WORKBOOK

Applying the Impoverishment Risks and Reconstruction (IRR) Model to Involuntary Resettlement in the Global Mining Sector

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Centre for Social Responsibility in Mining

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TABLE OF CONTENTS

KEY TERMS

Compensation	Payment in cash or in kind for an asset or a resource that is acquired or affected by a project at the time the asset needs to be replaced.
Displacement	Physical displacement occurs when there is loss of residence or assets resulting from project-related land acquisition and/or land use that requires affected persons to move to another location. Economic displacement occurs where there is a loss of assets, or access to assets, that leads to a loss of income sources or other means of a livelihood as a result of project-related land acquisition or land use.
Host population	People living in or around the destination sites that physically displaced persons will resettled to.
Impoverishment	Impoverishment is the state of having little or no money and few or no material possessions. It is also an act of depriving someone of food, money or rights.
Involuntary resettlement	Resettlement is considered to be involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in physical or economic displacement. This occurs in cases of (i) lawful expropriation or temporary or permanent restrictions on land use; and (ii) negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.
Livelihoods	The term livelihood refers to the full range of means that individuals, families and communities utilise to make a living, such as wage-based income, agriculture, fishing, foraging, other natural resource-based livelihoods, petty trade and bartering.
Livelihood restoration	International standards encourage developers to undertake resettlement as a sustainable development initiative, that is, an initiative that leads to an improved standard of living for project-affected people. In cases where resettlement affects the income-earning capacity of displaced families, compensation alone does not guarantee the restoration or improvement of their living standards.
Project-affected person	Any person who, as a result of the implementation of a project, loses the right to own, use, or otherwise benefit from a built structure, land (residential, agricultural or pasture), annual or perennial crops and trees, or any other fixed or moveable asset, either in full or in part, permanently or temporarily.
Relocation	Relocation is a process through which physically displaced households are assisted to move from their place of origin to an alternative place of residence. Households may receive compensation for loss of assets or may be provided with replacement land or housing at the destination site.

Replacement cost	The cost of replacing lost assets. The rate of compensation for lost assets must be calculated at full replacement cost, that is, the market value of the assets, plus transaction costs.
Resettlement	Resettlement is the comprehensive process of planning, displacement, relocation, livelihood restoration and support for social integration. Involuntary resettlement occurs without the informed consent of the displaced persons or if they give their consent without having the power to refuse resettlement.
Resettlement action plan	A resettlement action plan (RAP) is a document in which a project sponsor or other responsible entity specifies the procedures that it will follow and the actions that it will take to mitigate the adverse impacts of resettlement, compensate for losses and provide livelihood restoration support to people resettled by the project.
Risk	Risk is a probability or threat of damage, injury, liability, loss or any other negative occurrence caused by external or internal vulnerabilities, and that may be avoided through pre-emptive action.
Vulnerable groups	People who by virtue of gender, ethnicity, age, physical or mental disability, economic disadvantage, or social status may be more adversely affected by resettlement than others, and who may be limited in their ability to claim or take advantage of resettlement assistance and related development benefits.

ABOUT THIS WORKBOOK

The purpose of this workbook is to introduce the *Impoverishment Risk and Reconstruction Model for Resettling Displaced Populations* (the "IRR model") and highlight how it can be applied in the mining industry. The workbook briefly explains the context and origins of the IRR model, its inherent logic, and its application in the mining sector. This is followed by an overview of the model's eight (8) risk categories. The workbook only briefly covers risk reversal and reconstruction. The emphasis in this workbook is on understanding the types of impoverishment risks contained within the model, rather than on strategies used for the purposes of risk reversal and reconstruction. The workbook includes activities designed to prompt critical engagement with the material and/or think of illustrative examples.

Readers will:

- gain a basic understanding of the IRR model
- develop an appreciation of how the IRR applies to the mining sector
- be able to apply the IRR model to the practice of planning involuntary resettlement in mining;
- better predict impoverishment risks for different groups of people
- appreciate the need to manage impoverishment risks in project design, planning, financing and implementation.

ABOUT THE IRR

What is the IRR?

The Impoverishment Risks and Reconstruction Model for Resettling Displaced Populations (IRR model) was developed in the late 1990s, and provides a conceptual tool for identifying the intrinsic risks that cause impoverishment through involuntary displacement and resettlement. The model is derived from an extraordinary amount of accumulated empirical data captured over two decades of resettlement research, globally.[1] While the IRR model is not mining-specific, it forms a foundation of the established literature on development-induced displacement and resettlement (DIDR).

