

Impacts of displacement on urban livelihoods: a railway project in Metro Manila

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Abstract

This article seeks to understand the ways in which urban livelihoods are affected by development-induced displacement, with a particular focus on residents remaining in the locality. Through an empirical case study of a railway upgrading project in Metro Manila, the article investigates livelihood impacts of large-scale demolition and displacement, which varied depending on whether the physical capital of remaining residents declined due to land clearance and the extent to which they relied on the local livelihood network established with displaced settlers. In comparison, households remained intact when they had little engagement with the local informal economy.

Keywords: Aid – Development policies; Labour and livelihoods; East Asia

Introduction

This article seeks to understand the complex ways in which urban settlers are affected by development-induced displacement (DID). A particular focus is on residents remaining in the locality without being physically displaced. Displaced people have been the central concern of DID research as they bear the most obvious cost of being forcefully removed from their homes and livelihoods. However, few studies have addressed the possibility that other people might have been adversely affected by DID *in situ*. These are referred to in this paper as non-displaced affected people or non-displaced people. Compared to the experiences of the displaced, which have been systematically analysed in previous research, the impacts on non-displaced people are largely unknown, particularly so in urban areas.[1] This paper aims to examine indirect impacts of DID on urban livelihoods and to better understand their distinctive nature, which is yet to be incorporated into the research and practice of DID.

Through an empirical case study of a railway upgrading project in Metro Manila, the Philippines, the article investigates how the livelihoods of urban settlers were affected by the aftermath of large-scale demolition and displacement that took place in their locality. First, the relevance of studying indirect displacement impacts is explored within urban areas, which are characterised by the prevalence of the informal economy in urban residents' attempts to diversify livelihood strategies and experiences of vulnerabilities. After introducing the case study and research methodology, the article analyses the patterns in which urban livelihoods were impacted by the transformation of the physical and socio-economic environment around the informal settlement. The main sources of impacts are the erosion of productive physical capital through demolition, and the reconfiguration of the local livelihood network after displacement. Furthermore, it demonstrates that non-displaced people were differentially impacted, depending on the extent that their livelihoods were embedded in the locality. Based on this, there is a discussion who becomes more vulnerable and who turns out to be resilient.

Indirect impacts of urban development-induced displacement

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Large-scale infrastructure projects have been in the forefront of the drive towards economic growth and profit maximisation, resulting in significant spatial restructuring and consequent displacement of the existing inhabitants (Oliver-Smith 2010). The devastating experiences of impoverishment and disempowerment by displaced people have been extensively documented by sociological and anthropological research (Cernea 2000; World Commission on Dams 2000). The ethical problems posed by those making way for development projects have been actively challenged by affected people and civil society organisations (Mathur and Marsden 1998; Oliver-Smith 1996), and partly in response to this pressure, major development agencies, starting with the World Bank, adopted involuntary resettlement policies as a means of mitigating the negative impacts of displacement (Muggah 2008).

Even with the provision of resettlement, however, the plight of the displaced has not changed substantially (de Wet 2006), whereas incidents of DID have increased.[2] Within cities, in particular, given population density and land scarcity, any land-based initiatives are likely to create broad spatial impacts including displacement (Penz et al. 2011). Displacement has become a corollary of urban development that is driven by rapid urbanisation and an increasing number of investments in cities as command centres of the global economy (Mathur 2006; Robinson 2003; Roquet et al. 2015). The causes and contexts of urban displacement are diverse, with some aimed at boosting the urban economy, such as transportation projects or mega-events; while other initiatives for addressing urban problems such as flood management and slum-upgrading have displacement effects as well (UN-HABITAT 2011a). The modes in which DID takes place also varies from the outright eviction of existing inhabitants to their socio-economic marginalisation within cities, as in the case of gentrification (Roy 2005).

