$1). This appears to be a reasonable figure based upon the current cost of second hand materials.”

(COHRE 2004: 44)

There are a number of different ways to estimate the total land covered by buildings. The ESIA of KLERP [the Korle Lagoon Ecological Restoration Project] uses an overall area for the settlement of 31.2ha and from aerial photos calculates that the housing covers 20ha. Given the nature of the access network, the absence of gardens and the high housing density, a coverage of 60 percent will be assumed. This gives a covered area of 12ha, or 120,000 m2 [in the settlement]. Using the above cost of 100,000 cedis per m2, this gives a total housing investment cost of 12 billion cedis, or US$1.3 million. To place this investment in perspective, the governmental housing budget for new units for low and moderate-income groups (for the whole country) is given as 175 billion cedis.”

Such information about investment by communities into their own housing can be crucial during a pre-eviction situation such as Agbogbloshie in 2003 to argue for alternatives to forced eviction, such as in situ upgrading. Or, failing this, it can at least contribute to the setting of benchmarks for future restitution, reconstruction and/or compensation claims. Nevertheless, it remains true that in most fact-finding reports on forced evictions by human rights groups, reference to actual impact has been mostly generic, anecdotal and/or based on somewhat speculative estimates. There is a growing recognition that this is a gap that requires urgent attention.

\(^4\) 2002 Exchange rate between the Philippine Pesos and the US Dollar extrapolated from the historical exchange rate site at www.oanda.com as an average of currency conversion in April 2002 (PHP to USD 0.0196)
2.2 THE NEED FOR A PREDICTIVE MODEL

The need for developing a clear and practical conceptualisation and accurate methods of measurement of the specific impacts of forced eviction on the people affected has in fact been recognised for a number of decades. This is thanks in great part to the contribution of anthropologists and other social scientists, and in particular the seminal study The Social Consequences of Resettlement, published in 1971 (Colson 1971, discussed in Partridge 1989). Since that time numerous calls have been made for the improvement as well as a more widespread application of impact assessment methodologies in attempt to understand and deal with the problems caused by resettlement projects and evictions. The aim was for more than an anecdotal, retrospective or simply academic understanding of eviction impacts. In 1991, as noted by Cernea and Schmidt-Soltau (2006: 1813), a publication by sociologists and geographers on resident people and national parks (Brenchin & West 1991) called for a predictive model which could anticipate, prior to implementation, what those impacts would be, so that this could be fully taken into account in planning and decision-making on proposed displacements of people. According to Brenchin and West (1991:17, cited in Cernea 2004: 6):

> In the same year a United Nations Centre for Human Settlements report (UNCHS 1991), entitled Evaluation of Relocation Experience, recognised the need for understanding the differential impacts of relocations in urban contexts. The study looked at the question of who pays and who benefits:

> It is evident that for none of the actors are the benefits and costs of the relocation in equilibrium. Whereas for the public, and even to a larger extent, the private sector, the benefits far outweigh the costs of relocation, for the affected families this picture is reversed. […] It is apparent from this review of relocation experiences that relocation is almost always a very disruptive experience causing considerable social and economic hardship for the inner-city urban poor.”

(UNCHS 1991: 44)

The study also distinguished between two levels of impact, viz.: (1) impact on the social organisation of the people relocated; and (2) impact on their employment and financial situation. It also looked at the impact on women, as a third category warranting special focus (UNCHS 1991: 38-40). The findings of the UNCHS report reinforced the World Bank policy guideline of 1988 that whenever feasible, involuntary resettlement must be avoided or minimized, and alternative development solutions must be explored (UNCHS 1991: 44). The report also proposed guidelines for planning and design of relocation, in cases where it was unavoidable. These guidelines included an important guiding principle that “the relocatees should, on balance, benefit from the relocation” (UNCHS 1991: 47).

To assess and plan for the realisation of such ‘benefit’, a **predictive relocation impact assessment model** as envisaged by Brenchin and West would be essential. In the decades that followed, some significant progress was made in developing such as model, as well as designing the necessary research
methodologies. Working from varying yet at times intersecting needs and perspectives academics, professional, international institutions and advocacy organisations contributed in different ways to this process. The outcomes of this work will be discussed in the next section.

However in spite of this progress, there has been a growing recognition of the need for methodological consolidation and improvement, and for more widespread and extensive application of eviction assessment methodologies. For example, there is recognition of a need to improve economic research on the impacts of forced resettlement (Cernea 1999: 8-13), particularly with regard to the urban context (Mejia 1999: 148). Other urgently necessary improvements include:

- to broaden the categories of information regarded as valid in assessing impact (Seymour 2008: 299-301);
- to interrogate and reform the economic and financial foundations of resettlement to ensure that the full extent of potential negative impacts is accounted for (Cernea and Mathur 2008: 1-10);
- to improve understanding of hitherto under-researched causes of forced eviction including privately funded development projects, urban renewal and nature conservation (Oliver-Smith 2009: 9);
- to acknowledge, investigate and deal with the predicament of huge populations falling outside both traditional and formalised land tenure systems, who are often ignored in resettlement programmes, particularly in urban contexts (Mejia 1999: 154).

In its first report the Advisory Group on Forced Evictions (AGFE), established in 2004 to advise the Executive Director of UN-HABITAT, noted that:

> Another issue that AGFE has insufficiently addressed thus far is the search for innovative ways to face the economic and social costs related to the relocation of families. [...] This relocation implies significant economic costs, which usually comprise the cost of the urbanised site in addition to compensating people for what they had built over time. There are also social costs for the affected communities, such as loss of social, familial, religious and cultural networks; access to education, health and other social services; and the potential increase in transportation costs for work and purchase of food and other commodities. All these issues have to be factored into both the assessment of the necessity for relocation and, where deemed inevitable, the financial and other forms of appropriate compensation to be paid to the families affected by relocation.”

(ADVISORY GROUP ON FORCED EVICTIONS 2005: 150)

During its subsequent deliberations AGFE resolved that there was much to be gained from a sharing of experiences, comparison of methodologies and consolidation and improvement of the available tools relating to eviction impact assessment. These ideas were taken forward by the AGFE Secretariat and the current research project is an outcome of this process.

Furthermore, following on consultations during 2006 with individuals and organisations working on the issue, the then Special Rapporteur on adequate housing, Miloon Kothari, included the idea of eviction impact assessments as a requirement in his “Basic Principles and Guidelines on Development-Based Evictions and Displacement” (United Nations 2007 – hereafter Special Rapporteur’s Guidelines), as follows:
During a video conference discussion with the members of AGFE on 1 September 2008, the current Special Rapporteur on the right to housing, Raquel Rolnik, stated her intention to take these requirements further in the course of her work. Parallel to this, work is underway by Habitat International Coalition’s Housing and Land Rights Network together with two partner organisations Youth for Voluntary Action (YUVA) and National Centre for Advocacy Studies (NCAS), who have undertaken to build on the Special Rapporteur’s Basic Principles and Guidelines in order to “develop the modalities of eviction impact assessment as an operational tool.” (HLRN et al. 2009: 1).

32. States must give priority to exploring strategies that minimize displacement. Comprehensive and holistic impact assessments should be carried out prior to the initiation of any project that could result in development-based eviction and displacement, with a view to securing fully the human rights of all potentially affected persons, groups and communities, including their protection against forced evictions. “Eviction-impact” assessment should also include exploration of alternatives and strategies for minimizing harm.

33. Impact assessments must take into account the differential impacts of forced evictions on women, children, the elderly, and marginalized sectors of society. All such assessments should be based on the collection of disaggregated data, such that all differential impacts can be appropriately identified and addressed.”

(UN SPECIAL RAPPORTEUR ON ADEQUATE HOUSING 2007)
3. EXISTING METHODOLOGIES
3.1 ECONOMIC EVALUATION TO DETERMINE IMPACT MOTIVATION

The publication of Evaluation of Relocation Experience (UNCHS 1991), discussed in the previous section, was followed by an expert group meeting in 1992 which inspired the publication in 1993 of the Relocation and Resettlement Manual: A guide to managing and planning relocation, by the Institute for Housing and Urban Development Studies (Davidson et al. 1993). The purpose of this manual is “to help those involved in possible relocation to achieve a result that helps develop rather than harm those who may have to be moved from their existing locations”. The authors observe that “performance in relocation has often been poor, and considerable suffering has resulted.” The approach suggested is essentially pragmatic and technical, firstly by trying to encourage all parties “to avoid relocation”, and where this proves impossible, to find ways through proper management and planning “to try to minimise it”. They place emphasis on “the process of decision making and who is involved in it”, during which key questions to be considered include:

- Is relocation necessary?
- Can it be minimised?
- What is necessary for rehabilitation of those affected?
- How do you prepare a relocation plan?
- With whom should the plan be prepared?
- How should the process be managed?
- What support is necessary to rehabilitate those who are relocated?
(Davidson et al. 1993: 1)

For those last resort cases where relocation is genuinely necessary and unavoidable, such as where people are “living in a dangerous location, for example a river bed, or on the only possible site for needed city infrastructure”, the manual examines “how the relocation can be pursued in such a way that the interests of those affected are protected”. This would require a “commitment to rehabilitation of those affected so that they do not become impoverished through the process” (Davidson et al. 1993: 1).

The manual therefore tries to show what conditions are needed for a relocation to be ‘successful’, and more importantly how those conditions can be met. ‘Success’ is defined in terms of the objective “that those relocated should benefit from the process on a sustainable basis. At a minimum they should be no worse off” (Davidson et al. 1993). Taking guidance from the Evaluation of Relocation Experience research, the authors focus on five broad areas relevant to this objective, namely a sound policy, legal and institutional framework; participatory planning and management of the process; good location of the relocation; good physical development; and effective socio-economic development (Davidson et al. 1993: 5).

Using the definition of ‘successful’ relocation clearly implies the ability to measure the extent of loss or benefit – what we are referring to as EvIA. The question of assessing impact is directly addressed in section 3: “Feasibility and Economic Evaluation”, which inter alia “illustrates how to apply the various elements of an economic evaluation to relocation projects to make costs more explicit” (Davidson et a. 1993 13). The section describes the nature and purpose of determining feasibility in advance of implementation, naming the key areas of physical and environmental factors; legal framework; institutional questions (responsibilities, attitudes, capability and capacity); political issues; social issues; and risk analysis of possible changes.

A true test of the feasibility of the ‘push’ project causing relocation requires an understanding of the full costs of the entire process, something that cannot be delivered by a traditional financial evaluation. The authors propose the use of a significantly broadened conception of costs, specifically including social costs: “narrow definitions of
The purpose of an economic evaluation is to illustrate the most likely consequences for society as a whole of strategies proposed. This should be independent of whether the changes have any financial consequences for the implementing agency. Compared to a financial analysis, the scope of an economic analysis is broader. For example, implementing agencies seldom assume responsibility for families’ increased commuting costs during decades following resettlement. Similarly, they do not attempt to levy charges where resettlement reduces those commuting costs. No entries of outlays or revenues will appear in the financial accounts. Despite this, these elements influence the net benefit. They determine whether groups that gain from the project can compensate groups that lose (the latter groups very often belonging to the economically weaker sections of society). […] If the benefits of redevelopment from the push project cannot compensate the economic losses of resettlement, other options need to be considered at an early stage (including no resettlement).”

(DAVIDSON ET AL. 1993: 15)
for example: “Without relocation a family would spend USD 10 a month on commuting to work and have to devote 25 hours in travel; with relocation travel to work would require USD 14 and 30 hours”. In an economic evaluation, both these additional outlays, including the value of additional time spent, would count as “costs of relocation” (Davidson et al. 1993: 20-19).

The manual goes further to include “community effects”, which are equally logical but more challenging to determine: “Some people will suffer intangible, but still significant, personal losses when they move. This is especially true of the older residents and many of their children, who have a strong emotional attachment to their present houses, their neighbours, and the local customs of their communities. Moving may break up strong systems of social support within their neighbourhoods. Being forced to move somewhere else, among strangers and away from their familiar patterns of life, is a real loss” (Davidson et al. 1993: 20). While such losses are not “economic in the ordinary sense”, they argue that they have “definite, objective economic value”. Determining this is difficult but not impossible. Community effects “seldom enter market valuations because they infrequently play a role in current transactions”, which means that conventional quantification techniques don’t necessarily apply. However they can be determined through “dialogue with the community” (Davidson et al. 1993: 20-21).

**TABLE 1: RELOCATION EFFECTS IN AN ECONOMIC EVALUATION**

| 1. Housing and other living costs (or benefits) | a) Location and rents of stock outside the area; city or district wide price elasticities of housing demand for distinct categories of housing.  
| Housing costs | b) Price elasticity of long-run supply, cost estimates for resettlement options, costs of resettlement assistance, and ideally estimates of cost savings achieved by assistance.  
| | c) Change in living costs e.g. price of food and services.  
| Other living costs | a) Commuting costs: added time in travel and the shadow prices of commuting time, added pecuniary expenses.  
| | b) Public utilities’ supply costs at other likely locations or, where these are not available, estimates of loss associated with this.  
| 2. Employment and earnings | Amount and nature of locationally sensitive employment and associated earnings, including proprietors’ income; availability of similar employment opportunities elsewhere at other potential resettlement sites outside the standard commuting perimeter.  
| 3. Community effects | a) Useful indicators: ethnic and religious composition of the population; tenure and length of residence in present houses and within the present neighbourhood; income transfers within the neighbourhood.  
| | b) Estimates of value: blind factors for preliminary sensitivity tests; empirical estimates available only through bilateral negotiations and negotiations within community groups and between community groups and the agency responsible for compensation. |
4. Other costs (or benefits)

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<thead>
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<th>Analysis</th>
<th>Purpose</th>
<th>Estimation or Calculation</th>
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<tbody>
<tr>
<td>Acquisition costs</td>
<td>Financial</td>
<td>Budget estimates for assistance or planned relocation</td>
<td>Outlays depend on form of assistance or planned relocation.</td>
</tr>
<tr>
<td>Moving costs</td>
<td></td>
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<tr>
<td>Administration/institutional development costs</td>
<td>Economic</td>
<td>Estimating value of alternative housing and business premises after eviction</td>
<td>For families and businesses moving without planned relocation to new neighbourhoods, the value depends on the rents of stock outside the project area once the project area has been cleared and redeveloped; hence the changes in values that will occur as a result of the project; if planned relocation is to new sites, or private developers respond to additional demand elsewhere, costs then include investments in new housing and business premises.</td>
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<td>Environmental impact</td>
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<td>Rental value of land and buildings.</td>
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<td>Quantities and distance of goods to be moved, including scrap metals of demolished buildings, if applicable, available means of transportation, charges for commercial services.</td>
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<td>The costs of staff time and expenses and any institutional development required to manage relocation and its follow up.</td>
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<td>An environmental impact assessment should be made as part of the “push” project.</td>
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**TABLE 2: BASIS OF CALCULATION**

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<td>Depends on the specific form of assistance considered and liability accepted.</td>
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<td>i. Commuting costs; value of added time in travel (reference to texts on planning of transportation projects), added expenses and subsidies and on public transport or personal transport.</td>
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<td>ii. Public utilities’ supply costs at other locations, and, where not already available, estimates of the loss associated with this and of the costs of extending services.</td>
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<td>Depends on the type and extent of assistance; where assistance involves on-going grants, credit, and the provision of public utilities, the annual expenses for the administration of these elements are included.</td>
</tr>
<tr>
<td></td>
<td>Economic</td>
<td>Estimating the value of job and related earnings losses that will occur without assistance, and the benefits in reduced losses from assistance</td>
<td>i. Amount and nature of relocation sensitive employment and associated earnings, including proprietors’ incomes and availability of similar employment opportunities at other potential relocation sites.</td>
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<td>i. For planned relocation sites outside the standard commuting radius estimates of costs of creating new employment centres.</td>
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<td>ii. Resources for administration of various forms of assistance such as credit programmes, job training.</td>
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<td>iii. Where quantitative assessment is not attempted, a sensitivity analysis can be carried out.</td>
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<td>Budgeting assistance programmes, new facilities, and business oriented public services in planned relocation sites</td>
<td>Depends on the type and extent of assistance; where assistance involves on-going grants, credit, and the provision of public utilities, the annual expenses for the administration of these elements are included.</td>
</tr>
<tr>
<td></td>
<td>Economic</td>
<td>Estimating the value of job and related earnings losses that will occur without assistance, and the benefits in reduced losses from assistance</td>
<td>i. Amount and nature of relocation sensitive employment and associated earnings, including proprietors’ incomes and availability of similar employment opportunities at other potential relocation sites.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>i. For planned relocation sites outside the standard commuting radius estimates of costs of creating new employment centres.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ii. Resources for administration of various forms of assistance such as credit programmes, job training.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>iii. Where quantitative assessment is not attempted, a sensitivity analysis can be carried out.</td>
</tr>
<tr>
<td>Element</td>
<td>Analysis</td>
<td>Purpose</td>
<td>Estimation or Calculation</td>
</tr>
<tr>
<td>------------------</td>
<td>----------</td>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Community Effects</td>
<td>Financial</td>
<td>Budgeting special compensation and assistance for dealing with social conflict and psychological losses caused by eviction and breaking of community ties</td>
<td>Depends on the nature of community effects and means adopted for dealing with them, likely an estimate.</td>
</tr>
</tbody>
</table>
|                  | Economic | Estimating the value of community effects                              | i. Estimation of value available only through structured negotiations with individuals or with community groups; negotiations aimed at discovery of forms and amounts of compensation required to make relocation voluntary.  
ii. For qualitative evaluation, useful indicators of the probability of strong community effects include information about ethnic and religious composition of the population, tenure and length of residence in present houses within the neighbourhood, and evidence of mutual support among kin or community groups. |
| Other Costs      | Financial| Budgeting compensation for purchases of land and buildings              | Depends on legal formula for compensation and agency policy, typically based on after-tax rental value or market sales price.                              |
| Site acquisition | Economic| Estimating economic value of land and buildings                         | Pre-tax rental value of land and buildings capitalised at the social discount rate; for non-marginal projects where clearance and redevelopment will effect rental values elsewhere in a city, rental increases must be included and are typically estimated from studies of how much rents vary in relation to changes in the supply of the type of housing and business premises involved. |
| Moving Costs     | Financial| Budgeting compensation and planning components for assistance with moving or organising moving | Depends on legal formula or agency policy; elements include removal of household and business goods, temporary storage, and costs of accommodation during the move. |
|                  | Economic | Estimating resource costs of moving                                    | Costs depend on quantities of goods to be moved, including scrap materials of demolished building, if applicable, available means of transportation, and charges for commercial services. |

(Source: Davidson et al. 1993: 19)

**APPLICATION**

The Relocation and Resettlement Manual is intended as a “support and stimulus to improving local thinking and practice when relocation is a possibility”. Its deliberate intention is to try to minimise relocation and to ensure, when relocation is genuinely unavoidable, that it is done through proper planning, financing and management. It does not present or prescribe a specific methodology, on the grounds that different contexts will require different solutions. Instead it focuses on the basic principles that need to be applied (Davidson et al. 1993: 51). Thorough testing of the feasibility of projects that may involve relocation of people is regarded as essential. This has to include an economic evaluation which identifies and either calculates or estimates all costs,
including the impacts on all individuals and communities that may need to relocate. Some of these costs are intangible, and can only be determined through dialogue with the community. The authors acknowledge that “[f]or this to work it is important to have a sound basis for participation of the community, and safeguards against arbitrary eviction” (Davidson et al. 1993: 21). However, it is not made clear how one would proceed in contexts where such safeguards do not exist or where there is no basis for participation but rather a relationship of antagonism and fear, as is often the case when people anticipate being forcibly removed.

The manual provides good pointers on how to ensure that the information relevant to project feasibility is obtained, analysed and properly presented. The aim of this is to “inform decision makers clearly on the implications of alternative lines of action” (Davidson et al. 1993). It is important to investigate and present a broad range of options:

Relocation is only one of several options and should be evaluated as consistently as possible against the others. Finally, it is essential to communicate the results of the feasibility study clearly to decision makers so as to encourage a fair and equitable decision.”

(DAVIDSON ET AL. 1993: 21)

There is, again, lack of clarity on the effectiveness of this approach in contexts of fear or a breakdown of trust, where the State is perceived to be acting in bad faith as a result of previous or ongoing violations of land and housing rights. The other serious inherent limitation in this approach is the absence of any attempt to list, compute and calculate the social costs of such relocation processes.

3.2 THE HOUSING RIGHTS VIOLATION LOSS MATRIX MOTIVATION

The Housing Rights Violation Loss Matrix was developed by the Housing and Land Rights Network (HLRN) of the Habitat International Coalition (HIC). HIC is an independent, international, non-profit alliance of organizations and individuals working in the area of human settlements (HLRN 2010a).