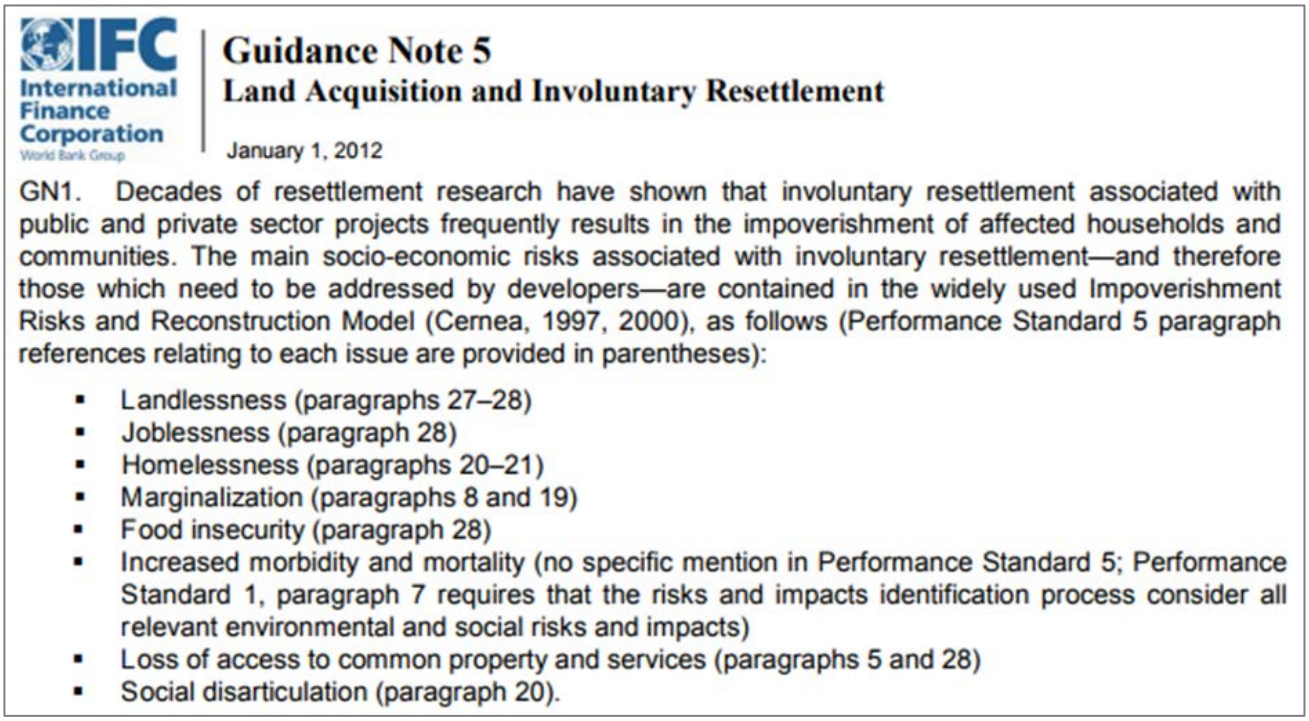
Who developed the IRR?

The IRR model was developed by Professor Michael Cernea, an American-Romanian social scientist, who introduced and later incorporated sociological and anthropological approaches into the World Bank's operating policies on displacement and development. Cernea worked as the World Bank's Senior Adviser for Sociology and Social Policy until 1997. He has published on a wide range of development impacts, including social change, social forestry, participation, grassroots organisations and population resettlement. He is credited with coining the term "development-induced displacement and resettlement" (DIDR).

Why is the IRR important?

The IRR model forms the basis for the World Bank's involuntary resettlement policy framework, which covers most aspects of an involuntary resettlement program. It also forms the basis of many of other frameworks, including the International Finance Corporation's (IFC) *Performance Standard 5 (PS5) on Involuntary Land Acquisition and Resettlement.* Figure 1 is extracted from the IFC's Guidance Note 5, and lists the IRR's eight risk categories.

[1] Cernea, M.M. (1997). The risks and reconstruction model for resettling displaced populations. *World Development*, 25(10): 1569–1587.



IFC International Finance Corporation World Bank Group

Guidance Note 5
Land Acquisition and Involuntary Resettlement

January 1, 2012

GN1. Decades of resettlement research have shown that involuntary resettlement associated with public and private sector projects frequently results in the impoverishment of affected households and communities. The main socio-economic risks associated with involuntary resettlement—and therefore those which need to be addressed by developers—are contained in the widely used Impoverishment Risks and Reconstruction Model (Cernea, 1997, 2000), as follows (Performance Standard 5 paragraph references relating to each issue are provided in parentheses):

- Landlessness (paragraphs 27–28)
- Joblessness (paragraph 28)
- Homelessness (paragraphs 20–21)
- Marginalization (paragraphs 8 and 19)
- Food insecurity (paragraph 28)
- Increased morbidity and mortality (no specific mention in Performance Standard 5; Performance Standard 1, paragraph 7 requires that the risks and impacts identification process consider all relevant environmental and social risks and impacts)
- Loss of access to common property and services (paragraphs 5 and 28)
- Social disarticulation (paragraph 20).