Despite intensifying trends of DID in cities, the complexities of urban displacement still remain largely understudied, even within the decades-old body of DID research (Roquet et al. 2015). It has been written that the lingering legacy of an implicit bias towards rural areas in international development and the relative neglect of urban areas for some time has prevented us from understanding the distinct features of urban displacement (Koenig 2002; Mathur 2006). The knowledge gap leads to the limitations of the existing resettlement policy, which is mostly based on rural experiences and needs to be fine-tuned to be an appropriate framework for addressing urban DID issues. For example, losing access to productive land is one of the most serious impoverishment risks involved in DID (Cernea 2000). However, few people displaced from a metropolis make their living from the land, making land-based compensation less relevant, whereas physical location is an important for informal livelihoods in urban areas (Koenig 2015; Roquet et al. 2015).

Urban resettlement policy falls short particularly where it is viewed primarily as a reconstruction issue with a focus on the provision of housing, which is often carried out by removing displaced people from urban cores to peripheries (Koenig 2009; Roquet et al. 2015). Resettlement houses in urban peripheries come with detrimental effects on the livelihoods of the displaced people, who use diverse resources available in urban centres to produce goods, services, and information (Koenig 2015). However, with the narrow conceptualisation of urban managers who are concerned with the aesthetics and the order of cities, informal settlements are practically forgotten in formal planning and the complex socio-economic networks around them rarely register as critical resources for livelihoods (Brown 2006; Potts 2006; Shatkin 2004). Without a serious consideration of livelihood issues, a vicious cycle has been repeated whereby, for instance, in Metro Manila informal settlers were relocated to remote sites with limited access to livelihoods, only to drift back to other slums in the city (Porio 2004; Choi 2014).

Against this backdrop, the study of non-displaced urban residents who do not need to move from their homes facilitates a needed refocusing of urban DID research and practice from the conventional concern with the housing needs (of displaced people), to the issue of livelihoods. For urban residents who have

stayed in the same urban locality, changes incurred by the demolition of informal settlements constitute one of many dramatic events such as macro-economic changes or natural disasters that can transform their socio-economic lives. The main hypothesis of this study is that if they were impacted by the removal of informal settlements, their experience could illuminate the extent that urban residents engaged with informal settlements as a space and mode of living, regardless of their own tenure status (i.e. whether or not they are informal settlers themselves).

This brings the concept of urban informality to the fore, the pervasiveness of which has made it an organising logic of urban public and private spheres (Roy and AlSayyad 2004). The concept of informality originated from the informal economy and expanded to other sectors such as housing and service provision (Thomas 1995). Although the literature pertaining to the informal economy and that of informal land and housing have tended to evolve rather disparately, the research and debate across both domains have been guided by the dynamic between the regulatory power of the state (or the absence of such power) and the capacity of civil society to resist regulations (Portes 2010; Roy 2005). There is at least a common understanding that it represents such diversity ranging from the 'exclusion' of some groups from accessing formal resources to the 'exit' strategy of others to maximise the advantages of informally accessed resources (Perry et al 2007).

Livelihoods is used as an entry point to understand diverse ways in which urban residents live in and around informal settlements, partly finding opportunities while being constrained by a key vulnerability to formal regulation such as the one highlighted by clearing of informal structures and economic activities for other urban initiatives (Potts 2006; UN-HABITAT 2011b). By investigating the livelihoods impacts experienced by non-displaced residents in an urban DID case, this paper intends to bring discussions on informal economy and those on informal housing together and elaborate on the extent to which the informal economy overlaps. Given the coverage of the discussion on informal economy from the organisation of production relations in a particular industry to strategies of a petty trader (Portes 2010), it is worth clarifying that a specific focus in this study is on households engaged in subsistence production or the simple sale of goods and services for survival.