The Housing Rights Violation Loss Matrix was developed as part of a broader methodology or Housing and Land Rights Monitoring Toolkit, which seeks to put the legal specificity of the human right to adequate housing into practical terms where authoritative information guides you through the process from development through monitoring to implementation. It is intended for a wide range of actors, including practitioners, policy makers, and researchers. The HRLN Toolkit takes the user through a series of ten steps, conceived as coinciding with the functions of human rights monitors. These are:

1. Explanation of the basic entitlements linked to the right to adequate housing;
2. Introduction to key sources, both legal and popular, substantiating claims to each entitlement;
3. Explanation of the applicable over-riding principles;
4. Discussion of the guarantees underlying the entitlement;
5. Examination of the threats, obstacles that may impede the fulfilment of the right;
6. Identification of victims and vulnerable persons likely to suffer violations;
7. Quantification of impact and losses of violations using the Housing Rights Violations Loss Matrix;
8. Identification of duty holders responsible for remedying specific violations;
9. Exploration of actions that can be taken;
10. Evaluation and follow up. (HRLN 2010d)
Step 7 is regarded as crucial: “Very important to portraying the whole picture with the focus on the victims’ experience is a methodology for quantifying losses and costs of a violation / deprivation. This ‘Quantifying losses’ guide introduces the methodology for capturing the costs and quantifying the deprivation as much as possible” (HLRN 2010c). Its potential applications include legal defence, advocacy, policy analysis, feasibility analysis, reparation calculations and others. It is particularly well suited to the violation of forced evictions.

The HRLN Loss Matrix was designed for application to a variety of housing rights violations including evictions. However further work has recently been done to make it more eviction-specific. Building on the 2007 release of the Special Rapporteur’s Guidelines, which included a call for the widespread, systematic use of eviction impact assessments, HLRN and two partner organisations, Youth for Voluntary Action (YUVA) and National Centre for Advocacy Studies (NCAS), produced a concept note and arranged an expert seminar in India during July 2009 “to develop a workable eviction impact assessment mechanism” (HLRN 2009: 2). The concept note stated that this methodological development and redesign process is still underway with ongoing field testing and improvement. A follow-up expert seminar is planned (Schechla 2010a).

It is important to note that HLRN’s Housing Rights Violation Loss Matrix and their more recent work on eviction impact assessment are firmly and explicitly rooted in a normative, human rights framework, with primary emphasis on the right to adequate housing and related rights. A key purpose of the HLRN Toolkit is to “return the legal achievements” of establishing this framework “to the people” (HLRN 2010d). A cornerstone of the framework is the status of the right to adequate housing as a fundamental human right, as well as the fact that the practice of forced evictions constitutes a gross violation of human rights, in particular the right to adequate housing. This implies specific entitlements and obligations; and also implies the right to remedy and reparation in the event of a gross violation, such as forced eviction. HLRN presentations therefore strongly emphasise the “Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law” (United Nations General Assembly 2006), which specify seven different dimensions of the right: 1. Restitution; 2. Return; 3. Resettlement; 4. Compensation: physically unrecoverable costs / losses; 5. Rehabilitation (economic, social, psychological, medical, cultural, etc.); 6. Promise of non repetition; 7. Satisfaction.

Given the potential usefulness of this tool as a means to help assess and minimize forced evictions in India, we feel it would be worthwhile to develop the modalities of eviction impact assessment as an operational tool. This would entail examining and studying existing available mechanisms and adapting relevant components of them to create a specific eviction impact assessment tool. One such available tool is the Loss Matrix developed by the Housing and Land Rights Network (HLRN) to assess damages / loss / compensation in the event of housing and land rights violations. This loss matrix enlists components to be factored into the calculation of both material and non-material losses and also includes steps to be followed in the process.”

(HLRN 2009: 1)
rehabilitation. In its networking meetings of the “African Human Rights Spaces” project HLRN has urged that applying such quantification methods also provide a practical contribution to the broader goals of transitional justice, of which reparation provides one essential element. The Housing Rights Violation Loss Matrix is a tool through which the extent of a future or past violation can be conceptualised and, to the extent that this is possible, calculated. This can serve either as a prevention initiative to anticipate consequences and so to warn against and hopefully deter the violation, or as a remedial tool for a retrospective investigation of formulating claims for remedy and reparation (Schechla 2010b),

METHOdOLOGY

The methodology of the Housing Rights Violation Loss Matrix is presented by HRLN as an 11-page component of a 1067 page Toolkit document under the heading: Section 1.7 Losses / consequences (HLRN 2010d – extract attached at ANNEX B). What follows is a selection of extracts to illustrate the basics of the methodology.

• The loss matrix tool can be used for any and all categories of housing rights violation (including evictions);
• The aim of the process is to quantify both personal costs experienced by victims and public or social costs or housing rights violations;
• The material and otherwise calculable costs resulting from the violations are determined for each unit (e.g. household) affected and then added together;
• In the case of multiple units affected, a representative sample is obtained to determine the average values, which then are to be multiplied by actual numbers of units affected;
• Incalculable losses are recorded and reported in narrative terms. Such narrative explanation and analysis is used as an accompaniment to the quantification table;
• Both short term / immediate and long term values are assessed and included;
• Personal injury and pain-and-suffering damages can be calculated using methods derived from applicable local jurisprudence, legal cases, actuary science or international practice;
• Accurate and thorough quantification of costs and losses requires a great deal of cooperation with the affected community and a sustained relationship with them;
• A loss matrix quantification table is used to record the values and other information (the full excel version can be downloaded via the scroll bar at the top right of the following webpage: http://www.hlrn.org/old_hlrn/toolkit/English/explore/index.htm). The structure of the HLRN loss matrix quantification table is shown below:

6 For reasons of space we are showing just a sample of the different types of measured violation impacts given on the full table. The full table is attached ANNEX C, for more detailed reference. Under the heading of “Method” the table also includes commentary on the contents of the calculated costs/losses and provides guidance on how they could be calculated. This may need to be adapted to suit a particular case. In the completed table the actual calculation method used would be described, together with any other information that would be relevant for analysis.
<table>
<thead>
<tr>
<th>Type of violation</th>
<th>Forced eviction</th>
<th>Confiscation</th>
<th>Demolition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inheritance</td>
<td></td>
<td>Access denial</td>
<td>Other</td>
</tr>
<tr>
<td>Type of cost/loss</td>
<td>Method</td>
<td>Short-term</td>
<td>Long-term</td>
</tr>
</tbody>
</table>

### Victims’ Material Losses

- **(e.g.) Structure**
  - Replacement value, based on reliable estimates from local contractors.
  - At the time of the violation and during the following 30 days.
  - The projected or actual costs following the initial 30 days after the violation and the subsequent 11 months.
  - Combined short-term and long-term values.

| Subtotal: | x |

- **(e.g.) Contents**
  - Replacement value of contents inventories provided by inhabitants, preferably taken before the loss.
  - At the time of the violation and during the following 30 days.
  - The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months.
  - Combined short-term and long-term values.

| Subtotal: | x |

**Subtotal of victims’ material losses:** x

### Victims’ Nonmaterial Losses

- **(e.g.) Health**
  - (your full description of consequences here)

- **(e.g.) Social marginalization**
  - (your full description of consequences here)

### Other than Victims Material Costs

- **(e.g.) Collateral damage**
  - Physical damage to home, property, infrastructure, landscaping or other material value belonging to neighbors and others affected by the violation. These could involve material losses in any category considered in quantifying the victim’s material losses/costs.
  - At the time of the violation and during the following 30 days.
  - The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months (covering the combined period of one solar year).
  - Combined short-term and long-term values

| Subtotal: | x |

**Total costs/losses to other than victims:** x

### Grand total:

**Other than Victims Nonmaterial Costs**

- **(e.g.) Civil order**
  - (your critical analysis narrative here)
* NOTES:

- Material losses can include: the structure; the plot; contents; collateral damage; infrastructure; business losses; equipment; prospective income; mortgage, other debts and penalties; livestock; land; trees/crops; lost/decreased wages or income; health care; interim housing; bureaucratic and legal fees; alternative/replacement housing; resettlement; transportation costs. HLRN provides a housing contents inventory schedule online. (See Annex D);
- Non-material losses can include: health; living space; reconstruction licensing; psychological harm; disintegration of family; loss of community; investment in infrastructure; investment in sanitation and waste-management systems; investment in security systems; investment in educational infrastructure; heritage;
- Victims non-material costs can include: environment/ecology; standing/seniority; political marginalization; social marginalization; further vulnerabilities;
- Other-than-victims’ material costs (public costs) can include: police; bulldozers; legal practitioners; army; other forces; bureaucratic and personnel costs;
- Other-than-victim’s nonmaterial costs can include: social costs; civic order; political legitimacy;
- It is possible to modify “Loss Matrix” to the user’s discretion. Modifications should be indicated, and also be shared among the community of monitors to ensure compatibility of findings. For example, certain direct and indirect victims’ losses may for some reason need to be separately calculated. In that case, an additional column could be added;
- It is important to indicate a global cost figure for the violations under review. The column at the far right under each category of cost should be totalled using an embedded formula.

APPLICATION AND DEVELOPMENT

While the HLRN loss matrix has been developed to an impressive level of detail and made available to the public via the website, it has not yet produced any comprehensive assessments of eviction cases. Nevertheless there have been a number of cases of practical application of the methodology.

Firstly, on-site piloting of the Loss Matrix in the case of five house demolitions in al-‘Isawiyya village, West Bank, Palestine, helped inform the development of the method.7 In addition, HLRN has used the Loss Matrix in numerous trainings on housing and land rights monitoring and documentation, and in some cases this was extended to field practice, as in a course provided jointly with the Urban Poor Consortium, in Jogjakarta, Indonesia during December 2004).

Current field application of the HLRN loss matrix is the subject of an initiative of HLRN in India to pilot a revised version of the Loss Matrix to conform more closely to the Special Rapporteur’s guidelines. This important initiative faces some big challenges, given that the guidelines seek to address the issues and values at stake in all three phases of eviction or displacement: before, during and after. The task of comprehensively assessing loss can appear as simply too daunting for most organisations with limited resources. Yet the complexities and labour intensity of quantifying eviction/displacement losses has served up valuable methodological and tactical lessons. The deployment of volunteer labour in house construction – as for example in the al-‘Isawiyya example – created the need for a general methodology to be applied with local criteria of commensurate wages to determine the original costs and replacement value after a forced eviction/demolition.

According to Schechla (2010b), HLRN may have been overly ambitious to expect that its members and other organizations would be able to

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7 For the results, see http://www.hic-mena.org/documents/Isawiya%20Losses%20eng.pdf.
develop their own practices of eviction loss/cost quantification. A similar lesson has been learnt in HLRN’s management of its Violation Database (VDB), which covers cases involving forced eviction, dispossession, demolition/destruction and/or violations arising from privatisation. In the array of violations that the VDB maps constantly in the HLRN website, very few include actual quantification data from the available reports. From the cross-regional perspective of the VDB, it is revealed that quantification of evictions’ consequences is a globally underdeveloped aspect of housing and land rights monitoring, in spite of the development of the quantitative tools described above.

Since 2005, the mass violations in cases ranging from “Operation Murambatsvina” in Zimbabwe to “Operation Cast Lead” in Gaza, HLRN has been exploring different practices in the documentation of evidence that could demonstrate housing and land rights violations that rise to the level of war crimes and/or crimes against humanity. They have compiled an inventory of available documentation methods, including those used by lawyers in Spain, England, the United States and local organizations in Lebanon and Palestine. Amongst these, HLRN rates the documentation work of Jihad al-Bina’, an organization engaged in the reconstruction of Lebanon since the Israeli withdrawal began in 1988, as among the most well-developed, with exemplary levels of detail and management of the data. However, the purpose of Jihad al-Bina’ remains reconstruction and not legal remedy, which means that the data has remain untried within the international remedy and reparation framework (Schechla 2010b).

There is one very interesting case in which an adapted version of the HLRN loss matrix is being used to test, critique and supplement an ongoing process of quantification and recording of losses incurred as a result of the erection of the West Bank Wall barrier in the Occupied Palestinian Territory. An important part of this process has been the identification and confrontation of gaps and shortcomings in the loss inventories recorded in the official United Nations Register of Damage (UNRoD).

The values recorded in the UN Register of Damage are: losses that “title holders” incur from time construction began; losses in immediate vicinity of construction; income losses as a direct result (within immediate vicinity); and other documented material costs/losses to eligible individuals.

The HLRN loss matrix offers an excellent reference against which to measure this approach. Gaps that have been identified by HLRN, and for which they are also in the process of collecting data, include:

- Costs/losses incurred before Wall construction begins;
- Losses/costs to those without legal title to lands in immediate vicinity to Wall;
- Losses/costs to those with or without legal title affected outside the nearest administrative district adjacent to the Wall;
- Environmental costs/losses;
- Public costs/losses;
- Opportunity costs;
- Pain and suffering, life and limb;

Other shortcomings in the UN approach to losses incurred as a result of the wall barrier have also been identified through HLRN’s investigations. These include:

- Lack of transparency;
- Unclear methods for measuring inflation factors and other recurrent damages/costs/losses;

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8 The account of this case is directly based on the text of a presentation entitled “Quantifying Losses / Costs: The West Bank Wall”, given by Joseph Schechla of HLRN at an experts group meeting in Rio on 20 March 2010.

9 UNRoD was established in term of United Nations General Assembly Resolution A/RES/10-17 of 24 January 2007, following on the advisory opinion given by the International Court of Justice on 9 July 2004 on the legal consequences of the construction of the Wall in the West Bank. For the Rules and Regulations Governing the Registration of Claims, see: http://www.unrod.org/docs/UNRoD%20Rules%20and%20Regulations.pdf.
• Registrants refused right to their own records;
• Poor coordination with national and international counterparts;
• No clear purpose (reparations framework or otherwise);
• Public goods, services & values excluded.

As part of its strategy to assist local actors to challenge these shortcomings and also to assist implementers to improve the existing data collection process, the HLRN and its partners are undertaking the following actions:

• Coordination with Members and Palestinian National Committee on the Register of Damage;
• Offering technical (methodological) assistance to UNRoD;
• Proposing joint concept paper on alternatives;

3.3 FORCED RESETTLEMENT IMPACT: THE IRR MODEL MOTIVATION

The Impoverishment Risks and Reconstruction (IRR) Model was developed in the course of the 1990s by Michael Cernea, building on two decades of prior research by social scientists, in particular anthropologists. It was developed in response to an urgent need for a predictive mechanism which could anticipate, prior to implementation, likely negative impacts of major development-induced human resettlement projects, and how these could be avoided or mitigated. This was in the context of a growing realisation of the full extent of the disastrous impact of forced resettlement processes on the people relocated, on the broader community and on society as a whole. Cernea presents the IRR Model as:

[A] conceptual and methodological tool apt to perform several essential functions in support of analytical and operational development work”. According to him, “this instrument enables project planners to focus from the outset on the poverty issues that are at the heart of involuntary resettlement. It does not add new tasks on top of the existing ones in preparing projects entailing resettlement. Instead, it saves efforts and increases effectiveness by (a) moving risk discovery upstream in project preparation, and (b) by helping reduce displacement, guiding early risk-elimination or risk reduction actions.”

(CERNEA 2007B: 1)
The terms “eviction” and “forced eviction” are seldom used in the literature on IRR, with the preferred terminology being the more neutral terms of “population displacement” and “involuntary resettlement”. However, as indicated earlier, most development-induced forced displacements would fit the definition of “forced eviction”. In addition, the underlying argument of the IRR Model contains welcome echoes of both the letter and the spirit of General Comments 4 and 7 (CESCR 1991 and 1997), in particular the statement in General Comment 4 that “Instances of forced eviction are prima facie incompatible with the requirements of the Covenant and can only be justified in the most exceptional circumstances, and in accordance with the relevant principles of international law” (CESCR 1991: Paragraph 18). According to Cernea “The theoretical underpinnings of the Impoverishment Risks and Reconstruction Model are informed by sociology, economics, anthropology and ethics—more specifically by concerns for equity, human rights and social justice in development, rather than by economic efficiency alone” (Cernea 2007b: 1). In fact, the IRR Model is predicated on the assumption that human displacement as a result of development projects is to be avoided wherever possible.

Maximum safeguarding is achieved when involuntary displacement is avoided altogether. This is the response to risks that should be considered first and foremost. Recognizing risks upfront and their financial implications is often a powerful stimulus to search for an alternative that will eliminate the need for displacement or cut down its size. This is technically possible in some cases, for instance, by changing the site of a dam or by re-routing a highway around (rather than through) a village. Many other technical options can be found through creative search.”

(CERNEA 2007B:5)

The IRR Model aims to be comprehensive, trying to cover the full spectrum of likely displacement losses ranging from cultural through communal assets and services to livelihoods and standards of living. It has sparked a growing research literature in which failings, gaps, challenges and opportunities are identified on an ongoing basis. Existing tools are scrutinised and, often, found wanting. One notable example is the emerging critique of the compensation principle, which has for years served as the only financial foundation for planning resettlement, but has been found to be sadly ineffective in preventing impoverishment (Cernea 2004: 46; Cernea and Mathur 2008: 15).

In this literature, we are constantly reminded of the brutal reality of the effects of displacement and the urgent tasks this poses to all actors in development-induced resettlement planning:

(CERNEA 2007: 1-2)

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10 See also Cernea and Schmidt-Soltau (2006: 1826).
While much has been written about cultural losses through displacement (or rather, not yet enough…), there is no doubt that the least examined problems and the deepest, most pervasive failures DFDR (development-forced displacement and resettlement) are of an economic nature. It de-capitalises the affected population, imposing opportunity costs in the forms of lost natural capital, lost man-made capital, lost human capital, and lost social capital. As long as this capital is not fully returned, cost externalization, the bane of sound development economics, occurs on a vast societal scale."

(CERNEA AND MATHUR 2008: 5-6)

With this reality comes the practical need and moral imperative to ensure, in cases where displacement is unavoidable, that comprehensive and effective remedial strategies and actions are in place so that cost externalisation can be avoided and any lost capital can be ‘fully returned’: “The imperative to stop and to reverse the mass-impoverishment caused today by forced displacements urgently dictates that we broaden the inquiry and challenge to the status quo” (Cernea and Mathur 2008: 10).11

METHODOLOGY

The IRR Model has four functions:

1. **Prediction** of impoverishment risks likely to result from forced displacement and resettlement;
2. **Diagnosis** of nature and extent of such risks in particular project contexts;
3. **Problem resolution**: planning and design of measures for prevention and mitigation of the risks;
4. **Research** which enables coherent analysis of resettlement impacts as well as monitoring and evaluation of resettlement projects.

Through these functions, IRR offers both a theoretical model of development-induced displacement and resettlement processes; and a methodology to be used in preparation, implementation and evaluation of resettlement projects. It is aimed at enhancing understanding, on the one hand, and influencing implementation practice, on the other. It is therefore a tool for both risk analysis and risk management.

The model focuses on eight major impoverishment risk areas, each of which is matched by a set of mitigation measures and strategies. It has a dual aim: to identify and analyse risks, and then to match or reverse these with viable countermeasures, for incorporation into project planning.

11 For economic analysis of the elements of “Full and Proper Compensation”, and the imperative that this should apply to both formal and customary rights, see Pearce (1999).
**TABLE 4: THE IRR MODEL**

<table>
<thead>
<tr>
<th>Displacement: Major impoverishment risks</th>
<th>Resettlement and reconstruction: Risk-reversal activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Landlessness</td>
<td>• from landlessness to land-based resettlement</td>
</tr>
<tr>
<td>2. Joblessness</td>
<td>• from joblessness to re-employment</td>
</tr>
<tr>
<td>3. Homelessness</td>
<td>• homelessness to house reconstruction</td>
</tr>
<tr>
<td>4. Marginalisation</td>
<td>• from marginalisation to social inclusion</td>
</tr>
<tr>
<td>5. Increased morbidity and mortality</td>
<td>• from increased morbidity to improved health care</td>
</tr>
<tr>
<td>6. Food insecurity</td>
<td>• from food insecurity to adequate nutrition</td>
</tr>
<tr>
<td>7. Loss of access to common property resources</td>
<td>• from loss of access to restoration of community assets and services</td>
</tr>
<tr>
<td>8. Social / community disarticulation</td>
<td>• from social disarticulation to rebuilding networks and communities</td>
</tr>
</tbody>
</table>

This framework has relevance for all actors involved in designing, implementing and monitoring development programmes. It enables recognition and analysis of the full spectrum of potential impoverishment risks associated with resettlement, and as a result has become influential world-wide in analysis of resettlement processes. It requires politicians, government officials and financiers to methodically take stock of all these risks (including the full human costs) of proposed development, prior to any final decision to proceed with projects that will require human resettlement. It offers tools for the prevention of the externalisation of development costs, and offers tools for the design and implementation of comprehensive risk-reversal strategies and activities. It also provides a framework for ongoing research and monitoring, as well as retrospective evaluation, of existing resettlement processes, in order to identify gaps and shortcomings which may require remedial action. The IRR framework necessarily implies detailed, intensive eviction impact assessment and analysis, and therefore has potential for application by affected communities and support organisations such as NGOs.