Do each of the eight identified risks materialise in every instance?
No, not all of the eight risks will materialise in each case of involuntary resettlement. Likewise, not all displaced households are necessarily affected in the same way by each risk factor. The model recognises that the intensity of risks varies depending on time and place, and also the group exposed to the risks. These risks affect various categories of people quite differently. For example, there may be differences between how rural and urban people, tribal and non-tribal groups, and people living upstream and downstream from a project experience these risks. Women, children and the elderly are typically considered to be more vulnerable to displacement risks. The model also recognises that risks to the host population are unlikely to be identical to those of resettlers, and that these risks can also result in impoverishment. The model is helpful for understanding why many involuntary resettlement projects have failed to safeguard against impoverishment.

How can the IRR model be applied in mining?
Application of the IRR model encourages project planners in mining to identify – from the very outset – known poverty risks associated with involuntary resettlement. The model requires a detailed examination of the social context in which resettlement will take place and consider risks to project-affected people. Application of the IRR model has the potential to increase the effectiveness of risk management by moving risk discovery "upstream" in project preparation, and reducing displacement impacts by guiding risk elimination and reduction actions.

CONTEXT AND ORIGINS

Is the IRR the only resettlement model?
There are two key foundational models in the literature on DIDR. These models were developed to make sense of the complexities involved in displacement and resettlement processes. The first model was developed by Scudder and Colson in 1982. In this work, Scudder and Colson present displacement and resettlement as occurring in four stages: The four stages were (i) recruitment, (ii) transition, (iii) recovery, and (iv) handing over or incorporation.[2] The model was first formulated to explain the stages of *voluntary* resettlement, and was only later applied to cases of *involuntary* resettlement (i.e., those 'successful' cases

[2] Scudder, T., and Colson, E. (1982). From welfare to development: a conceptual framework for the analysis of dislocated people. In: Hansen, A., and Oliver-Smith, A. (eds.), *Involuntary Migration and Resettlement: The Problems and Responses of Dislocated People*. Boulder, CO: Westview Press, pp. 267–287.

that passed through all four stages). The Scudder–Colson model focuses on the behavioural or psychological dimensions associated with each stage.

By the late 1980s, there was mounting evidence that people who were involuntarily displaced were not progressing through these four stages. Resettlement monitoring data indicated that instead of recovering, in fact the opposite was occurring and impoverishment was a near certainty in most instances of resettlement. It became apparent that a new model was necessary to identify the risks and consequences associated with involuntary displacement and resettlement. Cernea's IRR model was formulated in response to this gap.[3] In contrast to the Scudder–Colson model, the IRR model aims to identify the impoverishment risks posed by development projects with an emphasis on minimizing or eliminating risks to displaced persons.

INHERENT LOGIC

What does the IRR model aim to achieve?

The model is built on the principles of equity, human rights and social justice in development. It names impoverishment as the central risk to people who are involuntarily displaced. The model connects this central risk to eight sub-categories of impoverishment risk and outlining reconstruction strategies to counteract each of those risks.

In explaining what happens during involuntary displacements, the model provides a guide for resettlement policy, plans and programs. The model stresses that, unless these impoverishment risks are addressed through targeted policies, plans and programs, involuntary displacement will inevitably lead to impoverishment among resettlers and host communities. It also aims to correct the following three recurrent issues that lead to impoverishment risks being neglected by developers:

Conventional risk assessment methodology: Risk methodologies for major development projects, such as mining, tend to prioritise risks to the project (or business). Risks to people are prioritised when there is a project or business interest. The risks to project-affected people are not subject to the same rigorous analysis as risks to the project. This leads companies to overlook unfamiliar sources of risk that can, and often do, hit the company when it does not expect it, or is not prepared for it. By the time impacts are felt by displaced people it is often too late to prevent or mitigate the original source of the risk. Where involuntary resettlement is unavoidable, risk analysis must – at the very least – include the IRR's *known* impoverishment risks and design safeguards and safety measures in response.

Deficient cost-benefit analysis: Cost-benefit analysis is a macroeconomic tool. Conventional cost-benefit analysis weighs the aggregate benefits to the business against aggregate costs to the business. This approach has been criticised for not considering the impacts or costs to project affected people. The most damaging aspect of conventional cost-benefit analysis is that it routinely results in the under-financing of resettlement programs – both risk analysis and management response.

Inadequate consultation with affected communities: Communities should be consulted during major development projects and before decision-making by developers compounds the issue of deficient economic analyses. Poor engagement is one of the reasons that resettlement risks are not identified in mining. Consultation and engagement must be conducted in a timely and transparent manner. Without adequate information, affected communities cannot mobilise and begin the process of reconstructing their own lives. Equally, without a thorough understanding of how communities are likely to respond to displacement risks companies cannot mobilise the resources needed to responsibly manage risks.[4]

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[3] Cernea, M.M., and McDowell, C. (2000). *Risks and Reconstruction: Experiences of Resettlers and Refugees*. Washington, DC: The World Bank.