Research case and methodology

The railway service by the Philippine National Railway (PNR) has deteriorated so seriously over the past several decades that it has long been in dire need of upgrading. A proposal to make it an effective means of transportation materialised as part of the priority infrastructure projects of the Arroyo administration (2001–10), among which the North Rail–South Rail Linkage project is the particular concern of this research. The first phase of the project covers the area passing through Metro Manila (from Caloocan in the North to Alabang in the South) and aims to alleviate traffic congestion in Metro Manila by rehabilitating the rail tracks and upgrading train services. From the outset, clearing the right of way for the project was the main concern, because a large informal settlement existed alongside the railway, accommodating more than 35,000 families. In view of the anticipated social implications, a loan agreement signed between the Philippines and Korea in 2005 made the release of the loan conditional on the provision of adequate resettlement for displaced people. The National Housing Authority (NHA) assumed responsibility and implemented a relocation programme whereby those displaced were relocated in 11 different sites within and outside Metro Manila over a period from 2003 to 2010.[3] The railway project itself started in 2007 and was completed in 2010, with the new trains running on the rehabilitated tracks and carrying a large volume of passengers.

Following on the previous research conducted before land clearance and population displacement (Choi 2008; 2014), I revisited the project area along the railway in 2010 with the intention of exploring whether, and how, the remaining population was affected. In the densely populated urban centres of Metro Manila, there exist more houses beyond the demolished informal settlements, where urban residents continue to carry out their lives. In this project, the criterion dividing non-displaced and displaced people is whether they had to move out of their homes after losing their residential house completely. However, the railway area was cleared in such a way that houses standing on the border line of the clearance zone were demolished only up to the point where they fell within the zone. As a result, some of the remaining houses, which have now become the frontline that directly faces the railway, were literally “*chopped off*”, in the words of local residents. Furthermore, an investigation in the project area after the clearance revealed that displaced people had not all disappeared from the area but some have stayed on or have returned from the relocation sites, either temporarily or permanently. That is, the demolition of informal settlements left people in the locality with no housing loss, a partial housing loss, or complete housing loss, with the first two groups constituting “non-displaced” people.

Semi-structured interviews were conducted with the people remaining in the section between the España station and the Caloocan station, selected on the basis of accessibility (e.g. houses with open doors or windows or with people sitting outside). I was accompanied by experienced community organisers who have worked in the area for a long time, as well as by an interpreter with exceptional social skills, which was greatly helpful in gaining trust from research participants. An interview guide was prepared with reference to the Urban Sustainable Livelihoods Framework (Rakodi 2002) and Asset Vulnerability Framework (Moser 1998), which were mainly used as an organising tool to think through some of the known resources for urban livelihoods such as physical capital (a house, productive durables, and basic infrastructures), financial capital, the need for which is particularly pressing in urban areas where the goods and services have to be purchased, human capital, and social capital. The choice of semi-structured interview was partly meant to complement the potential cultural and linguistic barrier that I might bring in as a foreign researcher, despite my familiarity with the area and communities based on the previous research engagement. While it allowed me to cover a wide area along the railway, a rather rigid use of the interview guide limited the possibility of in-depth engagement in a particular locality.

A total of 67 interviews were conducted, with the main focus on gathering information about the manner in which resources are utilised by remaining households for their livelihoods. Over half of the research participants (36 out of 67) did not experience any housing loss at all because they are either formal land owners or users (22 out of 36).[4] However, not all non-displaced people are formal settlers, as the majority of people whose houses were partially demolished (13 out of 16) and nearly half of those who did not suffer any housing destruction (14 out of 36), are still living on the land that belongs to other public or private entities. Wherever relevant, displaced people are also included in the analysis, since as long as they stay in the same locality despite losing their house completely, they contribute to constructing a more comprehensive picture of urban livelihood impacts. In addition to a snapshot of livelihood impacts at a given point, I attempted to capture the changes in livelihoods over time by comparing the number of income-earning activities within a household before and after the demolition of informal settlements.