**APPLICATION**

Applications or usages of the IRR Model include:

- As a basis for developing “operational indicators for measuring impoverishment risks and their actual impacts” as a result of involuntary resettlement (Cernea 2004: 41);
- As a research tool for synthesising and analysing forced resettlement impacts and experiences in India. In this study IRR was used on the basis that it is “a conceptual model that encompasses both the risks of impoverishment through displacement and the strategies for reconstruction” (Mahapatra 1999: 190);
- As an analytical tool to assess the scope and extent of evictions impact. For example, use of the IRR Model by economists in an investigation on the links between poverty and displacement with reference to the !Xun and the Kwe peoples, who had been forcibly resettled from the Kalahari in Namibia to Platfontein near the town of Kimberley in South Africa. On the basis of a detailed impact analysis the researchers concluded that “all eight risks mentioned in the [IRR] model, that could lead to impoverishment of a community were present amongst the...
IXun and the Kwe” (Dalton-Greyling and Greyling 2007: 1);

- As a tool for involuntary resettlement programme preparation and planning, for example in India and the Philippines (Cernea 2004: 40);
- As a performance management tool in field supervision and monitoring of the implementation of resettlement programmes (Cernea 2004: 41);
- Incorporated into the resettlement policies, handbooks and other resources and tools of the World Bank, Asian Development Bank, African Development Bank and other organisations and countries;
- Applied in World Bank project evaluation studies as an involuntary resettlement and impoverishment risk model (World Bank 1996: 115-121);
- As a data-gathering framework and analytical tool to bring to light new areas of concern needing urgent attention and action. A good example of this is a 2006 research report looking at the impoverishment impacts of nature conservation-induced displacements in six African countries. So alarming were the findings of this evictions impact assessment that the authors concluded: “As long as restorative policies and laws are not enacted, forced evictions from parks must be stopped” (Cernea and Schmidt-Soltau 2006: 1826).

CASE STUDY: IRR AND THE TANGGUH LIQUEFIED NATURAL GAS PROJECT:

In spite of its incorporation into the relevant resettlement policies, and its reported widespread application in the planning of resettlement processes, it proved disconcertingly difficult to find examples in which use of the IRR model was successful both in anticipating and genuinely mitigating the full extent of the identified risks of development projects. One hopefully not isolated example of such success is, arguably, the Tangguh Liquefied Natural Gas (LNG) Project in Papua, Indonesia. The project involves government, the private sector (British Petroleum – BP) and a major international financial institution (Asian Development Bank – ADB). It entails the building and operation of gas wells and offshore drilling and production platforms and related facilities for the processing, transmission and export of Liquefied Natural Gas to international markets. Construction started in 2004 and was scheduled to be completed in 2008. According to the website of the ADB:

“The project is critical for Indonesia in its energy development and export efforts and will help Indonesia maintain its position globally as a key LNG export centre. The project is in accordance with the government policy of maintaining security of LNG supply and encouraging the development of foreign-exchange earning projects. It is also in line with ADB’s energy policy that emphasizes support for the development of cleaner fuels with the private sector participation […] ADB’s participation will catalyze significant amount of long-term debt to support Indonesia’s energy sector. Since the project is ADB’s first private sector project in Indonesia’s oil and gas sector, it has the potential to provide significant demonstration impacts for subsequent projects not only in Indonesia but also in the region.”

(ASIAN DEVELOPMENT BANK 2008)

To implement this, around 3500 hectares of land belonging to three clans of the Sumuri tribe had to be acquired and the inhabitants had to be resettled. The project would also affect people’s access to their agricultural land, fishing areas and cultural and religious sites. In preparation for implementation a detailed Land Acquisition and Resettlement Action Plan (LARAP) was prepared, as part of a broader
environmental and social impact assessment which was approved by the Government of Indonesia in 2002 (Cernea 2006: 5). This plan was subsequently revised and improved, to bring it in line with international (and specifically World Bank and Asian Development Bank) guidelines and standards on resettlement.

The Tangguh Project LARAP (Asian Development Bank 2006) covers the following:

- Background information to the project;
- A policy framework for land acquisition and resettlement;
- A policy and legal framework with regard to the full range of “project-affected people”, which includes an “entitlement matrix” (see ANNEX E);
- Baseline information on the “resettlement affected communities”;
- Impoverishment and livelihood restoration strategies of the resettlement programme;
- Public consultation and disclosure;
- Village design and relocation;
- Livelihood restoration and development;
- Social services and community cohesion;
- Implementation;
- Budget;
- Monitoring and evaluation measures to ensure compliance and success.

The IRR Model is central to the entire LARAP. It was used at the outset to inform and shape the project’s policy framework for land acquisition and resettlement, including provision for anticipating, quantifying and mitigating risks for the affected population:

While the Tangguh Project recognizes that the various resettlement policies and guidelines aim to safeguard resettlement-affected communities, it also required a specific tool to analyze key impoverishment risks (i.e., risks to livelihood continuity) faced by communities affected by relocation. Specifically, the Project sought an approach that would allow the Project to:

(a) Systematically identify the main poverty risks in the economic and physical displacement of the Tanah Merah community and host villages (Saengga and Onar)

(b) Formulate, develop and implement strategies to mitigate and reverse risks and ultimately achieve reconstruction at improved income and livelihood levels.”

(ASIAN DEVELOPMENT BANK 2006: 31)
### TABLE 5: IRR MODEL RISK ASSESSMENT

<table>
<thead>
<tr>
<th>Risks</th>
<th>Likely Intensity</th>
<th>Content of Main Risk</th>
<th>Counter Risk RAP Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Landlessness</td>
<td>High</td>
<td>Communities forgo significant areas of productive resources</td>
<td>Chapters 4, 9 [of LARAP]</td>
</tr>
<tr>
<td>2. Homelessness</td>
<td>High</td>
<td>127 families lose their original dwellings and home plots</td>
<td>Chapters 4, 5, 8</td>
</tr>
<tr>
<td>3. Loss of Access to Common Property</td>
<td>High</td>
<td>Common property resources (marine, sago, forest and land) on transferred land become inaccessible; loss of community infrastructure in Tanah Merah</td>
<td>Chapters 4, 5, 8, 9</td>
</tr>
<tr>
<td>4. Joblessness</td>
<td>Low</td>
<td>Very little if any pre-Project wage employment exists in the area</td>
<td>Chapters 5, 9</td>
</tr>
<tr>
<td>5. Food Insecurity</td>
<td>Moderate</td>
<td>Area and quality of land resources at resettlement sites; interruption of agricultural production and food supplies preceding, during and after population transfer</td>
<td>Chapters 5, 8, 9</td>
</tr>
<tr>
<td>6. Increased Morbidity</td>
<td>Moderate</td>
<td>Potential adverse health impacts from diseases brought in by labour force; exposure to new Project activities.</td>
<td>Chapter 10</td>
</tr>
<tr>
<td>7. Marginalization</td>
<td>Moderate</td>
<td>Temporary or permanent loss of livelihood opportunities; little change in individual, household and clan status expected within Sumuri tribe; competition from influx (migrant) population</td>
<td>Chapter 9, 10</td>
</tr>
<tr>
<td>8. Social Disarticulation</td>
<td>Moderate</td>
<td>Stress resulting from uncertainties of relocation and uneven impact/benefit distribution; potential intra-clan conflicts regarding access to and use of resources; potential inter-tribal jealousy and conflict regarding distribution of Project benefits</td>
<td>Chapter 10</td>
</tr>
</tbody>
</table>

Source: Asian Development Bank 2006: 32

Distinction is made between three different “project affected groups”:

1. Those affected by the exploration-phase seismic work;
2. The resettlement-affected communities (i.e. those physically resettled and the host villages of Tanah Merah, Saengga and Onar); and
3. People impacted generally by the land acquisition process (primarily the three clans of Sowai, Wayuri and Simuna).  
   (Asian Development Bank 2006: 36)

A crucial stage in the process of applying the IRR Model to the project was a detailed baseline socio-economic survey, commissioned to:
- Define eligibility to receive resettlement-related benefits;
- Identify private and communal assets that would be forgone due to the resettlement in order to plan their replacement;
- Describe the demographic structure of the communities to provide the Project with a basis for planning resettlement and protecting the social fabric of the resettled and host communities;
- Describe the communities’ livelihood systems to provide the Project with a basis for planning income restoration programs;
- Provide a socio-economic baseline against which Project impacts can be measured after resettlement has taken place.  
   (Asian Development Bank 2006: 71)

Chapter 6 of the LARAP demonstrates the direct, practical application of the IRR Model to the project:
Crucially, internal and external monitoring and evaluation of compliance and performance is also a specified requirement (Asian Development Bank 2006: 249-256). In addition to regular internal reports, seven external reports have to date been produced: two by an External Performance Monitoring Panel on Resettlement (Cernea 2005 and 2006) and five more general compliance monitoring reports by the External Panel for Environmental and Social Monitoring, two produced in 2007, one in 2008 and two in 2009 (e.g. Asian Development Bank 2007a and 2007b).

The Tangguh case demonstrates the potential of application of the IRR Model as an impact assessment and risk mitigation tool. It also clearly demonstrates that the option of resettlement of people is not one that should be taken lightly. Proper application of the IRR Model requires the full costing of a resettlement process, through detailed up-stream risk discovery. It demonstrates that to uproot and resettle a community in a manner that has a just and equitable outcome, without any externalisation of costs onto that community, demands significant, sustained inputs of time, financial resources and expertise.

It requires the ability to design and implement appropriate measures that will effectively mitigate and remedy the negative impacts of resettlement. This in turn requires the sustained commitment of numerous parties (in this case including different levels of government, the private sector, an international donor, independent experts, non-governmental organizations and the people themselves) to drive the process to its intended outcome regardless of setbacks or obstacles.

The chapter describes the assets foregone by resettlement-affected communities and the natural resources available at each of the resettlement sites. It subsequently applies the IRR model, analyzing each type of risk (i.e., homelessness, landlessness, loss of access to common property resources, joblessness, food insecurity, morbidity, marginalization and social disarticulation) individually and defining a differential intensity of risk based on this analysis. A tabular summary of this analysis is also provided with separate tables to describe the situation in each of the three resettlement-affected communities. [See Tanah Merah extract, given at ANNEX F] In addition to the assessment of general resettlement risks a separate section outlining resettlement risks specific to this project is provided. A final section describes strategies to avoid and/or mitigate these risks and achieve resettlement with development.

(ASIAN DEVELOPMENT BANK 2006: 101)

Another key element in the implementation of the LARAP was intensive consultations with all stakeholders and in particular with the affected communities throughout the entire project cycle. Negotiated agreements were struck on, inter alia: acquisition of the land required by the project; compensation in the form of replacement of private dwellings, replacement and upgrading of village infrastructure and services, resettlement site; location of resettlement site; compensation agreement on productive plants lost; design and type of replacement houses; on agricultural and non-agricultural livelihood development; village design and layout; access and maintenance agreement for cemeteries; and establishment of development committees.”

(ASIAN DEVELOPMENT BANK 2006: 129)
LARAP’s implementation during 2006 has continued to make new and very impressive advances toward fulfilling the project’s commitments regarding its resettlement component. It also confronted some challenges and unanticipated problems in implementation and monitoring that are to be resolved in 2007. […] Throughout the year, the BP Tangguh project crossed a historic milestone by completing Phase One of the LARAP: it successfully finished the population’s physical relocation, as well as the infrastructure construction for all the resettlement affected villages (RAVs), while also laying key premises for economic development. With that, the LARAP is entering its Phase Two, which is fully centered on its economic and social development content. The new Phase revolves entirely around income and livelihood reconstruction and enhancement, aiming to achieve and possibly surpass internationally recognized standards in resettlement.”

(CERNEA 2006: 6)

In light of this, the Panel advised the managers of the Tangguh project:

To consider what re-adjustment and fine-tuning are necessary in the LARAP, and in its staffing and management structure, to respond to the demands and longer-term objectives of the new phase. […] The new phase requires a broader mix of human resources and staff skilled in economic/sectoral development work, competent to ‘champion’, advise on, analyze and monitor the implementation of the ‘sectoral’ (income generating) development activities, upon which success will directly depend.”


3.4 EVIA THROUGH PARTICIPATORY MONITORING AND EVALUATION

MOTIVATION

From 2001 to 2003 research collaboration between UN-HABITAT, Cambodian Volunteers for Community Development (CVCD) and the Urban Resource Centre (UCR) in Cambodia included the development of an eviction impact assessment methodology. This was part of a broader Participatory Monitoring and Evaluation process (PME) aimed at measuring progress made in the implementation of the Phnom Penh Urban Poverty Reduction Strategy (UPRS) designed and implemented by the Municipality of Phnom Penh (MPP) with support from UN-HABITAT (UNCHS Project CMB/00/03). Although the PME would be focused on a selection of settlements, it was envisaged that it would in time “become an integral part of the UPRS and will provide consistent evaluation means to all poverty reduction programs in Phnom Penh interested in measuring the impact of their activities” (Fallavier 2001b: 1).

The Phnom Penh PME process had three main objectives:

1. “[T]o elaborate an impact assessment and monitoring mechanism to measure the effects of [UPRS] Project activities with simple indicators that will be regularly recorded in an information networking system hosted by the MPP. These indicators include qualitative indicators of the poverty analysis, as well as quantitative indicators consistent with the Global Urban Indicators […], and with impact assessment methods used by other actors of urban development in Phnom Penh. […]. They will reflect the specific needs of diverse communities, and will remain easy to aggregate for comparative purpose.
2. “[T]o conduct initial baseline studies and quarterly follow-up assessments, which will
investigate these locally defined indicators in a number of low-income settlements representative of the array of poverty situations in Phnom Penh. The findings of these studies will be stored in the information networking system and will be disseminated during forums, workshops and other relevant venues.

3. “[T]o train a local team to undertake baseline studies, quarterly assessments, and final Project impact assessments, and to maintain and further develop the information networking system. So doing, the team and interested partners will learn to refine and apply consistent PME methodologies to other programs and activities related to the UPRS” (Fallavier 2001b: 2).

The intended outputs of the research were:
1. Baseline reports / community profiles
2. Individual Community Development Frameworks
3. Results from Participatory Rapid Assessments and community workshops
4. Reports from field workers
5. Impact evaluation reports
6. Annual dissemination workshops
7. An information networking system to keep track of the indicators and data collected on each community. (Fallavier 2001b: 3-4)

Interestingly, the PME had not been specifically designed or intended to include measurement of eviction, relocation and resettlement impacts. At the time of the initial design, the PME was intended to build on encouraging progress that had been made from 1996 to 1999 in demonstrating the viability of in-situ upgrading of low-income settlements in Phnom Penh, followed by the formulation of an Urban Poverty Reduction Strategy (UPRS) (Fallavier 2009: 71-76). On the basis of progress made, the designers of the methodology “took at face value” an undertaking by the Municipality of Phnom Penh to stop evictions and so did not anticipate having to include measurement of their impacts in the course of implementing the PME (Fallavier 2010b). However from 2000, as the Cambodian Government became recognised internationally, increased aid and investment started flowing into Phnom Penh and “a lucrative real estate market started to appear, which led to numerous violent and disguised evictions” (Fallavier 2010b). In consequence a number of the settlements under study through the PME became eviction and/or resettlement cases; and the methodology proved itself to be well suited to the task of assessing eviction impacts.

METHODOLOGY

The methodology of the PME process was developed and documented in detail, and revised and fine-tuned after a four month trial period, with provision for further adaptation in the course of implementation. “As [the PME methodology] is based on a continuous learning-by-doing approach, it will evolve as it integrates with the other components of the Project and as field findings require adapting the analytical framework” (Fallavier 2001b: 6).

The methodology entailed assessment of progress in achieving UPRS project objectives through community-level impact monitoring, including both qualitative and quantitative research and the building of multidisciplinary community profiles. These profiles were seen as “are first step in participatory planning and represent baselines against which impacts of Project actions will be measured” (Fallavier 2001b:6). The tools developed to collect the necessary information included:

- Participatory assessment techniques categorised into: review of secondary sources; semi-structured interviews; techniques of direct observation; visual techniques; and field data analysis. (The techniques are explained in Appendix A, in Fallavier 2001b: A1-15);
- Household level interview questionnaire with guidelines covering a number
of key indicators: background data; organisation, participation and sense of community; socio-economic development; housing; infrastructure; transportation; environmental management. (Detailed, user-friendly guidelines given in Appendix B, in Fallavier 2001b: B1-27);

- Data collection and coding sheets and guidelines linking the household level and community interviews with the database coding system (given in Appendix C, in Fallavier 2001b: C1-5). These would “constitute the backbone of our information system to record, summarize and analyze these data” (Fallavier 2001b: 6)

The designers of the methodology were aware of the need to identify trends and impacts over time, and provided for a number of additional measures:

Although the direct impacts of Project activities can be concretely measured, the short duration of the PME yet limits the understanding of how they will durably impact human development in Phnom Penh. To answer this limitation, the PME will provide methodological basis to develop a long-term impact assessment with the use of two analytical frameworks that will assess the sustainability of progress made in poverty reduction: (i) a human right approach to measuring human development over time, and (ii) a measurement of the evolution of participatory urban governance.

(FALLAVIER 2001B: 8)

In addition, they recruited staff with substantial experience working on poverty issues in Phnom Penh, and also incorporated findings of the 1999 poverty analysis that had been used in formulating the UPRRS. The intention was also to keep updating data and on that basis refining findings over time.” (FALLAVIER 2003: 4)

A set of nine sites were selected for an initial pilot stage of the PME process, according to criteria selected to maximise their relevance. Included in these were three resettlement sites chosen to represent “(i) different stages of settlement process; (ii) different degrees and types of planning of the resettlement; and (iii) different levels of external intervention” (Fallavier 2001b: 12).

APPLICATION

Implementation of the PME between 2001 and 2003 produced a number of detailed and very useful reports. Several community profile studies were conducted, including of settlements that were going to and settlements that had already been resettled (Fallavier 2002b-g). Because of the focus of the PME on measurement of poverty reduction in the context of the UPRS, and thanks to the thoroughness of the research methodologies used, the data collected were of direct and valuable relevance to the assessment of the impacts of eviction, relocation and resettlement in particular cases. They could also form the basis of description and analysis of broader trends and patterns. A wealth of relevant material was produced in the course of this period, with titles including:12

2001:
- “A comparative analysis of recent resettlement projects in Phnom Penh.”
- “Analysis of the survey on impacts of relocation projects upon livelihoods conducted from January to March 2002 in five resettlements sites in Phnom Penh.”
- “Current Situation in low-income settlements of Tonle Basac: Floods in Basac AB, Basac 3B and Basac 3C communities; Resettlement planning issues for the seven Basac communities. Situation report and basis for planning action – a work in progress for discussion.”
- “Fire in the Tonle Basac November 26, 2001: 11 See Bibliography for more details on each of these reports.

2002:
Notes on the events and on the relocation planning process (Working paper).”

2003:
• “Lessons from experience and policy directions for resettlement programs in Phnom Penh: Interim findings, based on seventeen months of field observation.”

Each of these reports contains important information and insights in relation to the impacts of evictions, relocation and resettlement. In particular the 2003 report (Fallavier 2003) demonstrates the value of the methodology employed as an EvIA instrument. The report looks at resettlement sites around Phnom Penh. It relies on statistical data from two sources:

An extensive socio-economic survey we conducted with 140 households in five relocation sites three to eight months after their creations, and a shorter socio-economic survey conducted with 1,890 households in Anlong Kngan relocation site, seven months after its creation. It also relies on qualitative data “from the extensive set of data collected in the field since July 2001 in over fifteen low-income communities in Phnom Penh and resettlement sites in the outskirts of the city”. This is supplemented with data collected in the 1999 poverty baseline analysis and other sources. All findings are “the results of extensive triangulation of qualitative data, supported when available by statistical evidence.”

(FALLAVIER 2003: 4)

A framework was developed to measure progress made in reaching the UPRS objectives in the selected resettlement sites. It covers the key indicators mentioned earlier (organisation, participation and sense of community; socio-economic development; housing; infrastructure; transportation; and environmental management). These are described in more detail via 27 sub-indicators which include social cohesion; weight of corruption; income generation and expenses; security of tenure / threat of eviction; housing for the poorest; education levels, costs, barriers; water supply, access and affordability; transport availability; road access; air and water quality; etc. The indicators are explicitly linked to the specific UPRS objectives and their sub-components. The framework also includes a PME analytical matrix to measure success in achieving those objectives.