[4] Adapted from Sonnenberg, D., and Münster, F. (2001). Research Topic 3: Mining and Society – Involuntary Resettlement. Mining Minerals Sustainable Development (MMSD) Southern Africa, MMSDSA Regional Research, August, pp. 12-13); Farrell, L.A., Hamann, R., and Akres, E. (2012). A clash of cultures (and lawyers): Anglo Platinum and mine-affected communities in Limpopo province, South Africa. *Resources Policy*, 37(2): 194–204; Owen, J.R., and Kemp, D. (2013). Social licence and mining: a critical perspective. *Resources Policy*, 38: 29–35; and Kemp, D., Worden, S., and

How can the IRR model be used in practice?

The IRR model can be employed in five ways:

1. **Predictive**: as a warning and planning tool, to anticipate the main impoverishment risks involved in involuntary displacement and resettlement.

2. **Diagnostic**: as an explanatory and assessment tool, to help assess the content and the intensity of each major risk, in a given project's context.

3. **Planning and problem-resolution**: to guide the design of counter-risk measures and their incorporation in resettlement planning, for either preventing or mitigating risks.

4. **Research**: to serve as methodology in the scholarly analysis of resettlement impacts and to guide monitoring and evaluation studies on resettlement processes.

5. **Training**: to provide guidance for practitioners when planning involuntary resettlement in mining or other industry sectors.

USING THE IRR MODEL IN MINING

How does the IRR model apply in mining?

In the practice of planning or executing mining projects, the IRR model can help to identify impoverishment risks embedded in involuntary resettlement. The strength of the IRR model is its ability to predict known impoverishment risks ahead of displacement.

Applying the IRR model in mining and resettlement projects has three key advantages in that it:

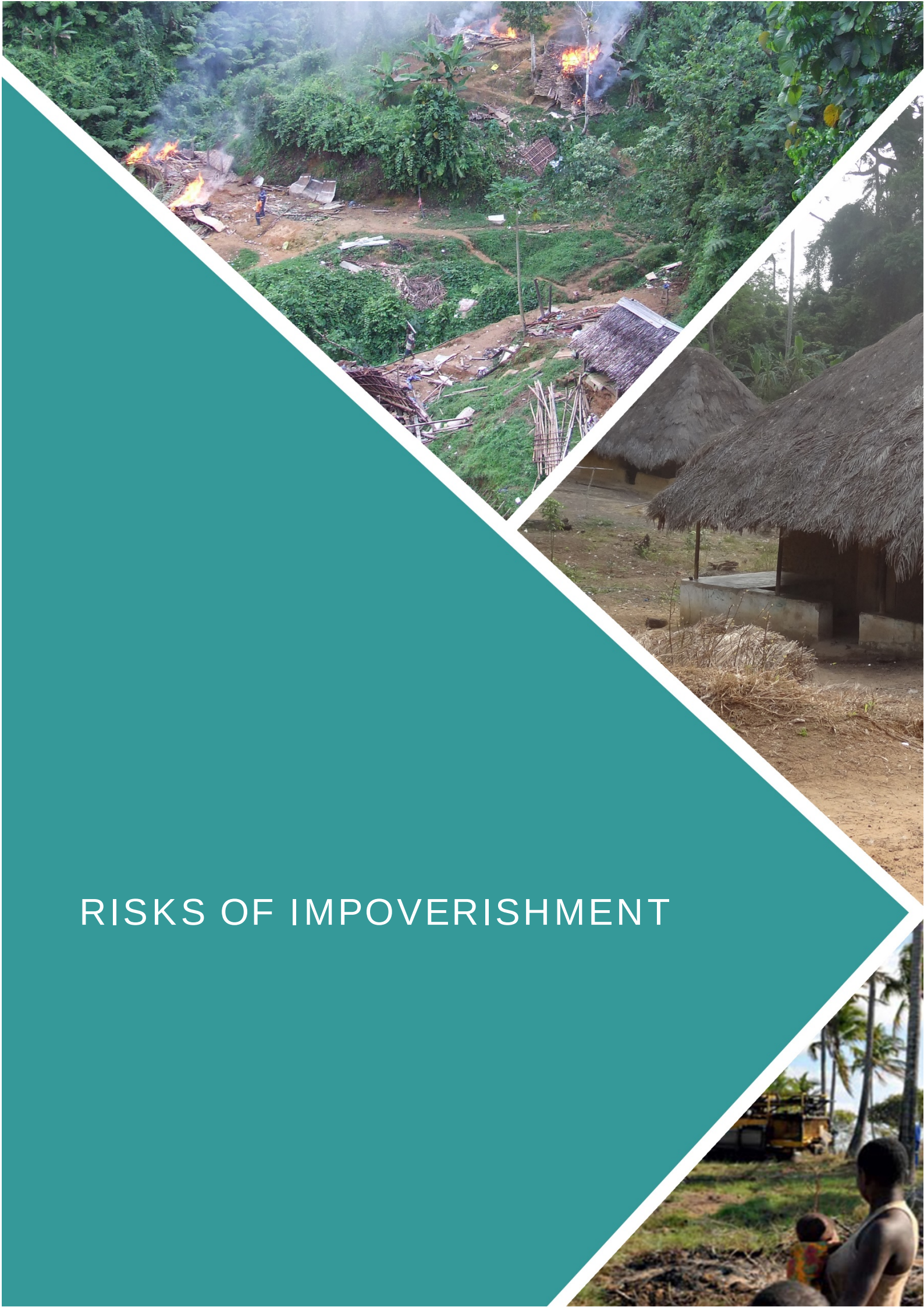
1. ensures that known risks to resettlers are not overlooked during the feasibility analysis of planned developments

