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Colombia, Peru & Mexico Cost & Benef t Analysis 3/4

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IN URBAN AREAS



## Contents

Introduction

- 1 Case studies and basic research method
- 2 The why and how of possible research
- 3 On concepts, notions and def nitions used in the research
- 3.1 3.2
- 3.3 Conditioning factors in understanding resettlement impacts and the evaluative

#### Major results and conclusions from research on costs and benef ts

cases in LAC.

In earlier stages of our research on urban resettlement under conditions of climate variability and change, a

approaches to decision making and implementation and a study of decision making and implementation in cases of resettlement in three Latin American countries

## 1. Case studies and basic research method

In previous regional Project reports it has been pointed out that a varied approach was employed in the selection of resettlement sites for analysis in each country.

the State of Yucatan, including two nearby rural communities affected by the same hazard event and resettled contemporaneously. In Colombia seven sites were considered, with varied implementation dates, all in the same city of Manizales. And, in Peru, one principle site was studied in the city of Iquitos with subsidiary information gleaned from a second site in Cuzco. This varied number of sites and locations was intentional and led to different depth and spread of research questions and methods.

Time available for research was critical in determining the depth of analysis that was possible. In the case of

country was available for designing and implementing the research method, analysing results and writing reports. Clearly this only allows for an indicative approach and results. This does not however make the results invalid. The value of results from the LAC region may be found in the diversity of sites studied and the comparative issues that arise. It is also due to the different approaches used to gather information and

and their differences, site to site, are based on the results gained through WP 2 at the two rural sites of El Escondido and Tigre Grande, as well as Campestre Flamboyanes in Progreso and the Celestun-FONDEN and Celestun-Charcas sites. This was complemented the different ways project implementers and those analyzing the implementation process conclude as

#### term results.

In Colombia, WP 2 results on decision making and implementation are reprocessed for the seven sites studied in the city of Manizales (Barrio Holandes, Yarumales, Barrio Paraiso, La Playita, Samaria, San

relationship to implementation processes were derived. This information is complemented with interviews with key housing authorities in the city and the reprocessing of a comparative study undertaken on costs and

Chardon from the National University. This latter study

in the Colombia research as a whole, on an outcome and causal level included: insitutional factors and

In the case of Peru, the New Belen resettlement

elsewhere, this scheme is large scale and will, when completed, have involved the movement of some 2600 families or 16000 persons. The size of the Project as well as the large number of interest groups involved

The major purpose of the research was to provide a series of results that can contribute to decision makers and implementers, population and civil society, NGOs and others, changing the dominant mind sets and practices with regard to resettlement. This is critical when we are often faced with resettlement and such as lack of adequate architectural and engineering provisions, lack of available land, lack of participatory processes etc, to delve deeper into the structural or non structural causes of these

model developed by Blaikie et al Blaikie et al, 1996) moves from unsafe conditions to dynamic pressures and root causes, here we propose the same. It is given a particular economic, social and political

practice.

### 3. On concepts, notions and def nitions used in the research

## 3.1 On "risk analysis" or "cost-benef t" analysis of resettlement.

Project description to depict the goals of the third stage of

#### development.

Firstly, they are not used to cover processes undertaken prior to the decision to implement a resettlement process. That is to say they are not applied in the sense of analysis by government or others that provided a rationale for the undertaking of a resettlement project. This is of course a legitimate use of such notions and processes which are in fact undertaken in many cases of resettlement and relocation. In the cases studied, only in the lower Belen resettlement process was it possible

equation was negative with the New Belen scheme less so than in the case of the suspended Sustainable Belen Project (see Peru national report). Peruvian law is

analysis is required in order to substantiate a resetttlement versus an on site improvement process. Risk analysis, understood as a search to measure and understand the

different hazards, is almost inevitably undertaken in some way or another prior to decision making. This may be

or on more sophisticated approaches with systematic

used as synonyms for post resettlement analysis of gains and losses, advantages and disadvantages. They refer to the outputs of resettlement, measured in the short and longer terms, and how they are perceived or measured by and disadvantages, gains and losses, or positive and

risks maintained or repeated or new risks incurred.