Specific UPRS objectives against which data was gathered and which are reported include:

1. Improve access to basic services
   • Affordable land secured in suitable locations
   • Physical infrastructure developed with water supply, drainage, roads, sanitation, electricity, transport, solid waste collection
   • Social services developed with affordable housing, education, health care and family planning
   • Disaster management (fire/floods) improved

2. Enhance income generation – especially for women
   • Provision of basic education and vocational training, credit and saving schemes, and industrial employment promoted
   • Dissemination of marketing information facilitated
   • Space for small businesses created

3. Strengthen local governance
   • Community organisation and leadership improved
   • Community Development Management Committees
   • Land and housing policies to secure tenure for the urban
   • Procedures for government services simplified
   • Corruption reduced

For more detailed reference, the table of key indicators and PME analytical matrix comprising the analytical framework are attached at ANNEXES G (1) and G (2).
On the basis of the analysis the report includes a number of significant findings on the impacts of relocation on the target populations of the Phnom Penh relocations of this period, examples of which are listed in the box below.13

**BOX 2: IMPACT OF RELOCATION ON PHNOM PENH TARGET POPULATIONS...COTD**

**Basic services**

[UPRS] Objective 1: **Affordable land secured in suitable locations**
Indicators used: C1 to C6, D1 to D3, E1 to E414

**Summary of Observations**

Most low-income families who live in the settlements we studied came to Phnom Penh for two main reasons: first to find work, and second to provide their children with access to education. To them, a “suitable” location to live is thus close to employment opportunities and to schools. Most have jobs that require few or no skills. Their employment opportunities are located in the centre of Phnom Penh. Small traders work in the streets and around markets, porters on the docks, laborers on construction sites, and motordup drivers in busy arteries. Low-income families are thus attracted to settle near the centre of the city, where they can find employment. To offer job opportunities, resettlement sites should thus ideally be located either close to the city centre, close to large-scale employers (such as factories), or close to good roads with low-cost transportation to the city centre. Over 2001 though, all new relocation sites have been created far from job opportunities [emphasis added]. The largest settlement to date, Anlong Kngan, housing over 2,000 families, is located 20 km from Phnom Penh – most other sites are also located between 12 and 20 km from the city centre (see Table 1 and Map 1). The isolation of these sites prevents easy access to jobs and services located in the city such as health and education; it has very high cost in time and money for the families relocated. A study conducted in five resettlement sites showed that 65 per cent of people living on the sites had to come to Phnom Penh to find work. This takes them an average of 85 minutes of transportation, for a cost of 2,438 Riel per day. This cost alone represents 15 per cent of the typical income of a family with two persons working, and 27 per cent of the budget for a family where only the head of household works. Typically, 2,000 Riel is also about the amount of profit a small vegetable trader would earn in a day working in Phnom Penh.

**Reaching the most vulnerable**

Some of the victims most in need were not allowed to receive either a plot, or emergency aid. Often they were renters, or families who did not participate in the savings activities of the CBOs in their communities of origin. Most of them, the poorest families. Many stayed a few months on the relocation sites expecting vainly a plot they had been promised; they later came back to live in squatter settlements in Phnom Penh. Meanwhile, speculation developed around the distribution of “free plots” to families relocated. Many better-off families have then been included on the list of resettlers after bribing local authorities or community leaders.

**Lessons from field data**

Undoubtedly, the newly created resettlement sites are not located in suitable locations for the urban poor. They cannot allow them to earn the income necessary to survive, and to plan in the long term for house improvement and for a new life on the new sites. Besides its impact on employment and income, distance from the city centre also reduces the access to basic services, as water and sanitation networks do not reach the outskirts of the city, and as there is no nearby quality, affordable health providers. In the long term, a positive aspect of the relocation process could still be the (expected) improved security of tenure for families who obtained a plot. If they stay on the site five years, they should receive a recognized ownership certificate for the plot. We can expect that, if more housing finance becomes available, these titles could then be used as collateral for loans.

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13 For further information and more examples, the reader is encouraged to read this and some of the other reports produced as part of the Phnom Penh PME process, as listed in the Bibliography.
14 Indicators as given in ANNEX G1
3.5 CASE-SPECIFIC EVICTION IMPACT ASSESSMENTS

A number of individual, case-specific eviction impact assessment studies were also identified in the course of researching this paper. That most of these studies were done completely without reference to each other, or to the more established methodological frameworks discussed above, reflects a growing, organic need for such investigations as part of efforts to address the problems associated with forced evictions. It also indicates a need for interaction, information sharing and collaboration between a range of different individuals, organisations and institutions working on these issues. The broad goal of all of these studies was the same, namely to measure the impact of a specific eviction on the affected population. However the circumstances of the cases varied considerably, as did the methods and techniques used in the studies, depending on their specific objectives and the time, resources and skills available to undertake the assessment project. We will look at four examples of such studies, two from South Africa, one from Indonesia and one from Cambodia.

3.5.1 EVIA VIA KEY IMPACT INDICATOR ANALYSIS: JOHANNESBURG, SOUTH AFRICA

MOTIVATION

In 2003 Stuart Wilson, a researcher at the Centre for Applied Legal Studies (CALS), University of Witwatersrand, conducted a research project amongst residents of a newly created settlement called Sol Plaatje Extension, located at an abandoned mine near Roodepoort to the west of Johannesburg. The residents had been evicted in January 2002 from Mandelaville, a 25 year-old settlement in Diepkloof, Soweto. Two unpublished research papers were produced from this project (Wilson 2003a and 2003b).  

The key impact indicator focussed on in the research was access to education. Mandelaville and Sol Plaatje Extension are 14 kms apart as the crow flies (by road the distances are more). The author of these reports notes that:

The relocation uprooted Mandelaville’s residents from their established extended family and social service networks. In particular, school-going children were moved several kilometres away from their primary and secondary schools, which were previously within very short walking distances. Despite guarantees from the City of Johannesburg (the evicting authority) that a primary school would be made available ‘on site’, the nearest primary school was about 5 km away by road and had insufficient capacity to meet the needs of the new settlement. The nearest secondary schools were at least 8 km away by road, and were already serving large populations."

(WILSON 2003A: 1)

What did this mean for the residents? The Sol Plaatje research had two inter-related goals:

Firstly, it characterises the impact of the community’s eviction from Diepkloof to Sol Plaatje on education access.  

[…] “Second, [it] aims to quantify with precision the burden placed on poor households in Sol Plaatje by the costs associated with sending children to school.”

(WILSON 2003A: 1,2)

Pursuing the second of these goals greatly complemented the first, providing insights into the various dimensions of the cost burden of providing education to children and the contextual risk areas that need to be taken...
into account when already poor people are uprooted. The importance of this inquiry lies both in the way in which these dimensions and risk areas are explored and in the potential applicability of its findings, with relevance to many communities and households in the city of Johannesburg (and beyond). In his introduction, author Stuart Wilson notes:

According to the Landless People’s Movement, 36 informal settlements in Johannesburg are currently earmarked for “relocation”, altogether comprising around 57,000 housing units and 285,000 people. The relocation of Mandelaville’s residents to Sol Plaatje was part of a coordinated development plan designed and implemented by the City of Johannesburg. The City’s plan is ambitious. It aims to upgrade all informal settlements in Johannesburg or provide formal housing on a suitable alternative site by 2007. The City also plans to reduce its housing backlog from 217,000 units to 50,000 by 2004. Relocations are an important part of the City’s plan to achieve these targets. They make currently occupied land available for development, and move communities into sites which have been upgraded for occupation.”

(WILSON 2003A: 1-2)

METHODOLOGY

The objectives of the Sol Plaatje study were to:

1. Assess the impact of a communal relocation on access to education;
2. Place data on access to education in Sol Plaatje in the context of background information on household incomes;
3. Disaggregate the various education access costs borne by Sol Plaatje residents, focusing specifically on transport costs;
4. Investigate the relationship between school access costs and attendance;
5. Account for the number of school age children living in Sol Plaatje who are not attending school;
6. Report on the lived experience of poverty in Sol Plaatje, especially as it relates to access to education.

The research procedure involved:

• Focus group discussions with school-age children;
• A legal literacy workshop for parents and children of their education rights, which included input sessions in which participants reflected on what education means for them and any problems experienced to access education services;
• Primary research using questionnaires administered to a sample of 780 households;
• Researchers were drawn from the community and received training and coaching throughout the process’;
• Problems experienced with the research process were monitored and resolved through redesign of some of the questions;
• During the analysis phase significance tests were run to verify correlations between key variables.

FINDINGS AND APPLICATION

The findings of the Sol Plaatje impact assessment included the following:

• Baseline information was established including household income and employment levels. The community was found to be poor, with significant income inequalities, placing “the great majority of households in Sol Plaatje in the bottom third of South African households ranked by income” (Wilson 2003a: 7). The unemployment level was found to be 41 per cent, i.e. “broadly comparable to the urban unemployment rate across South Africa” (Wilson 2003a: 8);
• While at Mandelaville schools were within walking distance, in Sol Plaatje only a tiny minority of 50 children were able to
The author sums up this situation as follows:

Sol Plaatje is a bruised and disorientated community. The manner of its eviction from Mandelaville, along with the failure of local authorities to provide sufficient access to a range of social services at or near their new location, has created an assortment of problems for a community in which poverty was not new. The burden of the community’s relocation has fallen very heavily on the education of its children.”

(WILSON 2003A: 16)

Access to education is used as an indicator for a broader conclusion:

Sol Plaatje’s residents were already extremely poor when they lived in Mandelaville. But the centrality of their location, the stability and regularity created by 25 years of occupation for some families, enabled the community to ‘plumb itself in’ to the services available in Diepkloof. […] Virtually abandoned on a site which was not all it was promised to be, 17% of Sol Plaatje’s children – the most vulnerable children in the poorest households – were pushed out of school, sacrificed in the struggle to cope with new circumstances. In an example of careless top-down “development”, the City of Johannesburg ignored the need to preserve the fragile web of security Mandelaville had woven for itself. With the bulldozers steadily creeping toward another 57,000 households across Johannesburg, further research is urgently required to assess whether the City’s relocation plans, however well intended, are, in some respects, simply deepening the poverty they claim to tackle.”

(WILSON 2003: 23-24)

attend a school within four kilometres from their new settlement. The rest had to travel greater distances, up to 14 km and beyond, to get to school. “Three hundred and twenty-seven children travel between four and six kilometres to school. Three hundred and eighty-two children travel between twelve and fourteen kilometres. These two categories of children make up the lion’s share of school-going children in the households sampled. It is interesting to note that the schools in the 12 to 14 km range are those within easy walking distance of Mandelaville, the informal settlement formerly occupied by the Sol Plaatje residents” (Wilson 2003a: 8);

• This meant that many Sol Plaatje children were commuting back to their old schools, which had previously been within walking distance of their homes at Mandelaville (Wilson 2003a: 9);

• The cost of transport to school made up more than half of most households’ education access cost burden. This placed poorer families with a difficult choice between either paying these high costs (at the expense of other important household costs), or withdrawing their children from school. The research found that in many cases the latter was the only option: “In 735 households, 935 children of school-going age were in school [meaning enrolled at a school] and 194 were out of school”. The survey found that the overwhelming majority (147) of these were not attending school due to high transport costs (Wilson 2003a: 14).
3.5.2 EVIA TO PREVENT EVICTION AND ACHIEVE POLICY SHIFTS: SURABAYA, INDONESIA

MOTIVATION

In May 2002 the inhabitants of the kampungs of Bratang, Medokan Semampir, Gunung Sari and others of Surabaya, the capital city of East Java, Indonesia, were threatened with eviction by the municipal government. The residents of these settlements, which had been settled for over 40 years, began to organise themselves and to establish alliances with external networks and support institutions (Some et al. 2009: 463-464).

The activities the riverside communities included:

- Formation of organisational structures to deal with their key challenges;
- Investigating relevant laws and developing policy submissions to the relevant national ministry;
- Lobbying the national ministry to intervene in the matter;
- Participating in a joint community/government team to prepare alternative solutions;
- Commissioning research into the rationale behind the planned evictions;
- Questioning technical arguments that had been used in support of the planned evictions;
- Conducting displacement impact assessment research in order to determine the social costs of the planned evictions;
- Developing an alternative vision for renovation of the settlements;
- Involvement in negotiations with the authorities;
- Implementing the alternative processes agreed on.

A key part of the strategy of these riverside communities was to obtain information on the cost versus the benefit of the planned development of the riverside areas, to highlight the extent of the social and economic impacts on the people affected, and on that basis to question the assumption that the people need to move in order for development to take place and to develop arguments for viable alternatives. A detailed “displacement impact analysis” formed part of this process (Some et al. 2009; Hafidz 2010; UPLINK n.d.).

METHODOLOGY

The methodology used in the displacement impact analysis of the Surabaya riverside settlements was designed by the Urban Poor Consortium (UPC) in Indonesia after consultation with other organisations working on eviction impact assessment and prevention strategies including Habitat International Coalition (HIC) and the Centre on Housing Rights and Evictions (COHRE). UPC is an NGO based in Indonesia, dealing with community organisation on housing rights and eviction, urban poverty and the urban environment.

According to Wardah Hafidz, then Coordinator of the UPC and currently Coordinator of UPLINK, existing methodologies were assessed during 2004 and on that basis they developed their own EvIA tool which was then used in, for example, the Surabaya riverside communities (Hafidz 2010). In the documentation provided the process is described as a “Displacement Impact Analysis” covering the following asset loss categories:

- Social Asset:
  - Social cohesion broken
  - Education for children disrupted
  - Joblessness
  - Psycho-social problems increase;

- Economic Asset:
  - Business network jeopardized
  - Market and consumers lost
  - Lower income or lost of income resources;
• Physical asset:
  – Physical investments, i.e. infrastructure, social cultural facilities lost.

Data is gathered on each of these categories, on which basis the nature and extent of the losses that will be incurred by the residents if relocated are analysed. The resulting information is then introduced into debates, advocacy initiatives and negotiations with government to illustrate the losses of the proposed relocations on the affected population, the inadequacies of existing government plans and budgets as compensation for those losses, and the levels of community investment into the existing settlements that could be used as a basis for in-situ “renovation” as an alternative to the planned evictions and relocation.

Data gathered included the following:
- Infrastructure and services (electricity, roads, water, sanitation, etc.)
- Health conditions and facilities
- Educational facilities
- Occupation
- Distance to workplace and transport costs
- Income levels
- Household level economic activity
- House ownership (ratio of owners to tenants)
- Land size
- Function of houses (home, business, both)
- Size of houses
- Family relations, Social relations
- Neighbourhood organization
- Security

**FINDINGS AND APPLICATION**

Using the above methodology, assessment of the likely impacts of eviction was conducted in the following riverside locations in Surabaya: Gunungsari, Kebraon, Karang Pilang, Jagir, Pagesangan, Kebonsari, Jambangan and Bratang. The study found that these were well established communities with high levels of investment in their own housing and facilities; high levels of capital accumulation and circulation of money from informal economic activities in the settlements; and relatively acceptable levels of access to infrastructure and services, with the exception of drainage, adequate sanitation and paved roads:

<table>
<thead>
<tr>
<th>Service or facility</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households with electricity</td>
<td>91%</td>
</tr>
<tr>
<td>Households with piped water</td>
<td>37%</td>
</tr>
<tr>
<td>Households with well water</td>
<td>63%</td>
</tr>
<tr>
<td>Households with adequate sanitation</td>
<td>58%</td>
</tr>
<tr>
<td>Households with well managed solid waste</td>
<td>76%</td>
</tr>
<tr>
<td>Percentage of roads in settlement that are paved</td>
<td>48%</td>
</tr>
<tr>
<td>Households with good drainage system</td>
<td>16%</td>
</tr>
<tr>
<td>Households with telephone lines</td>
<td>18%</td>
</tr>
<tr>
<td>Households with at least one mobile phone</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Source: UPLINK n.d.*
Important indicators such as distance to workplace were also investigated. The finding was that “the settlements are very strategic, most houses are located in less or around 1 km from the work place, and transport fare is cheap”:

**TABLE 7: COMMUTING DISTANCES FOR RESIDENTS IN SURABAYA RIVERSIDE SETTLEMENTS**

<table>
<thead>
<tr>
<th>Distance workplace to home</th>
<th>Percentage of residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 km</td>
<td>56.1</td>
</tr>
<tr>
<td>1-2 km</td>
<td>8.8</td>
</tr>
<tr>
<td>2.1 – 3 km</td>
<td>6.2</td>
</tr>
<tr>
<td>3.1 – 4 km</td>
<td>5.4</td>
</tr>
<tr>
<td>More than 4 km</td>
<td>23.4</td>
</tr>
</tbody>
</table>

**TABLE 8: LOSS OF INCOME**

<table>
<thead>
<tr>
<th>No of People</th>
<th>Income</th>
<th>Lost (IDR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>819</td>
<td>500,000</td>
<td>409,500,000 - 409,500,000</td>
</tr>
<tr>
<td>638</td>
<td>500,000 - 1,000,000</td>
<td>319,000,000 - 638,000,000</td>
</tr>
<tr>
<td>206</td>
<td>1,000,000 - 1,500,000</td>
<td>206,000,000 - 309,000,000</td>
</tr>
<tr>
<td>264</td>
<td>1,500,000 - 10,000,000</td>
<td>396,000,000 - 2,640,000,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Loss per month</th>
<th>1,330,500,000 - 3,996,500,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recovery</td>
<td>to 47,958,000,000</td>
</tr>
<tr>
<td>12 months</td>
<td>15,966,000,000</td>
</tr>
<tr>
<td>18 months</td>
<td>23,949,000,000</td>
</tr>
<tr>
<td>24 months</td>
<td>31,932,000,000</td>
</tr>
<tr>
<td>12 months</td>
<td>to 71,937,000,000</td>
</tr>
<tr>
<td>18 months</td>
<td>to 95,916,000,000</td>
</tr>
<tr>
<td>24 months</td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 9: LOSS OF ASSETS**

<table>
<thead>
<tr>
<th>Asset</th>
<th>Value (IDR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buildings</td>
<td>50,803,247,033.44</td>
</tr>
<tr>
<td>Land</td>
<td>52,653,678,532.90</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>4,058,053,074.43</td>
</tr>
<tr>
<td>Total Physical Assets</td>
<td>107,514,978,640.78</td>
</tr>
<tr>
<td>Income (18 months)</td>
<td>23,949,000,000</td>
</tr>
<tr>
<td>TOTAL Lost</td>
<td>238,978,957,281.55</td>
</tr>
</tbody>
</table>

**Estimated Total Asset Loss**

| 238,978,957,281.55 |
| to 286,966,957,281.55 |

**Government budget allocation for relocation**

| 40,000,000,000.00 |

**Source:** UPLINK n.d.

16 IDR = Indonesian Rupiah (1 IDR = 0.00011 USD)
The significance of the calculations are emphasised when the estimated total impact costs are compared with the budgets made available by the relevant authorities, as shown below. These figures are more compelling when it is pointed out that the estimated total asset losses given above do not include factors such as loss of access to educational facilities, higher transport costs or breakdown in security.

This information formed the basis of arguments for abandoning plans for relocation of the communities and instead embarking on a process of renovation. Also promoted was a proactive role for the community, as “Caretaker of the River”, to help implement a new vision for Surabaya as: “An inclusive and sustainable city that values social economic and cultural diversities, rooted strongly in its history where the rights of its citizens especially the poor are fulfilled” (Some et al. 2009:466; UPLINK n.d.).

It is important to note that the Surabaya EvIAs were part of broader activities and campaigns by the residents and support organisations to prevent the planned evictions, propagate an alternative development vision and engage with the relevant authorities on the way forward. Of particular relevance was research commissioned by Paguyuban Warga Strenkali (PWS), an organisation representing the residents, into the technical reasons given by the authorities as to why relocation was necessary. A good example of this was the supposedly high contributions of the riverside communities to the clogged and polluted state of the Surabaya River:

PWS commissioned its own study of the Surabaya River with the help of an Indonesian environmental NGO, Ecoton, and the University of Gajah Mada. Ecoton’s study looked at the source of the water contamination, and found that 60 per cent came from factories, 15 per cent from the riverside communities in Surabaya and Sidoarjo, and the rest from the province of Central Java. The report highlighted the large and increasing pollution load from the 156 factories along the Surabaya River (running between Surabaya and Sidoarjo), both in terms of chemical contamination and solid wastes. This showed that in fact, the poor urban communities were not responsible for most of the waste or pollution in the river, or for contributing to flooding or the degradation of the river’s ecological integrity. The riverside communities and the university published and distributed the report to the government, the provincial parliament and the community at large via the mass media. They also held discussions to determine whether it would be possible for communities to live on the riverbank without destroying their environment. This information was also disseminated via local and national newspapers, television and radio.”

(SOME ET AL. 2009: 464-465)
Such revelations are important and can become very powerful when read alongside the findings of an EvIA. Often evictions are justified in the name of a public interest or purpose, such as in this case the reduction of pollution and congestion of a river. The impact of the eviction on the affected communities is presented as justifiable in light of the benefits of a cleaner river to a broader community and the city as a whole. However if an EvIA is conducted and the findings illustrate just how severely the residents will be affected (as shown above), while complementary research illustrates that the perceived public gains (such as reduction of pollution) will be less significant than previously thought, the argument for a policy shift and change of the development plan can become compelling.

Of course the research on its own is unlikely to produce results. Dissemination of the information collected is vital, as is the building of broader public support and the direct involvement of residents in demonstrating that alternatives can work. In the case of the Surabaya riverside communities:

PWS’s efforts in building public support for the riverside communities via rallies, demonstrations and using the press, and by making their concept of community development a reality (with the construction of streets, housing improvements, settlement “greening”, etc.), eventually forced the government to make a decision. The provincial parliament assessed the plans set forth both by the government and the riverside communities. They concluded that riverbank settlements brought an important element of life to the city; if these communities were evicted, there would be very serious social and political consequences, destroying the social foundations of the people of Surabaya and the neighbouring villages, towns and cities all along the rivers: “We had a choice. We could have dealt with a low technical cost […] and a high social cost, or with the people’s model, we would have high technical costs but low social costs.’ The decision came down to a very basic cost-benefit analysis, which in the end came out in favour of PWS.”