2. prompts planners to distinguish the different intensity of each risks (high risks from low or moderate risks, in a given project-context)

3. demands a pro-active risk-reversal orientation in project design, planning, financing and implementation.

While the IRR model is useful in this regard, the level of commitment, and indeed, the capability of developers to "reconstruct" the livelihoods of displaced people during the resettlement phase is a critical factor in determining resettlement outcomes.

Owen, J.R. (2016). Differentiated social risk: rebound dynamics and sustainability performance in mining. *Resources Policy*, 50: 19–26.



RISKS OF IMPOVERISHMENT

THE EIGHT CATEGORIES OF THE IRR

What does breaking down of the eight risks achieve?
The breakdown of impoverishment risks into eight basic risk categories allows for the allocation of proportionate resources for the highest risk and/or against the risks affecting greatest number of people. It helps to avoid the misallocation of resources where risks are lower incidence or intensity. Context-specific risks that are not explicitly listed in the IRR, may also need to be addressed.

(1) Landlessness

Why does loss of land pose such a risk for people who are displaced?
Land is the main foundation on which many people build productive systems, commercial activities and livelihoods. These systems may include food production, cash cropping, trade stores or other retail ventures, rental income, or artisanal mining. International standards require that productive systems – including land – are compensated or replaced at full value. According to the IRR model, if this does not occur, then the risk of impoverishment will increase. While replacement at full value is a requirement of many international frameworks, land is seldom replaced or compensated in a way that reflects its full productive value.

How does loss of land occur in mining and resettlement?
MIDR-related impoverishment from landlessness can occur as a result of:

1. appropriation of land for initial project development
2. damages to the land's productive potential during initial project development in the surrounding, non-appropriated area
3. subsequent losses in the productive value of land on account of general (i.e. non-resettlement-related) environmental impacts
4. inability to secure access to alternative/replacement lands.

(2) Joblessness

Why does loss of jobs pose such a risk?
According to the IRR model, when people are involuntarily resettled, the risk of losing access to employment is very high. Unemployment or underemployment is not always addressed in the resettlement process. Those involved with the construction of replacement houses, or with relocation logistics, may gain access to employment opportunities, but this is usually short-term and unsustainable.

Is joblessness an issue in rural and subsistence-based economies?
Loss of employment can occur in both in rural and urban resettlement cases. People can be employed in both the formal and informal market as agricultural labourers, service workers or artisans. Observers unfamiliar with peasant and indigenous economies tend to overlook impacts not directly related to land ownership or economic activities that sit within the informal economy. Unemployment or underemployment can become chronic following the dismantling of the local economy.

How does job loss play out in mining and resettlement?
Employment created during the construction phase of a mining project can soften some of the displacement impacts experienced by resettlers. When construction is complete and these short-term employment opportunities come to an end, the demand for livelihood support will continue, unless comprehensive restoration and development mechanisms are introduced. Local hire provisions for the operations phase of a mining project may lead to employment for some displaced people. In remote settings in particular, where literacy levels tend to be low, this can be difficult to sustain as the mine sources skilled labour.

(3) Homelessness

What is homelessness?

Homelessness is defined as the absence of housing, or a house that its occupants may not consider "a home".[5] Absolute loss of shelter following displacement is rare. The more common scenario is the degradation of housing, and loss of identity and support structures.

How does homelessness become a risk?

A decline in housing conditions can occur if compensation for housing does not cover the cost of a complete rebuild, or where replacement housing is of a sub-standard quality. Issues can emerge with seemingly higher quality pre-fabricated "modern" housing as a result of people being unable to access tools or materials in order to make repairs. Similarly, examples exist where designs for replacement housing did not consider local customs relating to the use of space by women and men. In cases such as these, housing projects can become a source of grievance among displaced households, and in some instances, the cause of households electing to either vacate or rent their properties to outsiders.

(4) Marginalisation

What is marginalisation?