"Risk" is understood in a full development scenario including not only disaster risk (the probability of loss and damage with the occurence of damaging physical events) but also chronic and everyday risks that signify a loss of

population- bad health, insecurity due to social and family violence, unemployment, malnutrition etc.

or conditioners or by personal characteristics, capacities and adaptation opportunities. Following the concept used

an economic, social, cultural, psychological, political and physical perspective. A sustainable livelihood framework

costs.

qualitative terms and be either positive or negative. Analysis should permit an understanding of the balance or contrast between these and their impact on attitudes, decisions and actions in support of or against the resettlement scheme and process. Quantitative analysis pushes us towards more traditional econometric techniques couched in terms of summation processes that take into account the additional or reduced costs to the individual or to implementers in achieving different outcomes (such as mobility, mitigating or reducing disaster risk in old and new locations, housing and service provision). Qualitative measures take us along the road of intangibles and the "unmeasurable"-cultural identity, social cohesion and networks, lifestyle needs and wishes, identity with place, psychological security while more qualitative aspects are better considered under the notion of "use value".

(families, individuals, neighborhoods, which in turn may

position etc.) of resettlement through to those involved in the decision and implementation process (government at different levels, builders, planners etc.) and collateral

(NGOs, commerce, churches, service providers, etc.)

business persons near or around the new site, etc). Clearly from a humanitarian and social perspective it is the costs

that should assume a higher status although we know that decisions are taken and results forged according to the values of implementers and decision makers. Such a conclusion substantiates the need for highly participatory processes from the outset and throughout the resettlement process.

Outputs can be time related and will vary according to the time period considered, taking into account the long (10

and very short (less than a year) terms. Initial negative or positive overall and individual results may be transformed

may be turned around and vice versa. Longitudinal analysis can allow us to understand the processes at play including the role of social organization, government support mechanisms with infrastructure or employment

and the opportunity they provide for integration and employment. Unfortunately, the time frame of the present research does not allow for a longitudinal analysis, although some aspects of this are touched on in research

analysed have been in place for some time.

Outputs are also typology related. A broad categorization

related, or preventative preimpact movement, and climate change induced relocation from previously safe sites. Whether it is a resettlement (longer distance movements accompanied by recreation of life conditions and livelihood

conditions can be taken advantage of in work, service provision, social networks, cultural ties etc.) process will be important. The size of settlement or community is

resettlement occurs and the type of social structure

to economic, social, political, cultural, psychological, organizational, governance, urban planning, environmental, health, urban or regional considerations. The challenge of measuring and dimensioning intangible

category we are dealing with. Due to the time frame for this research and the range of cases involved such a

contrasts with the case of India where more concentrated and intensive research has permitted far more detail and disaggregation.

In the present research endeavour it has been possible to pursue an analysis of advantage and disadvantage, gains and losses from a principally qualitative perspective with some quantitative aspects covered. Analysis is more

stakeholders recognizing that each case analysed is a world unto itself in many ways.

settlement.

## 3.2 On interpretative models of gains and losses, explanation and outcomes.

Discussion amongst the research team both in LAC and in

implementationant tional tional tional

in decision makingeaisiatimphenstentation and settistivity or	tional	LAC	and	ing
not to cultural mores and needs come into play. Decision-				
making processes and implementation procedures				
may be subverted or downgraded in their effects due				

# 4. Major results and conclusions from research on costs and benef ts

Case studies of resettlement undertaken during the present project, and elsewhere, on physical hazard related resettlement and relocation are generally negative as to

under which they are enacted. The sui generis nature of much work in this area is clear and results are very much

conditions under which they are enacted. Despite this, many results are in common despite different on-theground processes. Here we will concentrate on providing a summary of major results as these have appeared in common and idiosyncratically in LAC case studies. A consideration will also be given to the diverse and discriminatory factors that have impinged on common outcomes wherever they may have occured.