(SOME ET AL. 2009: 464-465)

3.5.3 EVIA TO SUPPORT LITIGATION: PRETORIA, SOUTH AFRICA

The City of Tshwane has no plan to house people in desperate need within city boundaries. The suggested site at Soshanguve is not a viable alternative as our clients will be unable to maintain their economic networks needed for survival. Most of the Respondents eke out a living by selling used cardboard boxes and bottles, washing cars and doing part time work on an irregular basis. Others depend on the food provided by the local Roman Catholic Church and other charitable organizations in the area. Relocation would result in the loss of these networks and loss of economic opportunities basic to their survival. The LRC has established that there is vacant land available closer to the city to where the Respondents can be relocated. In the interim, we have requested the Applicant to provide our clients with basic services in the form of 2 communal fresh water taps and a number of chemical toilets.”

(LEGAL RESOURCES CENTRE 2004: 4-5)

MOTIVATION

This case involved around 750 people who had occupied an empty, disused government building called De Villiershof in Sunnyside, near the centre of Pretoria. The Municipality (City of Tshwane) reacted to this occupation by applying for an eviction order of the occupants in September 2003. The intention was to move them to a place called Soshanguve Extension
12, located approximately 40 km away. Eviction notices were served on the occupants, who obtained representation from a human rights organisation, the Legal Resources Centre (LRC). Legal proceedings commenced, although the parties did undertake to try to settle the matter out of court. The LRC’s legal strategy was as follows:

As part of their preparations for both negotiations and court, the LRC commissioned research into the likely socio-economic impacts that the proposed relocation would have on the occupants of the De Villiershof building. This research was supported by the South Africa programme of the Centre on Housing Rights and Evictions (COHRE). Two academics based at the Department of Sociology, University of Pretoria, were contracted to undertake this research on an urgent basis. They produced a 26-page report entitled “A socio-economic profile of Soshanguve and a comparison with Sunnyside Inner City Area” (Neocosmos and Naidoo 2004). An economist based at the University of South Africa, Prof. J.H. Martins, was also brought in to prepare supportive evidence as “an expert in the assessment of the cost of living and consumer markets and able to give an expert opinion on the amounts of money needed by families and individuals to obtain the necessities of life in order to support themselves (Martins 2004: 4).

METHODOLOGY

The approach taken by the De Villiershof EvIA is comparative. It aims “to provide a socio-economic profile of Soshanguve Extension 12, the place where resettlement for the residents at De Villiershof is proposed and to provide a brief comparison with the current socio-economic conditions in the Sunnyside area of Pretoria.” In the time that was available to do the study, “detailed strict scientific comparison” was not possible. However it was possible “to suggest, through the use of secondary data, comparable elements regarding the socio-economic profiles of the two living areas.”

Data was obtained through:

- Secondary data;
- Primary quantitative data from a previous survey on poverty in the Pretoria area (including Soshanguve);
- Focus group interviews with inhabitants of both Soshanguve extension 12 and De Villiershof in Sunnyside (Neocosmos and Naidoo 2004: 3).

The methodology employed by Prof Martins, in his complementary study, was to analyse detailed market research and Minimum Living Level (MLL) calculations applicable to the Pretoria area, as well as specific information relating to the De Villiershof residents.

FINDINGS AND APPLICATION

The EvIA counterposes the situations in De Villiershof, where the 750 were living, and Shoshanguve Extension 12, to which the City of Tshwane authorities wanted to relocate them. The research findings are summarised as follows:

Through a detailed analysis of this data, not only is a picture drawn of living conditions, but the absence of economic and social public amenities in Soshanguve is outlined. It is not reasonably possible to maintain that sufficient income can be generated in Soshanguve Ext 12 which will enable anyone to cover their necessities of life. The physical, economic and social isolation of extension 12 is shown to be the main problem facing its inhabitants. This compares to the marginal integration of the De Villiershof residence into Sunnyside despite their poverty. It is argued that rather than removing the poor and homeless to peripheral areas such as
Soshanguve, the city authorities of the CTMM should concentrate on developing an urban renewal programme which would not only help to integrate the poor into the economic and social life of the city but would also develop the economy and, by all accounts, also increase the levels of revenue for the authority. It is crucially important in a democratic South Africa not to attempt to resolve the problem of inner city poverty by reverting to the methods of old which can only continue to marginalise the poor.”

(NEOCOSMOS AND NAIDOO 2004: 2)

These implications of these findings are amplified by the investigations and analysis of Prof Martins. In his affidavit to the Court, Prof Martins concluded as follows:

30. I have read the founding affidavits by Warra Jerry Mphahlele, Kelebogile Lydia Magau and Joseph Moyo and others [residents of De Villiershof]. Their incomes are obviously far below the MLL [Minimum Living Level].

31. Table PR B1 sets out how the MLL monthly financial requirements for black people living in Pretoria were calculated. It indicates how much of the MLL is made up by food.

32. An absolute poverty datum (“PDL”) line is a fixed measure of poverty over an entire domain of poverty comparison. A PDL is typically calculated at the lowest retail cost of a budget to necessities of adequate quality to meet the basic nutritional requirements for a normal, active and healthy life. It typically contains six items: 32.1 food; 32.2 clothing; 32.3 cleaning materials; 32.4 fuel and lighting; 32.5 shelter; and 32.6 worker’s transport to and from work.

33. The food component of the MLL is the same as the food component of any PDL study and has been calculated on a comparable basis.

34. For purposes of this case, it is not necessary to compare more than the food component. By taking only the food component of the MLL, an absolute poverty datum is obtained below which nobody could attain reasonable health, basic nutrition, sufficient food or be able to support himself and his dependents.

35. Even if one accepts that the absolute minimum standard excludes all necessities of life other than food, then the applicants live below that level. They have no access to land on to grow crops but, even if they did, the difference between the food component of the MLL and the actual income of the applicants is so great that the yield of the land is insufficient to alter the conclusion that the applicants live below only the food element of an absolute poverty datum line.

36. Taking the food component of the MLL in isolation for a family such as the respondents, then at this very basic and absolute measurement, the applicants’ incomes fall very significantly below even the food component of the MLL and therefore below the lowest of any poverty datum line.

37. I conclude that the respondents cannot be able to support themselves and their dependents in their present circumstances. These circumstances can only worsen if they are moved to places without economic opportunities [such as Soshanguve].” (Martins 2004: 9-10)

These findings underscore that to forcibly remove the residents of De Villiershof from Sunnyside to Soshanguve Extension 12 – from the situation of “marginal integration” they went into complete marginalization marked by “absence of economic and social public amenities” – would further undermine their already precarious livelihood options, and could even amount to a death sentence.
“Moving De Villiershof residents will worsen their plight – report”
Zelda Venter, Pretoria News, 3 June 2004

“We are not working ... when we lived in town we could still secure piece jobs’

By simply dumping the inhabitants of the controversial De Villiershof in Sunnyside in Soshanguve Extension 12, the condition of the down and outs will only become worse.

This was the finding of an impact study done regarding the Tshwane Metro Council’s desire to remove the more than 200 people currently living in appalling conditions in the run-down De Villiershof.

The council at the end of last year lost its urgent bid to evict and relocate the occupants to Soshanguve as Judge George Maluleke was not prepared to evict the occupants on an urgent basis.

Meanwhile, the problem of De Villiershof is still not solved. The occupants, on the one hand, feel if they move the last crumb will be taken from their mouths. The council, on the other, wants to get rid of the “De Villiershof problem”.

In the latest development in the saga, two University of Pretoria sociologists have compiled a report comparing life in Soshanguve to that in Sunnyside. This was commissioned by the Legal Resources Centre in Pretoria, which is assisting the occupants in their legal action.

The report will form a central part of the ongoing battle which will be heard by the Pretoria High Court on a date still to be determined.

The physical, economic and social isolation of Soshanguve Extension 12, compared to De Villiershof in the vibrant Sunnyside area, is shown to be the main problem facing its inhabitants.

Sociologists Michael Neocosmos and Kammila Naidoo, who compiled the report, argue that rather than removing the poor and homeless to areas such as Soshanguve, the city fathers should concentrate on developing an urban renewal programme which would not only help to integrate the poor into the economic life of the city, but would also increase the levels of revenue for the city.

Extension 12 is an informal settlement area comprising temporary, informal structures. It is one of the poorest areas and on the edge of Soshanguve.

There are no markets, sources of employment, or any socio-economic life whatsoever.

On the other hand, the amenities in Sunnyside are far superior; it has a vibrant economy in the formal and informal sectors, although work has to be done to overcome the urban decay and poverty in the area, the report stated.

The report argues that because of the endemic poverty and underdevelopment of Soshanguve, compared to the high development in Sunnyside, it makes little sense to remove people from the inner city to Soshanguve. To do so, can only increase their desperation and poverty.

Interviews done with Soshanguve residents as part of the report also paint a bleak picture. “We are not working ... when we lived in town we could still secure piece jobs,” one of the residents said.
Not only is it difficult to generate income under these conditions, it is also difficult to find food as shops are far away. Transport is a problem and if they manage to get a bus or a taxi, a lack of money to pay faces them. “We are prepared to seek jobs in town, but the taxi driver needs your fare,” another resident said.

The terrible living conditions give rise to domestic violence and poverty leads people to go back to town to commit crime. “We are afraid that we will go to the city and turn to crime because our families are hungry,” a resident said.

Another problem in Soshanguve is that the nearest police station is in Akasia, 15km away. “We are afraid to be here without the police,” residents said.

Schools, it was found in the report, were non-existent in Soshanguve Ext 12, with the result that the youngsters loiter around. The residents say school authorities are not keen to enroll children from informal settlements who they believe to be “trouble makers”.

“We have a crisis at the moment.” “The majority of our children are not at school, because they were denied admission. The people from De Villiershof may come here, but one thing is for sure - those kids are going to suffer,” is the opinion of another resident.

According to the report, there is no doubt that the people living in De Villiershof make use of the economic and social resources of the inner city. It is stated that they will be far worse off if they were to be separated from them.

It is apparent that the main employment is occasional jobs which pay very little, yet they manage to make ends meet. One occupant said he does occasional gardening and earns R45 per day. Relocating means he will have to pay R28 towards his taxi fare.

Although only two children living at De Villiershof attend school, relocating to Soshanguve will mean no schooling for them. Many of the occupants complain that they cannot access health services as clinics do not recognise De Villiershof as a valid address and thus refuse to help them.

Other complaints are that government officers discriminate against them and will not pay them their social grants because they live in De Villiershof.

“It is better to give another address,” one said.

But, all in all, the report concluded that it was best for these people to remain in the inner city.17

3.5.4 EVIA THROUGH INVESTIGATING RESETTLEMENT CONDITIONS: CAMBODIA

MOTIVATION

The Cambodia country office of the United Nations High Commissioner for Human Rights (OHCHR Cambodia) has recently conducted a study into the social or human impacts of eviction and resettlement in Cambodia. The result of this project was a report, in draft form entitled “Eviction and Resettlement in Cambodia: Human Costs, Impacts, and Solutions - A Study on Selected Urban Resettlement Cases” (OHCHR Cambodia).

The study was undertaken to support official undertakings from the late 1990s to handle the problem of urban poverty in a more humane...
manner, including an announcement by the Prime Minister in 2003 that one hundred informal settlements would be developed through in-situ upgrading. In spite of some successful urban upgrading projects that have benefited communities, evictions and involuntary resettlement have continued, with devastating consequences for the majority of people affected.

Although estimates vary, it is clear that significant numbers of people are affected by evictions in Cambodia. In 2008 Amnesty International estimated that least 150,000 Cambodians were at risk of eviction due to “development projects, land disputes and land grabbing” (Amnesty International 2008: 44), and in 2010 they reported that approximately 27,000 people had been displaced as a result of at least 26 evictions in the course of 2009 (Amnesty International 2010: 93). Against this background, the study investigated the human and social costs of eviction and resettlement in Cambodia. It focused on a selection of urban cases looking for common features of different resettlement processes and –sites, in order to identify remedial measures and solutions, including constructive shifts in implementation practice. The emphasis was on discussion and cooperation to contribute to a process by which resettlement affected families might be enabled to improve their prior livelihoods in order to move out of poverty.

METHODOLOGY

The OHCHR Cambodia study assesses impacts of eviction and resettlement, mainly through primary and secondary research into conditions at a range of resettlement sites. These are measured against human rights standards and requirements, not only in the short term, immediately after relocation, but also (and very valuably) years later. This includes reference to basic principles such as non-discrimination, accountability and participation; as well as to the relevant international instruments and standards. Reference is made to the relevant national framework when this reinforces international human rights standards, or to compare that framework with international standards.

The main standards and sources used to develop the methodology and to frame the study include:

• International human rights standards pertaining to the prohibition of forced eviction, displacement, and rights affected by resettlement (ICESCR and ICCPR, the Special Rapporteur’s Basic Principles and Guidelines on Eviction and Displacement; CESCR General Comments 4 and 7, other socio-economic rights such as the right to education).
• Human rights principles such as participation and non discrimination.
• International guidelines / methodologies: e.g. the IRR model (discussed in section 3.3 above), which prompted them to explore in more detail the processes of social cohesion/integration of one resettled community into the host community.
• International humanitarian standards (used to a lesser extent): the SPHERE standards (Humanitarian Charter and Minimum Standards in Disaster Response) and UNHCR’s Handbook for Emergencies (e.g. reference to these in the housing and water and sanitation sections of the report).

The approach of the study is therefore not simply about the actual evictions and calculating or estimating their financial or economic, or about comparative analysis with the situation pre-eviction, even though data from pre-eviction was used when communities interviewed referred to the situation (e.g. in terms of nutrition, electricity, water, livelihood). Most of the attention goes to the post-eviction resettlement experiences of the affected families, and how these measure against the
relevant human rights standards. In addition the study briefly discusses events before and during the eviction and relocation process.

In total eight relocation sites were studied: five in Phnom Penh, one in Kandal Province and two in Preah Sinahouk Province, in total involving 4,000 or more households or more families.

The following information gathering methods were used:

- A review of relevant literature, including international standards and guidelines related to eviction, displacement and resettlement;
- Community surveys (both individual and group interviews);
- Interviews with institutions and organisations including local and municipal government, community representatives, housing and human rights organisations, service providers and development NGOs;
- Technical assessment on water and sanitation at a particular site, including interviews and testing of water quality;
- Extracting relevant information from OHCHR operational casework on resettled communities in Cambodia.

Two questionnaires were developed for the data gathering process. The first is entitled “Assessment of the Human Rights of Evictions and Resettlement: Interview Questions for Individuals and Families at Relocation Sites”. This questionnaire provides a structured approach for interviews along key themes derived from the “Basic Principles and Guidelines on Development-Based Evictions and Displacement” (United Nations 2007), supplemented by other relevant human rights standards not adequately dealt with in the basic principles and guidelines document (i.e. food, health care, community participation). The methodology allowed for flexible use of this questionnaire, with addition and expansion of questions depending on local conditions at the interview sites and the knowledge and experience of the assessment team. For example, the team used the seven key aspects of the right to adequate housing (as per General Comment 4) as indicators to assess the adequacy of housing, though these were not explicitly referred to in the questionnaire. The second questionnaire, a “Water and Sanitation Needs Assessment Checklist”, was used for gathering of information on this very important key indicator of post-resettlement living conditions.

The information collected is organised and analysed in terms of the international and national legal frameworks (and commensurate duties, responsibilities and obligations) applicable in Cambodia, including the right to adequate housing; international standards pertaining to evictions and resettlement; other human rights standards and principles as relevant (e.g. education, participation); the Cambodian Constitution; and various other national laws, resolutions and policies. The fact that this is done with reference to a total of eight different settlements, and with reference to a broader literature, adds weight to the findings and arguments of the report.

**FINDINGS AND APPLICATION**

The results of the research have been written up in a draft report which serves as a basis for continued dialogue with the Government of Cambodia and remains to be finalised.
4. CONCLUSION
4.1 CONVERGENCES, GAPS AND OPPORTUNITIES

Individuals, families and communities who are facing the prospect of eviction, or who have already been evicted, are never in much doubt about its impact on their lives. People facing eviction are acutely aware of what they stand to lose; so much so that they often are prepared to take enormous risks to their own safety and belongings by resisting; and where possible to try to negotiate alternative options with the relevant authorities. Those who have already been evicted experience those consequences firsthand in their daily lives. There are some cases where the outcome of resettlement is positive, but these are isolated exceptions. Regrettably the views and experiences of the individuals, families and communities in question are seldom heard, with the result that important information about the impacts of evictions seldom reaches the public or the authorities in any coherent or compelling form. Community organisations, support institutions and agencies do their best to help to get the message across, but generally, the effect on both government and private sector practice has been limited.

A positive finding of this research assignment is that during the past two decades activists, scholars, institutions and agencies have made a start at finding ways to assess, analyse and publicise eviction impacts. The result has been the emergence of a diverse and promising variety of approaches and methods on which one could draw, individually and in combination. These range from structured models with solid theoretical foundations and well developed data gathering and analytical components; to more unique, once-off methods developed around specific, urgent cases. Some of these approaches and methods are built on the principles and imperatives of the international human rights framework and are intended as tools to be used by those affected to call their governments to account.

Others have grown out of academic research disciplines such as sociology and anthropology, and have become more multi-disciplinary and practice-oriented over time. Some are based on intensive research using a few key indicators, for use in litigation and/or campaigns. Yet others are linked to the efforts of multilateral institutions to mitigate negative effects of funded development programmes. Increasingly, also, the importance of direct involvement by the people directly affected in the assessment process is being recognised.

In 2006 this ongoing work received a positive boost with the endorsement of the concept of impact assessments by the Special Rapporteur on adequate housing, who stated that:

"Comprehensive and holistic impact assessments should be carried out prior to the initiation of any project that could result in development-based eviction and displacement, with a view to securing fully the human rights of all potentially affected persons, groups and communities, including their protection against forced evictions."

(UN SPECIAL RAPPORTEUR ON ADEQUATE HOUSING, 2007: Paragraphs 32-33)

The identified EvIA initiatives reflect a growing realisation of the enormity of the problems caused by forced evictions, displacement and resettlement, and of an urgent need to get the full extent of their impacts known, understood and acted upon. Numerous national and international NGOs and support organisations have for years monitored and highlighted these problems and have repeatedly called for urgent measures to confront them. Parallel to this, the academic and practitioners’ literature on development-induced displacement has through the years acquired a increasing tone of urgency and even exasperation at the manner in which, in spite of the establishment and
improvement of models, assessment techniques, policy frameworks and statutory requirements; capital-intensive, high-technology, large-scale development projects have nevertheless continued to wreak havoc in the lives of up to 15 million displaced people per year, leaving impoverishment and misery in their wake.

In 2009, Oliver-Smith described it as follows in a book tellingly entitled Development and Dispossession – The Crisis of Forced Displacement and Resettlement:

"Aimed at generating economic growth and thereby improving general welfare, these projects have all too often left local people permanently displaced, disempowered, and destitute. Resettlement has been so poorly planned, financed, implemented, and administered that these projects generally end up being ‘development disasters’. The process of displacement becomes a ‘totalizing’ phenomenon, affecting virtually every aspect of life.”

(OLIVER-SMITH 2009: 3)

The initiatives also reflect a process of convergence between the insights and findings of EvIA practitioners and the powerful, instinctive understanding by individuals, families and communities worldwide that their eviction / displacement / resettlement is likely to result in disastrous impacts, in “a loss more significant than they think”. On the basis of this understanding, they are often deeply suspicious of offers of compensation for their losses, a resistance endorsed by recent research and analysis on the concept of “just compensation”. Compensation for losses, which is currently “the main – virtually only – financial foundation for planning resettlement” has been found wanting in many respects (Cernea and Mathur 2008: 5).

Looking at the various categories of risk and loss information required in terms of the Feasibility Study approach, the IRR model, the HLRN loss matrix and the Cambodia PME research (discussed in sections 3.1-3.4 above), one begins to realise just how detailed an assessment or valuation would have to be, in order to provide an accurate assessment of loss and of what would constitute a just remedy. The problem goes even deeper:

"It is clearly apparent that, by its nature, compensation money is not a net benefit to those displaced: this is only a restitution of what was taken away (very often, an incomplete restitution). Neither is it correct to interpret the financing of compensation as an investment for expanding resettlers’ former productive potential: it is only a refund for replacing equal value assets that already had existed and are destroyed through condemnation.”

(CERNEA AND MATHUR 2008: 8L; SEE ALSO 32)

The outcomes of most development-caused forced displacement and resettlement (DFDR) leave a disgracing stain on development itself, conflicting with its poverty-reduction rationale, objectives and ethic.”

These conclusions, based on years of research, analysis and practical application in the field, represent a significant convergence of position between an established, highly experienced and sophisticated research community, and the growing human rights community that has been working intensively with populations affected by evictions and displacement.