Marginalisation occurs when displaced persons lose economic power and experience a reduction in social status and confidence. They may also experience injustice and heightened vulnerability. In their new locations, displaced people may be regarded as "strangers" and denied opportunities and entitlements that they had access to, and relied upon, in their previous location. When compensation for land is inadequate, for example, landowners may not be able to purchase land outright and may be forced to become tenant farmers. While there are material elements to marginalisation, the marginalisation also has psychological dimensions. The process of marginalisation can happen immediately or over a longer period of time as people are not able to adapt to new circumstances.

What is risky about marginalisation?

Marginalisation can threaten displaced individuals and entire communities as they slip into lower socio-economic status relative to others in their local area. Relative economic deprivation and marginalisation can begin prior to physical displacement, such as when investments in infrastructure and services in affected areas are discontinued in preparation of project commencement. Partial but significant loss of farming land renders some small farms economically unviable. High-productivity farmers tend to become marginalised when moved to inferior soils. Marginalisation also occurs through the loss of off-farm income sources.

(5) Increased morbidity and mortality

How does resettlement put health and life expectancy at risk?

In addition to stress and trauma, displaced people can be exposed to parasitic and vector-borne diseases, such as malaria, and diseases associated with inadequate shelter or the poor choice of resettlement location. Unsafe water supply and unsanitary conditions can increase vulnerability to epidemics, and chronic conditions, such as diarrhoea and dysentery.

Are some people more at risk than others?

The health impacts of displacement and resettlement fall disproportionately to infants, children, pregnant women and the elderly.

Is there a link between health risks and other impoverishment risks?

The correlation between the loss of shelter and a decrease in health status is well established. Research shows that people who are involuntarily displaced experience higher levels of exposure and vulnerability to illness and disease than they did prior to displacement. Factors such as decreased access to quality food or public services can also heighten the risk of morbidity and mortality.

[5] Downing, T.E. (2002). Avoiding new poverty: mining-induced displacement and resettlement. Mining, Minerals and Sustainable Development (MMSD), No. 58, April.

(6) Food insecurity

What is food insecurity?

Food insecurity relates to the supply of food and people's access to it. Food insecurity occurs when displaced persons do not have access to sufficient, safe and nutritious food in order for household members to live active and healthy lives.

How does resettlement put food security at risk?

Food insecurity can arise when livelihood systems, which include farming, seasonal or full-time employment, are disrupted due to displacement. These systems are essential to support basic household provisioning. Replacement land can be of lesser productive value than the land that was acquired by the project, demanding more inputs from households in order to produce similar levels of crops. New settlement areas can also be located further away from resources that households depend on for additional food supplies, such as markets or personal networks.

What are the main contributing factors to food insecurity?

The main contributing factors to food insecurity among displaced people include loss of access to land and housing, interruptions in or poor sources of income and livelihoods, food price inflation, a decline in purchasing power and a lack of resilience due to limited assets or loss of ownership. All these issues have different impacts depending on factors such as age and gender. As rebuilding regular food production capacity at the relocation site may take several years, hunger and undernourishment can become a long-term impact.

(7) Loss of access to common property and services

What kind of common property tends to be lost during resettlement?

According to the IRR model, resettlers often lose access to common property assets such as grazing lands, forests and woodlands, coastal and inland water bodies, and burial grounds.

What happens when common property is not protected?

When displaced people's access to common property resources is not protected, they tend to encroach on reserved forests or to increase the pressure on the common property resources of the host community. This can cause social conflict and environmental degradation. Common property resources tend to be overlooked when developing entitlement packages. In many instances, natural resources and food stuffs sourced from forest areas are not considered when examining livelihood or food security systems. This can lead to compensation and livelihood restoration programs undervaluing and underestimating replacement assets. In other instances, the failure to recognise common property can result in collective rights over land and resources being lost altogether.

What kind of common services tend to be lost?

Loss of access to schools, health care facilities and other public services is a feature of this resettlement risk. The services represent domains that are central to most, if not all, development indicators. A loss of access to these services can leads to a drop in living standards. In most cases, loss of access is not permanent. However, research shows that significant interruption can occur to the functioning of schools throughout the displacement process. The impact of displacement on household livelihood systems can result in children not attending school, but instead joining their parents in farming or other labour activities.

(8) Social disarticulation

What is social disarticulation?

Social disarticulation describes the fragmentation of communities. Fragmentation or 'disarticulation' occurs through a weakening of community cohesion, informal networks and interpersonal ties among displaced persons.

How does social disarticulation occur?

When poorly designed and managed, involuntary displacement can disperse and fragment communities, dismantle patterns of social organisation and interpersonal ties, and scatter kinship groups. Life-sustaining informal networks of reciprocal help, local voluntary associations and self-organised mutual service can also be disrupted or lost. This loss is greater in cases where families are moved without due consideration to their ties with neighbours, relatives and other social groups.