Research findings

Although non-displaced people avoided the uprooting experience of having to leave a familiar environment, the railway area where they have stayed on has gone through significant changes of its own. The most visually striking change is the physical transformation of the locality that used to be

characterised by large informal settlements, while a mass population outflow turns out to have reconfigured the local economy considerably. First, I examine three main ways in which residents in the project area experienced livelihood impacts of these local changes: (a) where productive resources, notably, a physical structure and space for livelihood activities were affected by a physical change; (b) where the local livelihood network formed with informal settlers was reconfigured by their displacement; and (c) where livelihoods were doubly impacted by the mix of both. I also discuss the case of people whose livelihoods remained intact or resilient. Second, I note that non-displaced people in the railway area are not homogeneous, being differentially positioned in terms of the kind and number of livelihood activities, and thereby experience local changes in diverse ways. For understanding livelihood conditions prior to the change, I construct a livelihood portfolio consisting of household members' income-earning activities and other sources of income and safeguards such as savings and pensions, and I delineate differential implications of livelihood impacts and the capacity to cope and recover. A particular concern is with the people who have made their living on the margin and thus have few means to cope with, and recover from, any adverse impacts, thereby being likely to become impoverished *in situ*.

Types of livelihood impacts

Local changes following demolition and displacement affected the livelihoods of those residents who had arranged their physical-productive capital (i.e. physical capital that is used for livelihood activities or as sources of income) informally, or those who were part of the livelihood network formed in and around informal settlements. Some non-displaced people were affected in both ways. In addition to the impacts on the income-generating aspect of livelihoods, changes in terms of expenses were considered, notably, increased expenses related to displacement such as supporting relocated family members.

Impacts on productive physical capital

A physical change affected even non-displaced people who did not lose their homes completely when their productive assets were impacted. First of all, a partial demolition of a residential house is a significant loss of a physical capital in itself given that affected people had invested in the construction or expansion of their house incrementally over time. Nearly a quarter of the interview participants (16 out of 67) lost the part of their house that previously stood on PNR land. However, their partial loss was not recognised for compensation on the premise that they were not formal in the first place. Consequently, the cost of reconstructing the damaged house was borne by affected people. In comparison, for those who lost their house completely (i.e. displaced people), at least a relocation programme was provided, although it was merely a replacement of residential housing rather than its compensation, since the resettlement land and house were given as part of a long-term housing contract whereby the relocated have to repay the government over the next 25 to 30 years.

Other than a loss of a residential house (partially or completely), the land clearance also affected the physical productive capital of non-displaced people more broadly. For home-based businesses, a partial demolition of a house meant a reduction in the operational space, which led to a business decline or even closure. For example, after losing approximately 70% of her house, Linda could no longer afford space for the junkshop that she used to run at home. Likewise, Imelda's grocery store disappeared when her house was partially demolished, although the money from selling groceries was added to reconstructing the house. Even when people manage to carry on their business, losing a physical site for conducting business can undermine its performance. For example, Ronaldo used to manufacture fibreglass products at home and continued his business even after the partial demolition of his house. Nonetheless, his business has declined as his customers now find it difficult to identify his business easily.

Furthermore, informal settlements were commonly used as sites for livelihood activities and those who owned a house there other than their residential one also experienced a tangible impact. A notable case is Delia, who used to occupy a large portion of the PNR land where she had rental houses and a few businesses such as a small store (called *sari-sari*) and a handicraft shop. An inter-generational accumulation that had started with her father-in-law, who had come to the railway area right after the Second World War, was lost through the railway clearance. Similarly, Jocelito bought a house on the PNR land with savings from working abroad and turned it into a small computer shop. However, following the demolition of the house, he lost his shop and also had to sell his computer stock. There were many informal rental houses on the PNR property, including some owned by formal residents in the area, and their demolition meant that stable rent income was lost.

As well as informal structures, more broadly the informal use of space was controlled through the clearance process, and informal livelihood activities were curtailed. For instance, Teodor is not living in the railway area but had run a canteen on a sidewalk next to the railway tracks, which was then demolished. Immediately after the event, the authorities were poised to clear sidewalk vendors again so he had to wait for five months before he could rebuild his canteen. Felicidad, who started a small store on a cleared land along the railway tracks, had her products confiscated by the PNR police as part of their operation to prevent the reinvasion. Stricter management of space is certainly a new phenomenon after the clearance, according to Nene, who has been selling drinks and snacks under an awning outside her house and had her business affected by enhanced regulation, demonstrating that the demolition of informal settlements had the effect of formalising livelihood activities as well.