Paradoxically a rich and diverse “tool-kit” which could help efforts overcome such problems, already exists within the “vast and powerful” methodology of project economic evaluation. Yet this is not properly utilised:
In the practice of specialized development agencies there is no defined set of methods prescribed as the professional standard for scrutinizing whether or not a resettlement component is economically and financially feasible and able to achieve its given objectives.”

(CERNEA AND MATHUR 2008: 33)

The abovementioned methodological advances, and the various convergences of views, insights and approaches between diverse actors involved in evictions, displacement and resettlement, are significant and most encouraging. However there are also some important gaps and limitations that came to light in the course of this assignment.

1. In the first place, in spite of the IRR model’s huge influence on the policies of major multi-lateral institutions, it proved much more difficult than anticipated to identify an example of genuinely successful application of the model in an actual resettlement case. It would have been reasonable to expect an abundance of such examples cited in the literature, given the high number of donor-funded development projects underway, and the fact that the model has explicitly been incorporated into the policy frameworks of the major multi-lateral banks. In addition, there appears to be growing concern amongst experienced practitioners in the areas of development-caused displacement that there is a massive gap between theory and practice. This recently caused a seasoned practitioner to exclaim, in obvious frustration: “Why is it that despite everything we do, we so often fail to resettle displaced people decently, equitably? Where do we go wrong? What do we need to change? Is this intractable?” (Cernea and Mathur 2008:1).

2. The HLRN Loss Matrix and the much larger HLRN Housing and Land Rights Monitoring Toolkit of which it is part, have been developed in intricate detail and is in a process of field testing. Application to date has been limited, though pilot cases have shown promising results. The level of detail of the HLRN Toolkit, and the way in which it is directly linked to the international human rights framework, are significant achievements. However, that same intricate detail renders the Toolkit (and the website) unwieldy and cumbersome to navigate and use. Valuable lessons in this regard can be learnt from the more case-specific EvIAs discussed in Section 3.5 above. While admittedly not producing the most comprehensive accounts of impacts, loss and required remedies, these much quicker EvIAs illustrate what can be achieved in situations of limited time and resources through careful selection of and focus on key indicators. This suggests that there may well be need for a model that allows for pragmatic tailoring of approach and methodology according to the specific needs and contexts of particular cases, while at the same time making sure that a set of basic, agreed methodological and analytical standards are met.

3. Another matter for concern is the fact that many organisations who have become involved in relocation projects, either through assisting affected residents to negotiate with the authorities, or through more actively facilitating and even implementing the process, have to date paid very little attention to assessing the impacts on the affected individuals, families and communities. This is an alarming and exceedingly risky approach. Research has clearly shown that impacts of eviction that are not anticipated and incorporated into the planning, costing and implementation of a resettlement project tend to become externalised. The price is invariably paid – with interest – by the affected residents, many of whom are already poor and marginalised. Relocation and resettlement
should always be seen as a measure of last resort, undertaken only when absolutely unavoidable; when all other options including in situ upgrading have proven unviable; and only once the impacts on those affected have been properly assessed, and countered through properly planned and sufficiently resourced development strategies and projects.

4. There is also an urgent need for clarity on exactly whose loss should be counted in assessing eviction impacts, with a tendency to favour formal title over ‘lesser’ forms of tenure security. As Pearce pointed out: “[W]hen issues of actual compensation for displaced people arise, those with less well defined tenure and resource rights are often treated less well than those with secure rights. This asymmetry of treatment is often conveniently justified by the absence of legal registration documents and so on, but has more to do with minimizing the monetary, rather than the human, cost of resettlement”. This approach is inconsistent with the concepts of economic efficiency and sustainable development (Pearce 1999: 57, 58). It also contradicts international law and guidelines which recognise a range of tenure forms as valid.

5. A further gap is the disconcerting lack of awareness, communication and cross-pollination between several of the EvIA initiatives identified. On a number of occasions the sharing of drafts of this report with actors who had worked on EvIA projects was met with a response of “If only we had known about these other initiatives when we were doing our project!” In some cases the problem was found even within institutions and between different agencies of the same organisation. This was perhaps most graphically demonstrated by the process required to track down the extraordinary and highly relevant body of research done in Phnom Penh from 2001-3, as described in Section 3.4 above. Even though it was a project of UN-HABITAT, the same institution that commissioned the present research project, this Phnom Penh research was largely unknown, and stumbled upon coincidentally in the course of this EvIA research. Once identified, it took weeks for copies of the actual reports to be located, in spite of intensive library and internet searches, and various institutional queries. In the end the documents were located with the help of a Cambodian NGO who provided an email address for the relevant consultant, who had long since moved on from UN-HABITAT, but kindly agreed to look for them on his personal computer. Identifying these gaps in communication and information sharing on the subject of EvIA is a further positive outcome of this assignment, and points to some of the tasks and opportunities ahead. Indeed, the research process itself began to forge relationships with and between key individuals, organisations and institutions, hopefully as a first step in bringing them together to:

- Share information, ideas, methods and techniques;
- Review and jointly improve some of those;
- Possibly put together a shared toolbox of methods and techniques; and
- Hopefully chart a common way forward for EvIA.

This and other opportunities are described in the list of recommendations that follow.

4.2 CONCLUSIONS

This report has described a number of promising EvIA methodologies and techniques. Many readers of earlier versions of the report expressed delight at the high number identified, and at their level of sophistication and potential effectiveness. There is, clearly, scope for consolidation and expansion of EvIA as a practice in the field of land, housing and development. However, it is important that this
process is not rushed. While it is true that the EvIA methodologies identified share certain commonalities and broad objectives, it is important to note that they were initiated and developed on the basis of different frameworks, in different contexts and often for quite specific purposes. Whether or not it is feasible or even advisable for them to be combined into a composite EvIA “toolkit” is a question that cannot be decided without further investigation and consultation with the relevant parties.

In light of this, the following is recommended:

1. UN-HABITAT should circulate this report as broadly as possible amongst actors, organisations and institutions working on or with an interest in land, housing and development issues. Readers should be encouraged to contribute criticism, comments and further relevant information.

2. UN-HABITAT should commend institutions, organisations and actors who have developed EvIA methodologies, and support them in their endeavours to improve, fine-tune and implement those methodologies. The diversity of frameworks and approaches underlying these methodologies should be noted and respected.

3. UN-HABITAT should encourage institutions, organisations and actors working on land, housing and development issues, but not yet aware of or using EvIA, to incorporate existing methodologies into their work, or to design and develop new ones, as appropriate. Those requiring further information or assistance in doing this can consult the references and additional sources provided in the bibliography, inquire from the author, or seek advice from relevant individuals and institutions indicated in ANNEX A.

4. In engaging with organisations on EvIAs, UN-HABITAT should emphasise the need for a model which allows for pragmatic tailoring of the approach depending on the specific context and needs of particular cases. The value of using participatory methodologies in the course of conducting EvIAs should also be encouraged.

5. UN-HABITAT should use this report as a source document for an expert group meeting/s bringing together key actors who have designed and/or implemented EvIA methods and procedures. The objectives of the meeting should include:

- Sharing and comparing methodologies, techniques and tools;
- Discussing gaps and possible improvements and refinements;
- Assessing policy and practice implications of EvIAs for governments;
- Working towards agreement on a set of basic, agreed methodological and analytical standards for EvIAs;
- Advising whether a consolidated ‘toolkit’ would add value to EvIA practice;
- Discussing the merits and modalities of possible EvIA training;
- Formulating recommendations for a way forward for UN-HABITAT.

Drafts of this report were sent to a number of experts and practitioners at various stages of this project for review and comment. A pre-final version was also presented at the ‘International Resettlement Conference: Economics, Social Justice and Ethics in Development-Caused Involuntary Migration’ held in The Hague from 5-7 October 2010 (as part of the 15th International Metropolis Conference). The author gratefully acknowledges all comments, suggestions and criticisms received.
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19 In each of the reports attributed to Pierre Fallavier he is indicated as the “Principal Investigator”, with credit given to contributors from Cambodia Volunteers for Community Development (CVCD), the Urban Resource Centre (URC) Cambodia, and project team members from UN-HABITAT. Where applicable the author also expresses thanks to the many families who participated in the research process.
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## ANNEX A: CONTACTS LIST

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<td><a href="mailto:Bergmanm@ebrd.com">Bergmanm@ebrd.com</a></td>
</tr>
<tr>
<td>Fouich</td>
<td>Anouk</td>
<td>Social Expert</td>
<td>Compliance and Safeguards Division, African Dev. Bank</td>
<td><a href="mailto:a.fouich@afdb.org">a.fouich@afdb.org</a></td>
</tr>
<tr>
<td>Eberlein</td>
<td>Christine</td>
<td></td>
<td>Berne Declaration, Suisse</td>
<td><a href="mailto:ceberlein@evb.ch">ceberlein@evb.ch</a></td>
</tr>
<tr>
<td>Baskin</td>
<td>Julian</td>
<td>Snr Urban Specialist</td>
<td>Cities Alliance, Washington</td>
<td><a href="mailto:jbaskin@CitiesAlliance.org">jbaskin@CitiesAlliance.org</a></td>
</tr>
</tbody>
</table>
ANNEX B: RELOCATION EFFECTS IN AN ECONOMIC EVALUATION

<table>
<thead>
<tr>
<th>1. Housing and other living costs (or benefits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing costs</td>
</tr>
<tr>
<td>- Location and rents of stock outside the area;</td>
</tr>
<tr>
<td>- City or district wide price elasticities of housing demand for distinct categories of housing</td>
</tr>
<tr>
<td>- Price elasticity of long-run supply, cost estimates for resettlement options, costs of resettlement assistance, and ideally estimates of cost savings achieved by assistance.</td>
</tr>
<tr>
<td>- Change in living costs eg price of food and services</td>
</tr>
<tr>
<td>Other Living costs</td>
</tr>
<tr>
<td>- Commuting costs: added time in travel and the shadow prices of commuting time, added pecuniary expenses</td>
</tr>
<tr>
<td>- Public utilities’ supply costs at other likely locations, or, where these are not available, estimates of loss associated with this.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Employment and earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount and nature of locationally sensitive employment and associated earnings, including proprietors’ income; availability of similar employment opportunities elsewhere at other potential resettlement sites outside the standard commuting perimeter.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Community effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Useful indicators: Ethnic and religious composition of the population; tenure and length of residence in present houses and within the present neighbourhood; income transfers within the neighbourhood.</td>
</tr>
<tr>
<td>b. Estimates of value: blind factors for preliminary sensitivity tests; empirical estimates available only through bilateral negotiations and negotiations within community groups and between community groups and the agency responsible for compensation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Other costs (or benefits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition costs</td>
</tr>
<tr>
<td>- Rental value of land and buildings.</td>
</tr>
<tr>
<td>Moving Costs</td>
</tr>
<tr>
<td>- Quantities and distance of goods to be moved, including scrap materials of demolished buildings, if applicable, means of transportation, charges for commercial services.</td>
</tr>
<tr>
<td>Administration/ institutional development costs</td>
</tr>
<tr>
<td>- The costs of staff time and expenses and any institutional development required to manage relocation and its follow up.</td>
</tr>
<tr>
<td>Environmental impact</td>
</tr>
<tr>
<td>- An environmental impact assessment should be made as part of the “push” project.</td>
</tr>
</tbody>
</table>

Source: Davidson et al: 18
## ANNEX C: HLRN HOUSING AND LAND RIGHTS MONITORING “TOOL KIT”

### HOUSING RIGHTS VIOLATION LOSS MATRIX

<table>
<thead>
<tr>
<th>Type of violation:</th>
<th>Forced eviction</th>
<th>Confiscation</th>
<th>Demolition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inheritance</td>
<td>Access denial</td>
<td>Confiscation</td>
<td>Demolition</td>
</tr>
<tr>
<td>Type of cost/loss</td>
<td>Method</td>
<td>Short-term</td>
<td>Long-term</td>
</tr>
<tr>
<td>Victoria’s Material Losses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Structure</strong></td>
<td>Replacement value, based on reliable estimates from local contractors.</td>
<td>At the time of the violation and during the following 30 days.</td>
<td>The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months (covering the combined period of one solar year).</td>
</tr>
<tr>
<td><strong>Subtotal:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Plot</strong></td>
<td>Current market value, based on estimates from real estate agents or insurance adjustors</td>
<td>At the time of the violation.</td>
<td>The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months.</td>
</tr>
<tr>
<td><strong>Subtotal:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Contents</strong></td>
<td>Replacement value of contents inventories provided by inhabitants, preferably taken before the loss.</td>
<td>At the time of the violation and during the following 30 days.</td>
<td>The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months.</td>
</tr>
<tr>
<td><strong>Subtotal:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Collateral damage</strong></td>
<td>Replacement value of assets damaged or destroyed, based on owner’s actual costs (if possible).</td>
<td>At the time of the violation and during the following 30 days.</td>
<td>The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months.</td>
</tr>
<tr>
<td><strong>Subtotal:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td>Replacement value, based on reliable estimates from local contractors, if replacement is provided by services outside the community. In cases where local inhabitants installed the original infrastructure, replacement cost would include the cost of replacement equipment and materials, plus a reasonable value estimate of donated labor.</td>
<td>At the time of the violation and during the following 30 days.</td>
<td>The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months.</td>
</tr>
<tr>
<td><strong>Subtotal:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
<td>Timeframe</td>
<td>Calculation</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Business losses</td>
<td>Actual value of losses incurred from lost revenue, lost clientel, damage or destruction of business assets, inventories, or other material cost arising from the violation.</td>
<td>At the time of the violation and during the following 30 days.</td>
<td>The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months. However, revenue and stock losses could be cumulative and continuous, affecting livelihood over a longer period, if no alternative replacements are found. Therefore you may need to make your projection over a longer period.</td>
</tr>
<tr>
<td>Subtotal:</td>
<td></td>
<td></td>
<td>Combined short-term and long-term values.</td>
</tr>
<tr>
<td>Equipment/ inventory</td>
<td>Replacement value</td>
<td>At the time of the violation and during the following 30 days.</td>
<td>The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months (covering the combined period of one solar year). However, business losses relating to equipment and inventory could be cumulative and continuous, affecting livelihood over a longer period, if no alternative replacements are found. Therefore you may need to make your projection over a longer period.</td>
</tr>
<tr>
<td>Subtotal:</td>
<td></td>
<td></td>
<td>Combined short-term and long-term values.</td>
</tr>
<tr>
<td>Prospective income</td>
<td>Previous year base, plus local inflation factor and and other mitigating circumstances.</td>
<td>At the time of the violation and during the following 30 days.</td>
<td>The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months (covering the combined period of one solar year).</td>
</tr>
<tr>
<td>Subtotal:</td>
<td></td>
<td></td>
<td>Combined short-term and long-term values.</td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
<td>Timeframe</td>
<td>Combined values</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mortgage, other debt penalties</td>
<td>Actual cost of interest on loans for land and/or property lost or damaged to the point of being unusable. If the violation renders it impossible for inhabitants to meet their debt repayment obligations, any consequent penalties accrued would be counted here.</td>
<td>At the time of the violation and during the following 30 days. The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months.</td>
<td>Combined short-term and long-term values.</td>
</tr>
<tr>
<td>Subtotal:</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Livestock</td>
<td>Current market value, based on estimates from market prices and brokers.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Subtotal:</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Land</td>
<td>Current market value, based on estimates from real estate agents or insurance adjustors.</td>
<td>The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months.</td>
<td>1</td>
</tr>
<tr>
<td>Subtotal:</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Trees/crops</td>
<td>Current market value, based on actual investments to date and any current value of standing crops based on current market prices.</td>
<td>At the time of the violation and during the following 30 days. The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months.</td>
<td>Combined short-term and long-term values.</td>
</tr>
<tr>
<td>Subtotal:</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Lost/decreased wages/income</td>
<td>Actual wages, salary or other regular or other anticipated income sacrificed as a result of the violation.</td>
<td>At the time of the violation and during the following 30 days. The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months.</td>
<td>Combined short-term and long-term values.</td>
</tr>
<tr>
<td>Subtotal:</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
<td>Time Frame</td>
<td>Combined (Short-Term and Long-Term Values)</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Interim housing</td>
<td>Actual cost of temporary housing (rent) required as a result of the violation.</td>
<td>At the time of the violation and during the following 30 days.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal:</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Bureaucratic and legal fees</td>
<td>Costs paid, or due to be paid for administrative and legal assistance, fees to bureaus or bribes exacted for services to the victim(s) in connection with the violation.</td>
<td>At the time of the violation and during the following 30 days.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal:</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Alternative housing</td>
<td>Actual cost of replacement housing (rent) required as a result of the violation.</td>
<td>At the time of the violation and during the following 30 days.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal:</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Resettlement</td>
<td>The actual costs of labor, services and materials required, such as moving, storage, preparation of resettlement site, etc.</td>
<td>At the time of the violation and during the following 30 days.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months (covering the combined period of one solar year).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal:</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Transportation costs</td>
<td>Actual cost to victims for fleeing from violence, returning to home site, additional transport costs from resettlement site to source of livelihood, community visits, etc. as in connection with, or as a result from the violation.</td>
<td>At the time of the violation and during the following 30 days.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months (covering the combined period of one solar year).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal:</td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal of victims' material losses: 19
<table>
<thead>
<tr>
<th>Victims’ Nonmaterial Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
</tr>
<tr>
<td>Living space</td>
</tr>
<tr>
<td>Reconstruction licensing</td>
</tr>
<tr>
<td>Psychological harm</td>
</tr>
<tr>
<td>Disintegration of family</td>
</tr>
<tr>
<td>Loss of community</td>
</tr>
<tr>
<td>Inheritance</td>
</tr>
<tr>
<td>Environment/ ecology</td>
</tr>
<tr>
<td>Standing/seniority</td>
</tr>
<tr>
<td>Political marginalization</td>
</tr>
<tr>
<td>Social marginalization</td>
</tr>
<tr>
<td>Further vulnerabilities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other than Victims Material Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collateral damage</td>
</tr>
<tr>
<td>Subtotal:</td>
</tr>
</tbody>
</table>

| Services and fees                 | Any costs incurred by any person or institution facing the need to procure services, advice or other intervention from a billing party. | At the time of the violation and during the following 30 days. | The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months (covering the combined period of one solar year). | |
| Subtotal:                          | 1 |

<p>| Opportunity costs                 | Business losses, reduced rent income or other deficit in revenue arising from the violation. | At the time of the violation and during the following 30 days. | The projected or actual costs following the initial 30 days after the violation and throughout the subsequent 11 months (covering the combined period of one solar year). | Combined short-term and long-term values. |
| Subtotal:                          | 1 |</p>
<table>
<thead>
<tr>
<th><strong>Police</strong></th>
<th>Actual or reasonably estimated cost of labor and materials (actual salaries paid per hour of work, and portion of supplies and equipment used) in all conduct leading up, carrying out and following up the violation. This would include a range of activities and situations, from police harassment aspects of victims to police prosecution of victimizers.</th>
<th>Actual or reasonably estimated cost of labor and materials for the period of all known and relevant activity leading up, during the violation and over the following 30 days.</th>
<th>Actual or reasonably estimated cost of labor and materials for the period of all known and relevant activity following the initial 30 days after the violation and throughout the subsequent 11 months (covering the combined period of one solar year).</th>
<th>Combined short-term and long-term values.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subtotal:</strong></td>
<td><strong>1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bulldozers</strong></td>
<td>Actual or reasonably estimated cost of use and labor to operate bulldozers and other equipment to carry out the violation. In some cases, authorities actually bill the victims for the “service,” in which case a value is already attached.</td>
<td>At the time of the violation, taking into account that the scale of the violation could include multiple violations and take place over days.</td>
<td>If the violation takes place as a operation over 30 days, then the costs would be considered over the following 11 months to provide a “longterm” calculation.</td>
<td>Combined short-term and long-term values.</td>
</tr>
<tr>
<td><strong>Subtotal:</strong></td>
<td><strong>1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lawyers</strong></td>
<td>Actual billable or reasonably estimated cost of pro bono and public sector lawyers working in the service of the authorities carrying out the violation, or in the prosecution and defense of the perpetrators.</td>
<td>Actual or reasonably estimated cost of labor and materials for the period of all known and relevant activity leading up, during the violation and over the following 30 days.</td>
<td>Actual or reasonably estimated cost of labor and materials for the period of all known and relevant activity following the initial 30 days after the violation and throughout the subsequent 11 months (covering the combined period of one solar year).</td>
<td>Combined short-term and long-term values.</td>
</tr>
<tr>
<td><strong>Subtotal:</strong></td>
<td><strong>1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Military</strong></td>
<td>Actual or reasonably estimated cost to the public of the use of army or other military personnel for its role in carrying out or responding to the violation.</td>
<td>At the time of the violation, taking into account that the scale of the violation could include multiple violations and take place over days.</td>
<td>Actual or reasonably estimated cost of labor and materials for the period of all known and relevant activity following the initial 30 days after the violation and throughout the subsequent 11 months (covering the combined period of one solar year).</td>
<td>Combined short-term and long-term values.</td>
</tr>
<tr>
<td><strong>Subtotal:</strong></td>
<td><strong>1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other forces</td>
<td>Actual or reasonably estimated cost to the public of the other than military for its role in carrying out or responding to the violation.</td>
<td>Actual or reasonably estimated cost of labor and materials for the period of all known and relevant activity leading up, during the violation and over the following 30 days.</td>
<td>Actual or reasonably estimated cost of labor and materials for the period of all known and relevant activity following the initial 30 days after the violation and throughout the subsequent 11 months (covering the combined period of one solar year).</td>
<td>Combined short-term and long-term values.</td>
</tr>
<tr>
<td>Subtotal:</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Bureaucracy and administration</td>
<td>Actual or reasonably estimated cost of labor and materials (actual salaries paid per hour of work, and portion of supplies and equipment used) in carrying out all administrative functions leading up, carrying out and immediate following up the violation. This would include a range of activities and situations, from court clerks processing eviction or demolition orders, to clerks processing or delaying building permits to census enumerators selecting inhabitants for relocation, etc.</td>
<td>Actual or reasonably estimated cost of labor and materials for the period of all known and relevant activity leading up, during the violation and over the following 30 days.</td>
<td>Actual or reasonably estimated cost of labor and materials for the period of all known and relevant activity following the initial 30 days after the violation and throughout the subsequent 11 months (covering the combined period of one solar year).</td>
<td>Combined short-term and long-term values.</td>
</tr>
<tr>
<td>Subtotal:</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total costs/losses to other than victims:</td>
<td></td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Grand total:</td>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Other than Victims Nonmaterial Costs</td>
<td>(your critical analysis narrative here)</td>
<td>(your critical analysis narrative here)</td>
<td>(your critical analysis narrative here)</td>
<td>(your critical analysis narrative here)</td>
</tr>
</tbody>
</table>
## ANNEX D: HLRN HOUSING AND LAND RIGHTS MONITORING INVENTORY