ACTIVITIES

Take 30 minutes to think through the material, and respond to the questions. Write down your answers and be prepared to discuss with colleagues.

Activity 1: Risk assessment

Consider the way in which your organisation identifies and assesses resettlement risk.

What consideration is given to risks to the project?

What consideration is given to risk to project-affected people?

How are impoverishment risks captured in the risk assessment process?

Is this adequate?

Activity 2: Risk interactions

Go to the *UQ Mining and Resettlement Consortium* eLibrary at: www.miningresettlement.org

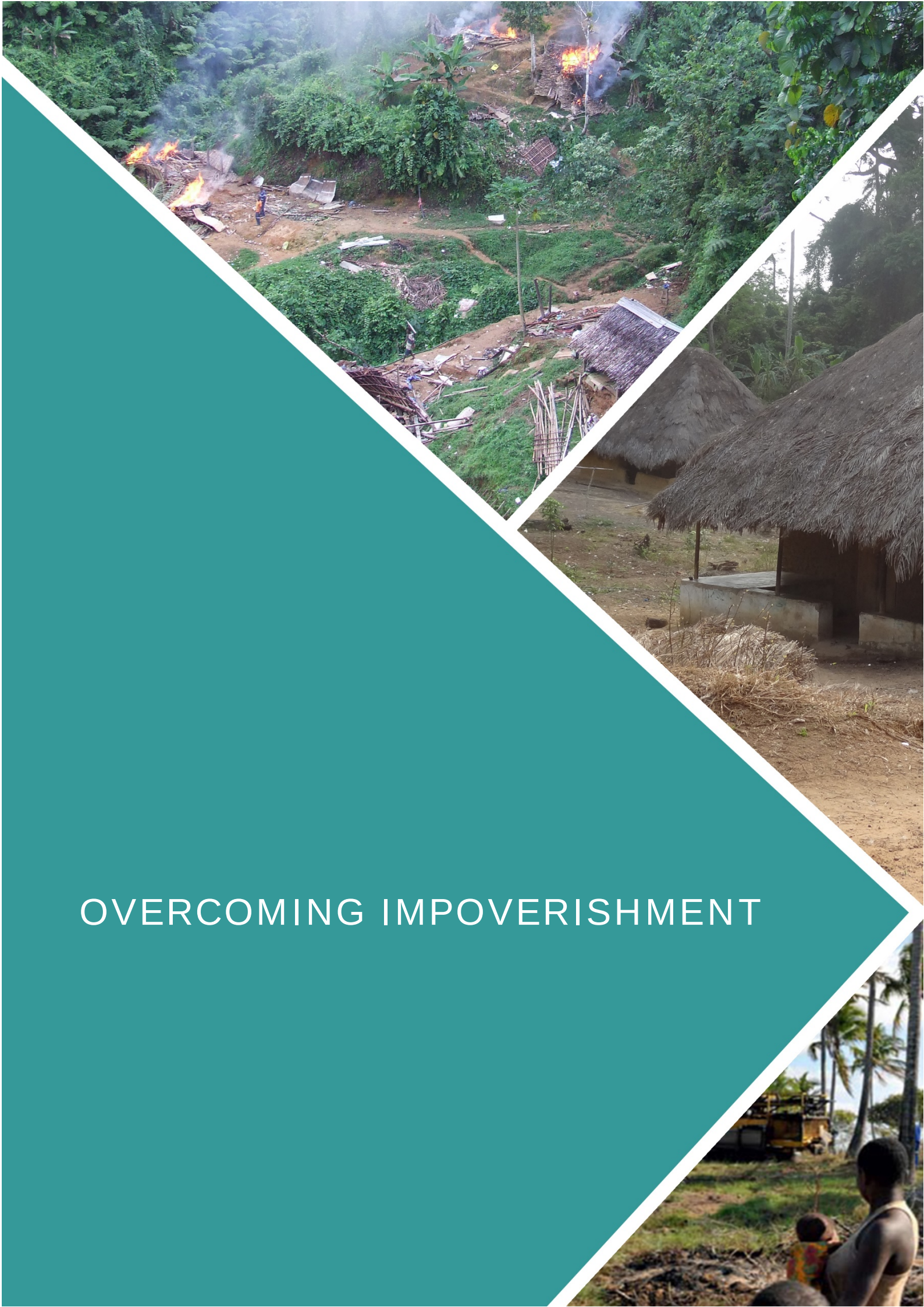
Download the *Ahafo South Resettlement and Livelihood Restoration Completion Audit, Final Report*.

Read the report and consider the following questions:

What is the relationship between landlessness and other risk factors?

What was the company's approach to identifying the key IRR risks?

Should the resettlement be considered "complete"?