The major factors that favor a negative balance in costs

- Compliance with legal and normative requirements as regards human security from hazards in the aftermath of disaster and which lead to concerns as to legal action against non complying public servants, leads to a bureaucratization of procedures and ignorance of wider concerns associated with resettlement, be they social, economic, environmental or cultural.
- The tendency to see resettlement as essentially a housing and service provision problem where getting people out of harm's way is the preponderant concern and the wider livelihood, development and poverty reduction needs of the population is ignored or forgotten.
- Problems of coordination and participation between relevant government sector ministries.

- A lack of coincidence between the cultural, aesthetic and functional premises of those designing resettlement schemes and the backgrounds and needs of local populations.
- The political nature of the problem and the manipulation of information and ideas among contrasting groups.
  - easy "victims" of inadequate schemes where the satisfaction of needs related to housing, land security and access to services in particular tend to override the satisfaction of wider livelihood needs (employment, incomes, health and security).
- part of decision making as such on location, housing, services etc.
- The use of post impact resettlement as political

turnover of professionals dedicated to such activity.

procedures occur and can objectively lead to a more

processes have normally taken place in circumstances where large scale disaster has not yet occured and time is on the planners' side. Moreover, budgeting

emergent or emergency process. However, where

with Lower Belen and Iquitos) both the process of resettlement and the process by which populations

gamesmanship, protection of vested interests and

is only with a consideration of the opinions of the already resettled population that a balance can be introduced in analysis. Clearly, interviews with resettled populations have shown that the balance

contemplate moving back to the original Lower Belen area. This probably means that the so-called free rider effect will increasingly operate and the strength of the anti resettlement factions will be eroded over time.

 Clearly a resettled population desires easy access to employment, services, social networks, and environmental health. However, interviews and analysis at multiple sites show that if titled housing and land is made available and services are adequate,

favorable in general, despite downfalls in the provision of other social and economic attributes. If, as in the have to be handed over to the State but can be used later for productive purposes, the incentives

even more favorable. Resilience of the population to prior conditions of environmental and social stress ameliorate their demands for a more adequate solution and over the years the resttled population make good on improvements in employment, services and overall location costs.

resettlement employment opportunities, increased

climate-related risk, this should be considered as the **last possible management option and solely contemplated for extreme cases.** Before deciding on resettlement of already exposed populations all other possible options for reducing risk should be closely considered and costed.

4. Where considered absolutely inevitable and essential, population relocation/ resettlement should never be conceived and planned as a project, with its own specific and limited disaster risk reduction goals, although these clearly should be present in the formulation of objectives. Given that the vast majority of at high risk communities are poor or very poor and it is poverty which best explains their hazardous location and the levels of risk they experience, all resettlement projects should be formulated and planned in terms of wider poverty reduction goals and associated employment, income and livelihood needs. That is to say, they should be considered from a wider sustainable development perspective and involve relevant development institutions. Schemes that judge success primarily in terms of disaster risk reduction goals are likely to fail. Poor populations will always favor access to employment, income, livelihoods and social and economic infrastructure over the singular objective of reducing disaster risk or avoiding infrequent disaster. Risk tolerance and trade-offs between everyday, chronic and disaster risk contexts will inevitably occur.

5. Population resettlement projects should not only deal with the physical components (housing, infrastructure and service provision) of habitat but should also give equal importance to the **social**, **economic and cultural needs and requirements of the affected population**. While the physical components and land and housing security and ownership are the conditions generally **most valued by the population**, the lack of, or diff culty in sustaining livelihoods, employment and social-family cohesion and networks leads to a serious risk of failure.

6. Resettlement does not have to be governed by a specif c law, although this option may be contemplated under determined national and local conditions. Rather than dictating rigid and f xed conditions and characteristics of resettlement schemes, laws or norms should clearly establish the holistic and integral nature of resettlement and the roles, types and levels of coordination and collaboration that must exist among relevant national and local government agencies. These should include land use, employment and livelihoods, housing and infrastructure, social relations and cultural concerns, amongst others. 7. **Typologies** of resettlement according to type and size of urban area and type and size of resettlement must be established and **procedures adapted to accommodate the differences**.