### SCHEDULE HOUSING CONTENTS

[http://www.hlrn.org/old_hlrn/toolkit/English/explore/index.htm](http://www.hlrn.org/old_hlrn/toolkit/English/explore/index.htm)

<table>
<thead>
<tr>
<th>Room</th>
<th>Description of Item</th>
<th>Number</th>
<th>Replacement value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hallway</td>
<td>• closet with mirrored door</td>
<td>1</td>
<td>$89</td>
</tr>
<tr>
<td></td>
<td>• 4-shelf bamboo étagère</td>
<td>1</td>
<td>$26</td>
</tr>
<tr>
<td></td>
<td>• ceiling light fixture</td>
<td>1</td>
<td>$34</td>
</tr>
<tr>
<td></td>
<td>• wall coat rack with 5 hooks</td>
<td>1</td>
<td>$14</td>
</tr>
<tr>
<td></td>
<td>• straw welcome mat</td>
<td>1</td>
<td>$4</td>
</tr>
<tr>
<td></td>
<td>• mirrored doors</td>
<td>2</td>
<td>$28</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office reception</td>
<td>• sofa sectionals</td>
<td>5</td>
<td>$150</td>
</tr>
<tr>
<td></td>
<td>• sofa corner sectional</td>
<td>1</td>
<td>$34</td>
</tr>
<tr>
<td></td>
<td>• curtains</td>
<td>6</td>
<td>$50</td>
</tr>
<tr>
<td></td>
<td>• picture frames</td>
<td>3</td>
<td>$35</td>
</tr>
<tr>
<td></td>
<td>• air conditioners</td>
<td>1</td>
<td>$119</td>
</tr>
<tr>
<td></td>
<td>• blue oriental-style carpets</td>
<td>1</td>
<td>$79</td>
</tr>
<tr>
<td></td>
<td>• square glass coffee table</td>
<td>1</td>
<td>$60</td>
</tr>
<tr>
<td></td>
<td>• rectangular glass coffee table</td>
<td>1</td>
<td>$45</td>
</tr>
<tr>
<td></td>
<td>• small waste bin</td>
<td>1</td>
<td>$5</td>
</tr>
<tr>
<td></td>
<td>• TV</td>
<td>1</td>
<td>$125</td>
</tr>
<tr>
<td></td>
<td>• bamboo TV stand</td>
<td>1</td>
<td>$23</td>
</tr>
<tr>
<td></td>
<td>• ceiling light-fixture</td>
<td>2</td>
<td>$31</td>
</tr>
<tr>
<td></td>
<td>• Panasonic phone</td>
<td>1</td>
<td>$29</td>
</tr>
<tr>
<td></td>
<td>• wooden boxes</td>
<td>2</td>
<td>$2</td>
</tr>
<tr>
<td></td>
<td>• small bamboo end table</td>
<td>1</td>
<td>$19</td>
</tr>
<tr>
<td></td>
<td>• metal table lamp</td>
<td>1</td>
<td>$24</td>
</tr>
<tr>
<td>Dining room</td>
<td>• metal tray</td>
<td>1</td>
<td>$12</td>
</tr>
<tr>
<td></td>
<td>• table</td>
<td>1</td>
<td>$50</td>
</tr>
<tr>
<td></td>
<td>• chairs (with table)</td>
<td>8</td>
<td>$100</td>
</tr>
<tr>
<td></td>
<td>• alabaster vase</td>
<td>1</td>
<td>$25</td>
</tr>
<tr>
<td></td>
<td>• curtains</td>
<td>2</td>
<td>$65</td>
</tr>
<tr>
<td></td>
<td>• picture frames</td>
<td>3</td>
<td>$49</td>
</tr>
<tr>
<td></td>
<td>• ceiling light fixture</td>
<td>1</td>
<td>$35</td>
</tr>
<tr>
<td></td>
<td>• wall cabinet (2 pcs. with drawers)</td>
<td>1</td>
<td>$79</td>
</tr>
<tr>
<td></td>
<td>• green oriental-style carpet</td>
<td></td>
<td>$48</td>
</tr>
<tr>
<td></td>
<td>• assorted books &amp; magazines</td>
<td>1</td>
<td>$59</td>
</tr>
<tr>
<td>Room</td>
<td>Description of Item</td>
<td>Number</td>
<td>Replacement value</td>
</tr>
<tr>
<td>------------</td>
<td>---------------------------------------------------------</td>
<td>--------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Kitchen</td>
<td>Kitchen Appliances:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Apollo water heater</td>
<td>1</td>
<td>$90</td>
</tr>
<tr>
<td></td>
<td>• Prima cooking range</td>
<td>1</td>
<td>$112</td>
</tr>
<tr>
<td></td>
<td>• Philips Tropical refrigerator</td>
<td>1</td>
<td>$99</td>
</tr>
<tr>
<td>Other</td>
<td>Other contents:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ceiling light fixture</td>
<td>1</td>
<td>$27</td>
</tr>
<tr>
<td></td>
<td>• 3-drawer cabinet</td>
<td>1</td>
<td>$49</td>
</tr>
<tr>
<td></td>
<td>• 2-drawer cabinet</td>
<td>1</td>
<td>$33</td>
</tr>
<tr>
<td></td>
<td>• 3-door wall cabinet</td>
<td>1</td>
<td>$55</td>
</tr>
<tr>
<td></td>
<td>• plastic garbage can with lid</td>
<td>1</td>
<td>$13</td>
</tr>
<tr>
<td></td>
<td>• smoked glass plates</td>
<td>5</td>
<td>$24</td>
</tr>
<tr>
<td></td>
<td>• smoked glass serving dish</td>
<td>1</td>
<td>$13</td>
</tr>
<tr>
<td></td>
<td>• hard plastic bowls</td>
<td>3</td>
<td>$10</td>
</tr>
<tr>
<td></td>
<td>• 1 frying pan</td>
<td>1</td>
<td>$24</td>
</tr>
<tr>
<td></td>
<td>• china soup dishes</td>
<td>5</td>
<td>$23</td>
</tr>
<tr>
<td></td>
<td>• china salad plates</td>
<td>7</td>
<td>$14</td>
</tr>
<tr>
<td></td>
<td>• china cups</td>
<td>6</td>
<td>$18</td>
</tr>
<tr>
<td></td>
<td>• china saucers</td>
<td>6</td>
<td>$9</td>
</tr>
<tr>
<td></td>
<td>• plastic juice pitcher</td>
<td>1</td>
<td>$8</td>
</tr>
<tr>
<td></td>
<td>• melamine soup dishes</td>
<td>6</td>
<td>$13</td>
</tr>
<tr>
<td></td>
<td>• melamine plates</td>
<td>5</td>
<td>$19</td>
</tr>
<tr>
<td></td>
<td>• painted plant pot</td>
<td>1</td>
<td>$8</td>
</tr>
<tr>
<td></td>
<td>• ceramic wall tile</td>
<td>1</td>
<td>$12</td>
</tr>
<tr>
<td></td>
<td>• Turkish coffee cups</td>
<td>6</td>
<td>$14</td>
</tr>
<tr>
<td></td>
<td>• gas lighter</td>
<td>1</td>
<td>$4</td>
</tr>
<tr>
<td></td>
<td>• broom</td>
<td>1</td>
<td>$6</td>
</tr>
<tr>
<td></td>
<td>• dustpan</td>
<td>1</td>
<td>$2</td>
</tr>
<tr>
<td></td>
<td>• mop</td>
<td>1</td>
<td>$6</td>
</tr>
<tr>
<td></td>
<td>• cooking pots with lids</td>
<td>4</td>
<td>$44</td>
</tr>
<tr>
<td></td>
<td>• porcelain sink basin</td>
<td>1</td>
<td>$90</td>
</tr>
<tr>
<td></td>
<td>• plastic colander</td>
<td>1</td>
<td>$4</td>
</tr>
<tr>
<td></td>
<td>• round plastic container with lid</td>
<td>1</td>
<td>$9</td>
</tr>
<tr>
<td></td>
<td>• plastic silverware tray</td>
<td>1</td>
<td>$4</td>
</tr>
<tr>
<td></td>
<td>• teaspoons</td>
<td>7</td>
<td>$7</td>
</tr>
<tr>
<td></td>
<td>• dinner forks</td>
<td>8</td>
<td>$8</td>
</tr>
<tr>
<td></td>
<td>• dinner knives</td>
<td>2</td>
<td>$12</td>
</tr>
<tr>
<td></td>
<td>• pastry forks</td>
<td>6</td>
<td>$6</td>
</tr>
<tr>
<td></td>
<td>• tablespoons</td>
<td>6</td>
<td>$7</td>
</tr>
<tr>
<td></td>
<td>• drinking glass</td>
<td>5</td>
<td>$7</td>
</tr>
<tr>
<td></td>
<td>• plastic towel rack with 5 hooks</td>
<td>1</td>
<td>$7</td>
</tr>
<tr>
<td></td>
<td>• glass ashtray</td>
<td>1</td>
<td>$4</td>
</tr>
<tr>
<td></td>
<td>• coffee mug</td>
<td>2</td>
<td>$2</td>
</tr>
<tr>
<td>Room</td>
<td>Description of Item</td>
<td>Number</td>
<td>Replacement value</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------</td>
<td>--------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Bathroom</td>
<td>• wall cabinet</td>
<td>1</td>
<td>$34</td>
</tr>
<tr>
<td></td>
<td>• mirror</td>
<td>1</td>
<td>$12</td>
</tr>
<tr>
<td></td>
<td>• ceiling light fixture</td>
<td>1</td>
<td>$21</td>
</tr>
<tr>
<td></td>
<td>• small light above mirror</td>
<td>1</td>
<td>$9</td>
</tr>
<tr>
<td></td>
<td>• porcelain basin</td>
<td>1</td>
<td>$90</td>
</tr>
<tr>
<td></td>
<td>• porcelain tub</td>
<td>1</td>
<td>$100</td>
</tr>
<tr>
<td></td>
<td>• porcelain toilet</td>
<td>1</td>
<td>$100</td>
</tr>
<tr>
<td></td>
<td>• porcelain toilet roll holder</td>
<td>1</td>
<td>$8</td>
</tr>
<tr>
<td></td>
<td>• shower curtain rod</td>
<td>1</td>
<td>$9</td>
</tr>
<tr>
<td></td>
<td>• shower curtain</td>
<td>1</td>
<td>$12</td>
</tr>
<tr>
<td></td>
<td>• LG water heater</td>
<td>1</td>
<td>$84</td>
</tr>
<tr>
<td></td>
<td>• plastic washbasin</td>
<td>1</td>
<td>$7</td>
</tr>
<tr>
<td></td>
<td>• metal towel rack</td>
<td>1</td>
<td>$11</td>
</tr>
<tr>
<td></td>
<td>• trash basket (bin)</td>
<td>1</td>
<td>$4</td>
</tr>
<tr>
<td></td>
<td>• toilet brush</td>
<td>1</td>
<td>$8</td>
</tr>
<tr>
<td>Bedroom 1</td>
<td>• double bed with mattress</td>
<td>1</td>
<td>$158</td>
</tr>
<tr>
<td></td>
<td>• side tables</td>
<td>2</td>
<td>$65</td>
</tr>
<tr>
<td></td>
<td>• chest of (7) drawers</td>
<td>1</td>
<td>$81</td>
</tr>
<tr>
<td></td>
<td>• low table on wheels</td>
<td>1</td>
<td>$14</td>
</tr>
<tr>
<td></td>
<td>• table cloth</td>
<td>1</td>
<td>$11</td>
</tr>
<tr>
<td></td>
<td>• closet with 2 doors</td>
<td>1</td>
<td>$79</td>
</tr>
<tr>
<td></td>
<td>• ceiling light fixture</td>
<td>1</td>
<td>$46</td>
</tr>
<tr>
<td></td>
<td>• curtains</td>
<td>2</td>
<td>$65</td>
</tr>
<tr>
<td>Bedroom 2</td>
<td>• twin beds</td>
<td>2</td>
<td>$117</td>
</tr>
<tr>
<td></td>
<td>• side tables</td>
<td>3</td>
<td>$66</td>
</tr>
<tr>
<td></td>
<td>• built-in cabinet (niche)</td>
<td>1</td>
<td>$203</td>
</tr>
<tr>
<td></td>
<td>• wall mirror</td>
<td>1</td>
<td>$26</td>
</tr>
<tr>
<td></td>
<td>• desk with 2 drawers</td>
<td>1</td>
<td>$72</td>
</tr>
<tr>
<td></td>
<td>• chest of (7) drawers</td>
<td>1</td>
<td>$111</td>
</tr>
<tr>
<td></td>
<td>• curtain</td>
<td>2</td>
<td>$35</td>
</tr>
<tr>
<td></td>
<td>• ceiling light fixture</td>
<td>1</td>
<td>$33</td>
</tr>
<tr>
<td></td>
<td>• small waste bins</td>
<td>2</td>
<td>$9</td>
</tr>
<tr>
<td></td>
<td>• throw pillows</td>
<td>2</td>
<td>$12</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>$4,175</td>
</tr>
</tbody>
</table>

Signed by the tenant(s) ...........................................

Date: 15 October 2004
ANNEX E: ENTITLEMENT MATRIX

As discussed in Chapter 1, the Project has identified three Project-Affected groups:

a. Those affected by exploration-phase seismic work;

b. The resettlement-affected communities (i.e. those physically resettled and the host villages—Tanah Merah, Saengga and Onar);

c. People impacted generally by land acquisition (primarily the three clans Sowai, Wayuri and Simuna), and

d. 

Compensation for each of these groups has been dealt with in different ways in light of the timing of the losses incurred by each of the groups. Project-Affected People who were temporarily affected by seismic operations were compensated in the manner described in Section 4.4.1 below. The main groups of PAPs are the villagers resettled from Tanah Merah, the host communities of Saengga and Onar, and the three clans, compensated as set out in Section 4.4.2. In addition, as described in Section 4.4.3, the Project commits to on-going monitoring and assessing occurrence of resettlement-related impacts. Table 4.1 presents an entitlement matrix that identifies the losses incurred by each group, and the way in which the Project has provided compensation.

<table>
<thead>
<tr>
<th>Type of Loss</th>
<th>Entitlement</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Holders of Hak Ulayat</td>
<td>Community Use</td>
</tr>
<tr>
<td>Victims’ Material Losses</td>
<td>Sowai, Wayuri and Simuna clans with recognized adat/hak ulayat rights to affected resources</td>
<td>Project-affected communities including communities affected by exploration phase seismic work, resettlement-affected communities and communities and commercial enterprises potentially affected by marine safety exclusion zones</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A. LAND

<table>
<thead>
<tr>
<th>Loss of settlement land</th>
<th>Negotiated cash and in-kind compensation package for landselling clans based on clan rights and land boundaries agreed between clans and surveyed in March 1999; cash payment distributed to clan leaders</th>
<th>Replacement land for settlement including community infrastructure and utilities (Refer Appendix 8.1–8.3 for details pertaining to resettlement villages of Tanah Merah Baru and Onar Baru)</th>
<th>500m2 house plot / household in Tanah Merah Baru and Onar Baru replacement village (AP’s choice). Project to support and cover costs for applications for land title for plots (in name of husband and wife) Preparation of empty house plots for future village expansion in Tanah Merah Baru</th>
<th>Total replacement settlement area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• 100 ha for Tanah Merah Baru</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• 6 ha for Onar Baru</td>
</tr>
<tr>
<td>Type of Loss</td>
<td>Entitlement</td>
<td>Community Use</td>
<td>Individual households</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>---------------</td>
<td>-----------------------</td>
<td></td>
</tr>
<tr>
<td>Loss of forest land</td>
<td>Holders of Hak Ulayat</td>
<td>Negotiated cash and in-kind compensation package for landselling clans based on clan rights and land boundaries agreed between clans and surveyed in March 1999; cash payment distributed to clan leaders. In-kind payment included a development foundation with Project endowment of US$ 2 million.</td>
<td>Access to replacement forest land through self-initiated negotiation with Simuna clan (Tanah Merah Baru) and Agofa clan (Onar Baru)</td>
<td></td>
</tr>
</tbody>
</table>

B. COASTAL AND MARINE RESOURCES

<table>
<thead>
<tr>
<th>Marine resources affected by establishment and enforcement of marine safety exclusion zone for LNG site and associated facilities, i.e., jetty</th>
<th>Development foundation with Project endowment fund of US$2 million to generate revenue stream for three landselling clans</th>
<th>Facilitate access to alternative fishing grounds through provision of boats as described in Section 9.3.2, Fisheries Access and Development Program</th>
<th>Facilitate restoration of fisheries-based livelihood activities through the Fisheries Access and Development Program described in Section 9.3.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine resources potentially affected by intensification of use (from resettlers)</td>
<td>Mitigate potential intensification by facilitating clans’ access to alternative marine resources through provision of boats. Refer to Fisheries Access and Development Program described in Section 9.3.2</td>
<td>Mitigate potential intensification by facilitating resettled households’ access to alternative marine resources by provision of motors, etc. Refer to Fisheries Access and Development Program described in Section 9.3.2</td>
<td></td>
</tr>
<tr>
<td>Marine fishing grounds affected by restriction of use (for sub-sea pipelines, utilities, platforms)</td>
<td>Analysis demonstrates that current development plans will not affect artisanal and commercial fisheries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of Loss</td>
<td>Entitlement</td>
<td>Comment</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-------------</td>
<td>-------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>C. HOUSES AND INDIVIDUALLY OWNED ATTACHMENTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of house structures</td>
<td></td>
<td>Replacement house constructed by project at AP’s preferred replacement village.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistance with packing and physical relocation of household goods</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistance with demobilisation of all structures and subsequent transport to AP’s preferred replacement village</td>
<td></td>
</tr>
<tr>
<td>Loss of additional infrastructure (fences, animal pens, kiosks, etc)</td>
<td></td>
<td>Assistance with demobilisation of all structures and subsequent transport to AP’s preferred replacement village</td>
<td></td>
</tr>
<tr>
<td>Loss of wells &amp; bores</td>
<td></td>
<td>No privately owned wells and bores</td>
<td></td>
</tr>
<tr>
<td><strong>D. GARDENS, PLANTS AND CROPS, FRUIT TREES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of cultivated tree crops (fruit trees, estate crops)</td>
<td>Not applicable</td>
<td>Cash compensation to owners of trees on a per tree basis.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rates in accordance with the Decree of Bupati of Manokwari, No. 213, 1997</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Provision of replacement asset (grafted fruit trees) to resettled households to facilitate restoration of production</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plants not on the inventory list will not be eligible for compensation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>An inventory of all productive crops (including fruit trees) was conducted jointly by the project and Tanah Merah residents in March 1999.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agreement pertaining to provision of compensation specifies that trees planted after the inventory will not be eligible for compensation.</td>
<td></td>
</tr>
</tbody>
</table>