Adverse livelihood impacts of a spatial change underline that a space is an important physical asset, whether its use is formal or informal, or its purpose is residential or non-residential, serving diverse functions such as a reserve of financial capital (upon being sold), a source of income (e.g. a rental house), and a basis for livelihood activities. In view of this, the impact of demolition expands beyond the most visible material loss of a house, as it means that past investment is foregone, current livelihoods are weakened, and the capacity to accumulate in the future may also be undermined. The loss of physical capital originates from the precarious nature of informal investment in or access to resources. Informal arrangements may enable access to resources at a lower cost (although it is not always the case) or in a readily available manner, but are vulnerable to any changes in formal policies or in the formal market. In the current case study, the urban infrastructure project functioned as one such change by which informal access to and use of urban space was regulated.

Impacts on the local livelihood network

In addition to a physical change, local livelihoods were affected by the transformation of the existing socio-economic relationships in the area. Given that the local economy before was universally characterised as involving a lot of people where selling was a common livelihood option, a drastic drop in the number of people after mass population displacement was detrimental to local economic dynamism and subsequently to the remaining small business holders, vendors, and petty service providers who relied on them for their livelihoods. The livelihoods of nine households were adversely affected in this way, whilst 12 others experienced impacts on both their physical productive capital and livelihood network.

Above all, informal settlers used to form a pool of customers and thus their displacement translated into a substantial reduction in the profit level. For example, Crescencia, a sidewalk vendor selling slippers, experienced a reduction in her daily profit (gross income) from 3,000 pesos to 1,000 pesos.[5] The magnitude of an effect on income varies but most people reported at least a 50% reduction in their daily profits. For instance, for Reynaldo, a fish vendor, the volume of daily sales was reduced from 80kg per day to 40kg. Those providing petty services in the area such as massage, hair cutting, and manicures

were also hard-hit by a customer loss. One of the most commonly mentioned examples was that of drivers of tricycles and jeepneys, both of which are popular modes of transportation in the Philippines. Tricycle and jeepney drivers are bound by a fixed daily payment called a “boundary” for using a vehicle, and the daily profit, subtracting the rental fee, becomes their income. Therefore, when the total profit was reduced because of the customer decrease, it was the drivers who bore the consequence of profit reduction, not the tricycle or jeepney owners, who could remain in business since the boundary they collected from drivers remained the same.

Displacement affected not only the customer base but also a broader livelihood network within which local businesses were run. For example, the aforementioned junk shop of Linda obtained junk from the middlemen who collected plastic bottles, cardboard, newspapers and so on in the neighbourhood. Now their junk providers and collectors were displaced as well as their friends who used to lend them a truck for free for delivering junk to a factory. The wife of Renaldo was affected in a similar manner, as she used to make food products and had a few people selling them on streets, but these sellers were now displaced. She also lost a significant number of customers, which compelled her to suspend her business for a while. On the other hand, Jojie reflected the problems caused for customers when she noted that she lost the people who used to do her laundry and thus now has to do it herself. These cases illustrate how the whole livelihood network could be disrupted by a drastic population change such as that entailed in a DID context.

Furthermore, people were doubly impacted when the rupture in the local socio-economic fabric was combined with the erosion of physical productive capital. For instance, Elvera had an eatery on the ground floor of her brother’s house that is now demolished. Even though she managed to construct a snack stall in an open space, her business was still affected by the loss of customers. In the aforementioned case of Jocelito who lost his computer shop, his home-based *sari-sari* store was also affected by the loss of customers, the combined impacts adding up to a large reduction in the daily profit level from 3,000 pesos to 100 pesos. A collective example is a market in Caloocan that was formed literally on the railway tracks at the northern end-point of the current railway project, where train services had stopped for a long time. At the time of the field research, the work on the rail tracks was still going on and vendors kept moving their stalls according to the construction schedule. Many had already given up doing business in the area, partly because of the stress involved in moving from place to place and also because of reduced sales after the displacement of people.