## On the scientif c and information base for resettlement:

1. When resettlement is judged to be unavoidable, a rigorous and objective scientif c assessment of the actual risk conditions of the population and the need for relocation must be available. This scientifc evaluation should be comprehensive and participatory. It must include not only a consideration of physical hazards (magnitude, intensity, recurrence, etc.) and the levels and types of exposure and vulnerability to these, but also the social needs of the population, the range of risk contexts they face and their overall attitudes and perceptions of risk and its different manifestations. Under many circumstances the population understands the risk it faces, have been affected by disasters in the past and are many times willing to accept determined levels of disaster risk in order to maintain ongoing livelihood and lifestyle options, thus reducing everyday as opposed to strictly disaster risk.

2. The national and local government institutions responsible for DRM should **monitor areas of high unmitigable risk** in order to avoid further urban occupation and densif cation and increased progression of risk in such areas.

3. On the institutional side, prior to a relocation the following should be **evaluated accurately** (see below for detail as to these aspects): a) the most appropriate site for the new settlement; b) the existence of a viable project for the use of vacated land; c) the

Since relocation of urban populations is most closely related to **urban land use and planning issues** and the spatial development of urban areas, it is essential that protocols be established for resettlement projects as part of existing rules and norms. These should clearly assign the responsibilities of different levels of government, private sector and civil society and the procedures for implementation. **The review and updating of existing legal frameworks relating to urban development planning and land use** is urgently required in many countries.

Many times, due to land costs and availability, it is diffcult if not impossible to procure an adequate, well located lot of urban land and resettlement takes place many times on distant and socially and economically untenable land. Although it is normally considered that a community should be moved as a whole this idea should not always dominate. Even where a single adequate piece of land is found, able to accommodate all of the resettled population, consideration should always be given to other options involving the separation or segregation of an existing community with its relocation to different parts of a city. This may more adequately serve the interest and needs of the population in terms of work, income, social relations and costs. Such division of the population, by groups of families or individually, can be fostered by schemes that allow, for example, for the purchase or rental of used housing in different parts of a city, trade-off schemes whereby a proposed resettled population could take the home of others and these take the new location offered in the relocation scheme.

Abandoned land should never be used for new housing or made available to other population groups through invasion or illegal occupation. The abandoned land should be ceded to the State on the hand-over of new, titled housing in relocation sites. Incentives and schemes for environmental and recreational uses in abandoned high-risk areas should be considered as a mechanism to prevent attempts to use it for new housing and to increase the ecosystem service provision in the urban area.

## On the settlement pattern and housing for relocated populations:

1. Plans for resettlement in urban areas should include all those services necessary for a new generation of safe and healthy urban spaces. This requires **participation and coordination of sector and territorial development institutions** in order to achieve the goal of safeguarding the physical and livelihood integrity of the population at risk. 2. Cultural diversity is the basis of **numerous lifestyles in cities.** These merit close consideration in the design of resettlement schemes in order to avoid traumatic changes in the target population. New houses should be **functional and appropriate to the geographical conditions and needs of the population, as well as being consistent with their customs**.

3. Given the diversity of climates and customs that can prevail in a country, standardization in the style, size and layout of housing for relocated populations should be avoided if what is sought is permanence of the population in the new settlement and a minimizing of the discontent that a project of this type can and often does generate. The use of local materials and techniques and the "local" design of houses has a clear rationale, and knowledge is required as to autochthonous or local styles in order to achieve improved results. It will always be far less costly economically and socially to invest in improving traditional housing construction techniques, than imposing ineff cient and degrading models with which people cannot readily identify. In order for this to occur, socially and culturally sensitive architects and builders must be employed, many from the areas where relocation is enacted.

4. The practice of granting free housing **is not sustainable in general** and must be avoided. Such

for an integrated approach to resettlement must be guaranteed from the outset.

2. Good practice with f nancing can include: the creation of a contingency reserve fund f nancing the initial actions of a resettlement process; sector-specific interventions f nanced with institutional budgets; the articulation of f nancing to housing bonds created for the various social housing programs handled by the State.

3. The economic benef ts generated by the activities on abandoned land (income, employment, production etc.) can or should be **shared with the relocated population**, thus respecting and maintaining past ties to land, ensuring an additional incentive for accepting relocation and guaranteeing employment and income for the resettled population or a part of it.

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Colombia, Peru and Mexico

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