OVERCOMING IMPOVERISHMENT

RISK REVERSAL AND RECONSTRUCTION

How do we overcome patterns of impoverishment?
Before displacement begins, the risks of impoverishment are only potential. However, if preventative counteractions are not initiated, these risks become impoverishment impacts. The internal logic of the IRR model suggests that to overcome patterns of impoverishment during displacement and resettlement, it is necessary to prevent risks from manifesting in the first place.

How do we reverse the risks associated with involuntary resettlement?
The second part of the IRR model - reconstruction - provides guidance on how to "reverse" the risks associated with involuntary resettlement and maps the way to restoring and improving the livelihoods of displaced people. In the same way as the model deconstructs the process of displacement into eight major risks of impoverishment, it also reconstructs definable risks-reversal activities, which can be implemented through resettlement planning and resource allocation.

What is the starting point for reconstruction?
According to the IRR model, risk identification and management is crucial. When involuntary displacement cannot be avoided, mitigations need to be established early during the planning phase. Early risk assessment and management using the IRR model and tailored to the local context should lead to risk reversal activities.

What aspects of reconstruction should be considered as early as possible in resettlement planning?
According to the IRR, key considerations of reconstruction are as follows:

- Resettling displaced people into locations that have cultivatable land or opportunities for employment is the best basis for reconstructing livelihoods. To prevent landlessness following displacement, extensive efforts should be made to identify viable sites that can offer settlers security of land tenure and can support a range of livelihood activities. These locations must be secured before displacement begins.

- Improved shelter is relatively easy to achieve. To prevent homelessness, however, the house reconstruction program should be designed in advance. It should include approaches and housing models that are acceptable to resettlers.

- The reconstruction of communities, networks and social capital is essential for the recovery process and should be facilitated before physical relocation.

- Nutrition levels and health will depend, in the long term, on progress in resettlers' economic recovery. In the short term, reconstruction requires that sudden disruptions in food supply and health risks to displaced persons are addressed, before full economic reconstruction is undertaken.[6]

[6] For more detail, see Cernea (2004), pp. 29–39.

ACTIVITIES

Take 30 minutes to think through the material, and respond to the questions. Write down your answers and be prepared to discuss with colleagues.

Activity 3: Reconstruction

The IRR model breaks down the process of resettlement and reconstruction into a set of risks-reversal activities.

Think about specific risk reversal strategies for your own site, which may lead to the following:

- from landlessness to land-based reestablishment
- from joblessness to reemployment
- from homelessness to house reconstruction
- from disarticulation to community reconstruction
- from marginalisation to social inclusion
- from expropriation to restoration of community assets/services
- from food insecurity to adequate nutrition
- from increased morbidity to improved health care

What do you see as the main challenges to reconstruction?

Activity 4: Case studies

Go to the *UQ Mining and Resettlement Consortium* eLibrary at: www.miningresettlement.org

Download the two reports:

(1) A Third Party Review of the Barrick/Porgera Joint Venture Off-Lease Resettlement Pilot: Operating Context and Opinion on Suitability.
(2) Porgera Joint Venture (PJV) off-lease resettlement pilot Independent Panel of Observers: Annual monitoring report (March 2016-2017).

Also refer to this Landsat timeseries clip: https://www.youtube.com/watch?v=3Pm2wtKkS-g

Read the reports, watch the clip, and consider the following questions:

How did the project's footprint – through the mine life cycle – influence impoverishment risks?

Identify where the pilot project may inadvertently heighten impoverishment risks:

Identify where the pilot offers opportunities for reducing or addressing impoverishment risk:

What else could the company consider, to achieve reconstruction?

SOME CRITICISMS

The IRR model has received detailed examination across a variety of disciplines and sectors. Scholars and practitioners have offered a critique of the model, suggesting that it:

- is too general and does not contextualise the eight impoverishment risks[7]
- does not sufficiently address linkages between the eight categories of impoverishment risk, which leads to risks being viewed in isolation
- does not sufficiently take into account the capabilities and vulnerabilities of people who are being displaced[8]
- does not adequately recognise the complexities inherent in resettlement processes, such as political motivations and difficulties with financing and institutional capacity[9]
- assumes that resettlement problems can be "erased" by planning and underestimates the enduring nature of some risks in particular contexts
- does not account for a degree of choice that can exist in negotiating the conditions under which resettlement takes place
- does not account for contingent factors outside the resettlement process itself.

While these critiques have been offered, Cernea has not found any need to adjust the model. The IRR remains the most stable conceptual model in resettlement research today.

[7] Horgan, J. (1999). The Itaparica Dam Project in north-eastern Brazil: models and reality. *Forced Migration Review*, 4: 25–28; Muggah, R. (2000). Through the developmentalist's looking glass: conflict-induced displacement and involuntary resettlement in Colombia. *Journal of Refugee Studies*, 13(2): 133–164.
[8] Muggah (2000).
[9] De Wet, C. (2001). Economic development and population displacement: can everybody win? *Economic and Political Weekly*, 36(50): 4637–4646.

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