1 Detailed records of the measurement and inventories of crops and trees in Tanah Merah are retained by the Project.
<table>
<thead>
<tr>
<th>Type of Loss</th>
<th>Holders of Hak Ulayat</th>
<th>Community Use</th>
<th>Individual households</th>
<th>Comment</th>
</tr>
</thead>
</table>
| Loss of sago      | Negotiated lump sum cash compensation (IDR75 million) | Agreement by project to provide communities with access to sago areas lying to east of plant  
Path around LNG terminal site to connect Tanah Merah to sago stands (to be constructed by project)  
Project supply of boats (one per clan) to enable marine access around LNG jetty to sago stands.  
Access to sago proximate to resettlement sites through own negotiation with Simuna clan (Tanah Merah Baru) and Agofa clan (Onar Baru)  
Agricultural diversification programs to reduce reliance on sago – refer to Section 9.3.1 | Not applicable        | Original lump sum compensation defined in Minutes of Agreement dated 26 May 1999.  
Agreement for access to sago area defined in 8 August 2002 Agreement  
Commitment for construction of access path bypassing the LNG site to allow access to sago stands as described in 8 August 2002 Agreement Other commitments as defined by this RAP. |
<p>| Loss of garden plots | Development of house garden and agroforestry plots in resettlement sites as described in Section 9.3.1 | Analysis demonstrates only usufructuary use of garden plots; beyond initial clearing, no development of garden plots |</p>
<table>
<thead>
<tr>
<th>Type of Loss</th>
<th>Entitlement</th>
<th>Individual households</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of forest plots</td>
<td>Holders of Hak Ulayat</td>
<td>Access to replacement forest land through self-initiated negotiation with Simuna clan (Tanah Merah Baru) and Agofa clan (Onar Baru)</td>
<td>Analysis demonstrates only usufructuary use of forest plots with reversion to clan based communal ownership after cultivation; some plots planted to fruit trees implying extended usufructuary use; compensation provided for fruit trees as described above</td>
</tr>
<tr>
<td>Loss of field and vegetable crops</td>
<td>Not applicable</td>
<td>As for individual households</td>
<td>Plants not on the inventory list will not be eligible for compensation; An inventory of all productive plants (including crops) was conducted jointly by the project and Tanah Merah residents in March 1999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cash compensation to owners of crops on a per plant basis</td>
<td>Entitlements are defined in “Minutes of Payment of Compensation for Vegetation of 22 July 1999, with minor addition of 24 July 1999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rates for medium and large crops in accordance with the Decree of the Bupati of Manokwari, No. 213, 1997</td>
<td>The Minutes identify eligible owners of plants (individuals, a church, village and hamlet entities)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rates for plants categorized as ‘small’ to be one-third Bupati Decree rates for ‘medium’ plants</td>
<td>Agreement pertaining to provision of compensation specifies that crops planted after the inventory will not be eligible for compensation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Provision of replacement asset (crop and vegetable seed) to resettled households to facilitate restoration of production</td>
<td></td>
</tr>
<tr>
<td>Type of Loss</td>
<td>Entitlement</td>
<td>Comment</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Loss of cultivated forest species</td>
<td>Project will provide access to or compensation for <em>Agathis spp.</em> stands based upon operational and safety requirements of the LNG facility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of forest</td>
<td>Hak Ulayat payment for trees felled for construction of Tanah Merah Baru and LNG site. Compensation rates based on Governorial decree and forest inventory. Access to replacement forest land through self-initiated negotiation with Simuna clan (Tanah Merah Baru) and Agofa clan (Onar Baru)</td>
<td>Access to replacement forest land through self-initiated negotiation with Simuna clan (Tanah Merah Baru) and Agofa clan (Onar Baru)</td>
<td></td>
</tr>
<tr>
<td>Loss of access to non-timber forest products &amp; hunting grounds</td>
<td>Access to replacement forest land through own negotiation with Simuna clan (Tanah Merah Baru) and Agofa clan (Onar Baru)</td>
<td>Access to replacement forest land through own negotiation with Simuna clan (Tanah Merah Baru) and Agofa clan (Onar Baru)</td>
<td></td>
</tr>
<tr>
<td>F. COMMUNITY FACILITIES AND INFRASTRUCTURE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of meeting hall</td>
<td>Project provision of meeting hall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of primary school</td>
<td>Project provision of kindergarten and primary school for 6 grades; provision of teacher housing</td>
<td>Project also provided lower secondary school and dormitory</td>
<td></td>
</tr>
<tr>
<td>Loss of sporting facilities (volley ball, soccer)</td>
<td>Project provision of volleyball courts (3x), football field (1x) and basketball court (1x at high school)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of places of worship</td>
<td>Project provision of one mosque, one Catholic church and one Protestant church in Tanah Merah Baru</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of Loss</td>
<td>Entitlement</td>
<td>Comment</td>
<td></td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| Loss of wells, bores         | Project provision of centralised bore, pump and water storage facilities for replacement villages.  
                             | Project provision of reticulated water supply to all replacement houses.  
                             | Project recruitment and provision of a Village Facilities Supervisor for 18 months following relocation to oversee operation of water systems and develop village capacity to manage and operate system.  
                             | Training and capacitybuilding to village management and selected villagers for management, operations (maintenance, cost recovery) and repair of the water supply system.  
                             | Reticulated water supply connection to each replacement house.  
                             | Project provision of health and hygiene training to women APs.           |
|                              | Holder of Hak Ulayat                                                         | Community Use                                                           | Individual households                                                                 |
| G. CULTURAL SITES            | Development of Sacred Sites Agreement allowing for relocation of key sacred sites (Sowai clan)  
<pre><code>                          | Protection of Simuna and Agofa clan sacred sites on resettlement sites |                                                                                       |
</code></pre>
<p>| Loss of access to sacred sites | Development of Cemeteries Access and Maintenance Agreement providing access on important religious days |                                                                                       |
| Loss of access to cemetery   |                                                                              |                                                                         |                                                                                        |</p>
<table>
<thead>
<tr>
<th>Type of Loss</th>
<th>Entitlement</th>
<th>Comment</th>
</tr>
</thead>
</table>
| Loss of subsistence/ income from coastal resources & fisheries              | Provision of boat and outboard engine (one per clan) to facilitate access to more distant resources | For households relocating from Tanah Merah:  
Provision of transitional food package for one year following relocation allowing garden establishment and production  
Agricultural restoration program (house garden and agroforestry systems) to promote restoration and intensification of agriculture.  
Refer Section 9.2.2 Access to replacement forest land through own negotiation with Simuna clan (Tanah Merah Baru) and Agofa clan (Onar Baru) |
| Loss of subsistence/ income from agriculture                                 | Provision of 15HP outboard motors to all households owning or acquiring a boat |                                                                                                                                                                                                         |
| Loss of subsistence/ income from forest resources                           | For households relocating from Tanah Merah:  
Provision of transitional food package for one year following relocation allowing garden establishment and production  
Access to replacement forest land through own negotiation with Simuna clan (Tanah Merah Baru) and Agofa clan (Onar Baru) |                                                                                                                                                                                                         |
| Loss of subsistence/ income from forest resources during relocation         | Households provided with meals during relocation                              |                                                                                                                                                                                                         |
## ANNEX F: IMPOVERISHMENT RISK, ASSETS/RESOURCES FOREGONE AND RESTORATION AND DEVELOPMENT STRATEGIES FOR TANAH MERAH HOUSEHOLDS MOVING TO TANAH MERAH BARU

<table>
<thead>
<tr>
<th>Risk Type/ Intensity</th>
<th>Foregone Assets/ Resources</th>
<th>Restoration/Development Package</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risk Assessment: High</strong></td>
<td><strong>68 houses</strong></td>
<td><strong>101 new houses with land certificates</strong></td>
</tr>
</tbody>
</table>

- Reduced access to land adjacent to village as a result of village expansion through either splitting of existing households or residents returning from outside the village
- 54 additional house plots for expansion
- Two wells, one spring, and tap from the Calmarine Camp
- Reticulated clean water system providing water to each house
- Meeting hall
- Replace community building
- Addition of village office
- Elementary school
- Replace elementary school
- Addition of kindergarten
- Addition of junior high school and dormitory
- Headmasters’/teachers’ quarters
- Housing facilities for teachers
- Places of worship (two churches and one mosque)
- Replace places of worship
- Addition of houses for the Imam, Pastor and Priest
- Christian and Muslim cemeteries
- Provision of cemetery areas in new village
- Fencing of cemeteries in Tanah Merah and agreement for ongoing maintenance during plant construction and operations, as well as for provision of periodic visitation rights for Tanah Merah Baru and Onar Baru households
- Possible future relocation of cemeteries depending on requirement to expand LNG plant
- Sacred sites
- Re-design of Plant Dock to avoid disrupting the Sowai Batu Kumapa (sacred sites)
- Protection of other sacred sites to extent allowed by requirements for development of LNG plant
- Relocation of sacred sites where necessary
- Renovation and protection of sacred site in Tanah Merah Baru
<table>
<thead>
<tr>
<th>Risk Type/ Intensity</th>
<th>Foregone Assets/ Resources</th>
<th>Restoration/Development Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volleyball courts (2x)/soccer field</td>
<td>• Replacement and addition of sporting facilities (one soccer field, one basketball court, and three volleyball courts)</td>
<td></td>
</tr>
<tr>
<td>One dirt road system</td>
<td>• Compacted gravel roads throughout new village</td>
<td></td>
</tr>
</tbody>
</table>
| Beach access to the Bay at high tide | • Jetty and boat dock on the Saengga river providing 24-hour access to the Bay  
  • Two boat landings providing high tide access to the Bay |

Additional assets provided:
• House for village babinsa (security official)  
• Village head visitor’s residence  
• Cooperative office and gallery  
• Health clinic  
• Market shelter  
• Solar and electrical power generation and distribution system  
• Night street lights and dock lights  
• Sewage, drainage and waste management facilities  
• Prepared lots for future post office/bank/phone booth; teachers’ housing; customary building

2. Landlessness and Loss of Access to Natural Resources  
Access to Natural Resources and Income-Generating Activities  
Natural Resource Use-Based Income Restoration

<table>
<thead>
<tr>
<th>Risk Assessment: Moderate</th>
</tr>
</thead>
</table>
| • Access and use of existing gardens including area required for rotation of gardens in swidden agriculture  
  • Access, ownership and development of gardens in new location |  
|  
| • Payment for productive trees cultivated on land released to the Tangguh Project (completed in 1999)  
  • Compensation for sago on land released to Tangguh Project (completed in 1999)  
  • Replacement gardens (~0.2 ha) on new village land  
  • Technical and material assistance supporting establishment of agroforestry systems in Tanah Merah Baru and on lands to the east of the LNG plant  
  • Facilitation of overland access to land resources (agriculture, forest, sago swamp) east of the LNG plant  
  • Facilitation of adat negotiations to ensure Tanah Merah Baru households have access and use rights to Simuna forests south of new village |
<table>
<thead>
<tr>
<th>Risk Type/ Intensity</th>
<th>Foregone Assets/ Resources</th>
<th>Restoration/Development Package</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Loss of access to shoreline marine resources and artisanal fishing grounds by development of LNG plant and imposition of marine safety exclusion zone</td>
<td>• Support for improved boats allowing fishermen to bypass marine safety exclusion zone and access other fishing grounds in the Bay beyond the area in front of Tanah Merah Baru</td>
</tr>
<tr>
<td></td>
<td>• Fishing grounds in front of Tanah Merah Baru overlap with current fishing grounds of Saengga</td>
<td>• Development of overland access to areas east of the LNG plant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Facilitation of adat negotiations to ensure Tanah Merah Baru households have access and use rights to Simuna fishing grounds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Artisanal fisheries development program to increase and diversify marine produce and promote value-adding initiatives</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Facilitation of entry of commercial marine produce buyers (especially prawn buyers) to the resettlement-affected communities, including buyers willing to invest in processing and storage facilities</td>
</tr>
</tbody>
</table>

3. Joblessness

**Risk Assessment:** Short term: Low Long term: High

- Limited pre-Project employment

**Employment-Related Income Restoration**

- Skills training and employment in village reconstruction, LNG plant construction, and plant operations
- Vocational training

- Competition from influx (migrant) population

4. Marginalization or ‘Downward Mobility’

**Risk Assessment:** Moderate

- Business assets (7 kiosks/ businesses)

**Business-related Income Restoration**

- Market shelter
- Cooperative office
- Savings/Loan program promoting improved money management
- Small enterprise development programs

- Competition from influx (migrant) population

5. Risk of Increased Morbidity

**Risk Assessment:** Moderate

- One health outpost (*posyandu*)

**Health Support**

- Medical clinic to be shared with Saengga
- Two multi-function health posts (*posyandu*)
- Housing for doctor and nurses
- Clean water, sewage, drainage and waste management system
- Benefit from Bay-wide health program implemented by Project
- Health practices mandated at Project construction sites
<table>
<thead>
<tr>
<th>Risk Type/ Intensity</th>
<th>Foregone Assets/ Resources</th>
<th>Restoration/Development Package</th>
</tr>
</thead>
</table>
| Risk of migrant workforce introducing new disease | • Basic immunity of resettlement-affected communities due to coastal dwelling and regular contact with outside people  
• Policies and procedures for workforce management and recruitment limiting contact between workforce and local population  
• Health programs for Project workforce  
• Community health programs including malaria prevention, HIV/AIDS awareness and prevention, TB control, mother and child health, water and sanitation and improved health service delivery  
• Mosquito control programs around construction camps and work areas to reduce risk of outbreaks of mosquito-borne diseases (malaria, dengue) | |
| 6. Risk of Food Insecurity | Food Production Resources | Food Production Restoration |
| Risk Assessment: Moderate | Loss of standing crop at relocation and temporary loss of access to productive gardens (until new gardens established in new sites) | • Provision of weekly and monthly food packages for each household throughout the 12-month period following relocation  
• Technical and material support for the establishment and sustainable cultivation of vegetable and field crop gardens | |
| | Loss of perennial crop harvest and temporary loss of access to productive gardens (until replaced) | • Provision of weekly and monthly food packages for each household throughout the 12-month period following relocation  
• Technical and material support for the establishment and sustainable cultivation of vegetable and field crop gardens | |
| 7. Risk of Community Disarticulation | Social Assets | Social Restoration |
| Risk Assessment: Moderate | Disruption and/or loss of established social systems and networks | • Establishment of and capacity-building for the Tanah Merah Resettlement Committee  
• Village participation in new village design  
• Village participation in the construction of new village and homes  
• Support ceremonies for move from Tanah Merah and arrival in new locations  
• Provide community development training, capacity-building, and the opportunity for community participation in all development activities |
<table>
<thead>
<tr>
<th>Risk Type/ Intensity</th>
<th>Foregone Assets/ Resources</th>
<th>Restoration/Development Package</th>
</tr>
</thead>
</table>
|                      | Inter-tribal jealousy and conflict regarding distribution of Project benefits             | • Outreach promoting Bay-wide awareness and understanding of rationale and content of Project Resettlement Program  
• Project workforce recruitment and management policy and procedure preempting in-migration to bay  
• Outreach promoting Bay-wide awareness of potential disruptive effects of influx (migrant) population and promoting community and government management of these issues (refer to Project Indigenous People’s Development Plan) |
### ANNEX G: QUALITATIVE INDICATORS OF URBAN POVERTY IN PHNOM PENH

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>QUALITATIVE INDICATOR OF LOCAL DEVELOPMENT USED FOR THE PME – DIFFERENTIATED BY GENDER WHEN APPROPRIATE</th>
<th>RELATION TO PROJECT OBJECTIVES, AND TO UNCHS MISSION – NUMBERS IN PARENTHESES REFER TO THE PARAGRAPH # OF THE HABITAT AGENDA</th>
</tr>
</thead>
</table>
| A. Background data | A1. Administrative and demographic data  
A2. Physical characteristics of settlement  
A3. History of settlement’s creation & development | | |
| B. Organization, participation and sense of community | B1. Organization of people’s participation  
B2. Representation of minority groups  
B3. Social cohesion  
B4. Weight of corruption | 3. Strengthening governance by: promoting decentralization and strengthening local authorities (180), encouraging and supporting participation and civic engagement (182), and ensuring transparent, accountable and efficient use of public resources (45a)  
Integrating the poorest by: providing equal opportunities for a healthy and safe life (42), promoting social integration and support of disadvantaged groups (117 & 96b), and supporting gender equality in human settlements development (46) | |
| C. Socioeconomic development | C1. Employment patterns  
C2. Income generation and expenses  
C3. Access to financial services; indebtedness  
C4. Health problems, access to care, cost, financing  
C5. Education levels, cost, barriers  
C6. Physical safety and criminality | 2. Enhancing income generation, especially for women by: strengthening small and micro-enterprises, particularly those developed by women (160b), encouraging public–private sector partnerships, and stimulating productive employment opportunities (158b & 118a) | |
| D. Housing | D1. Housing types, household equipment, cost, quality, financing  
D2. Security of tenure, threat of eviction  
D3. Housing for the poorest | 1. Improving access to basic services by: providing security of tenure (40b), promoting the right to adequate housing (39 & 61), providing equal access to land (40b), promoting equal access to credit (48e), promoting access to basic services (40c). | |
| E. Infrastructure | E1. Water supply, access and affordability  
E2. Electricity  
E3. Drainage and sewerage  
E4. Sanitation and health | 1. Improving access to basic services by: managing supply and demand for water in an effective manner (141c) | |
| F. Transportation | F1. Transport availability  
F2. Usage Pattern  
F3. Road access | Promoting effective and environmentally sound transportation systems (141c) | |
| G. Environmental management | G1. Air and water quality  
G2. Solid waste management  
G3. Disaster risk and management  
G4. Green spaces | Reducing urban pollution (43l), preventing disasters and rebuilding settlements (43z), supporting mechanisms to prepare & implement local environmental plans and local Agenda 21 initiatives (137i) | |

Sources: Fallavier, 1999; United Nations Centre for Human Settlements, 1999
### ANNEX H: PME ANALYTICAL MATRIX TO MEASURE SUCCESS IN REACHING UPRS OBJECTIVES LEVEL OF IMPACT ANALYSIS (AS MEASURED BY PME INDICATORS AND ACTIVITIES)

<table>
<thead>
<tr>
<th>PROJECT OBJECTIVES</th>
<th>MICRO-LEVEL OBJECTIVES: IN SETTLEMENTS OR COMMUNITIES</th>
<th>MACRO-LEVEL OBJECTIVES: IN TERMS OF URBAN POVERTY REDUCTION STRATEGY</th>
</tr>
</thead>
</table>
| 1. Improve access to basic services | - Affordable land secured in suitable locations (indicators D1 to D3, E1 to E4, C1 to C6)  
- Physical infrastructure developed with water supply, drainage, roads, sanitation, electricity, transport, solid waste collection (indicators E1 to E4, F1 to F3)  
- Social services developed with affordable housing, education, health care and family planning (indicators D1 to D3, C1 to C6)  
- Disaster management (fire/floods) improved (indicators E1 to E4, G3) | - Targeted communities involved in the organization and prioritization of goods and services delivery through the community action planning process: 25% at the end of the first year, 60% at the end of the second year and 100% by the end of the Project (as demonstrated by the production of Community Action Plans) (indicators B1 to B4)  
- Improved coverage and targeting demonstrated by measurable impacts on the poorest and most vulnerable groups (indicators B2, B4, D2, D3) |
| 2. Enhance income generation especially for women | - Provision of basic education and vocational training, credit and saving schemes, and industrial employment promoted (indicator C1 to C6)  
- Dissemination of marketing information facilitated (indicators C1 to C3)  
- Space for small businesses created (indicators C1 to C3) | - Improvements in economic conditions demonstrated during the third year by a reduction in indebtedness to moneylenders and an expanded access to savings and credit programs (indicators C3)  
- Increased local employment through involvement in community-contracted settlement improvement program, and expanded vocational training associated with increase in job opportunities (indicators C1, C2, C5) |
| 3. Strengthen local governance | - Community organization and leadership improved (indicators B1 to B4)  
- Community Development Management Committees developed (indicators B1, B2)  
- Land and housing policies to secure tenure for the urban poor drafted (indicators D2, D3)  
- Procedures for government services simplified - see institutional analysis (Wakely, 2001)  
- Corruption reduced (see Wakely, 2001) | - Strengthened institutional linkages between MPP and civil society through the creation of the UPRU at the Municipality and of one Community Relations Services (CRS) in each of the seven Khans, and the creation of Community Action Plans, overseen by CDMCs in each community where projects will be undertaken (involvement of different actors in PME)  
- Quality information regarding project monitoring and impact assessment stored in the UPRU and disseminated to the concerned communities, NGOs, Khan and Sangkat offices (use of information networking system)  
- A strengthened national capacity to design and implement urban poverty reduction policies (capacity building element of the PME) |

Sources: Slingsby, 2000; Yap, 1999
The practice of forcibly evicting people from their homes and settlements is a growing global phenomenon and represents a crude violation of one of the most elementary principles of the right to adequate housing as defined in the Habitat Agenda and international instruments. This report is the first research of its kind; it maps out existing eviction impact assessment methodologies globally. While many good practices exist in localized situations, and while some tools have been appropriated to suit the specific needs and contexts, this is the first time such practices been pulled together into a single report. The report is an important step towards understanding the tools and approaches that are required to create a solid evidence base of the actual and potential losses of forced evictions and thus promoting viable alternative policies and approaches.