Substantial livelihood impacts of local changes indicate the prevalence of making a living in the informal economy (mostly through self-employment), which needs to be understood in the context of the Philippine (formal) labour market, where limited employment opportunities have been a chronic problem, while relatively accessible options come with low job security, low income, and poor working conditions. However, people without abundant material resources tend to start small businesses that can only be sustained by selling a number of relatively cheap products or by providing services at a low price. Many still have to borrow money to start a business, curtailing future profits due to the burden of repaying financial and social debts. Hence, for a constant flow of capital, it is critical to be able to access a large pool of customers even though their purchasing power may be low. This is part of the reason why urban poor residents strive to stay in the city, particularly at the urban centre. However, the findings demonstrate that when the urban locality itself goes through a significant transformation, even the livelihoods of the remaining population that are locally reliant can become adversely affected.

Characteristics of livelihoods remaining resilient

Cases of adverse effects on local livelihoods need to be balanced by the fact that a number of non-displaced people (29 out of 52) experienced little or relatively minimal changes in their livelihoods. Given

that sources of impacts are the demolition of informal settlements and a consequent displacement of the local population, those whose physical productive capital remained intact or those whose livelihood network goes beyond the locality were unaffected. With regards to the physical productive capital, the majority of this group (22 out of 29) neither lost their residential house nor invested in informal settlements or spaces. Those whose house was partially demolished are also included in this category as long as they did not have home-based livelihoods or the partial loss of housing did not affect the business space.

The main characteristics of livelihoods that were *not* affected by local changes warrant further examination. Notably, in eleven households (out of 29), all the members were employees working outside the locality. Even locally employed people such as a street sweeper or a car-body painter were not affected as long as their employer was not reliant on the local economy for their business. Although employment concerned here is often contractual and thus characterised by low job and income security, at least it guarantees a stable flow of income, whereas the income of local business holders was adversely affected.

Among the households that include at least one or more self-employed members, four factors are identified for explaining their resilience. First, a number of people whose clients come from outside the locality did not have customer relationships with informal settlers and thus were not affected by their displacement. For instance, Aida has a bike shop which is located just one street away from the railway. However, it is a formal shop that was already distinguished from the informal settlement and thus informal settlers were not significant clientele. Likewise, the husband of Imelda has been selling horse meat dishes at his house and has gained a good reputation for his food. Hence, he has attracted a broad base of customers from outside the area and his business is still doing well even after his immediate neighbours were displaced. Second, a few people who operate in their neighbourhood have a customer base that is differentiated from informal settlements. Sherwin has been selling *lugaw* (rice porridge) at a mobile shop along the railway but is unaffected since his customers have been formal residents in his own neighbourhood. His case also illustrates that being a mobile vendor or an on-call service provider, which is normally deemed an indicator of less capital, may have an unexpected advantage in cases of DID because they do not have any fixed physical space to lose by demolition. As another illustration, Faustino, who provides a laundry service at home, contends that his customers are “middle class”, not “squatters”, which implies that subtle divisions crisscross the densely populated urban settlement. Third, others have regular clients for their service such as laundry or rug-making, who would guarantee at least stable income although it is often very minimal. Finally, self-employed people who operated outside the locality were not affected by the DID event.

Furthermore, for a few people, changes in the locality opened a very small window for livelihood opportunities. Interestingly, the physical change in the locality, which left many houses partially demolished, created a demand for housing repair and consequently increased the income of self-employed construction workers such as a mason and a plumber. For some business holders, the displacement of people meant a loss of competitors rather than customers and the business environment has become less competitive. However, newly generated livelihood opportunities are limited in their nature and magnitude and may not be sustainable in the long run. With regards to the possibility that the influx of project-related workers might have increased demands for local goods and services, the evidence is yet weak, with mixed accounts. Teodor, as a canteen owner, noted that construction workers brought their own food and did not necessarily buy from local eateries. Other people have only hoped for better sales prospects if the improved train services bring more passengers into the area.

Implications of livelihood impacts and coping

Diverse and differentiated impacts may have varying implications for households depending on their livelihood preconditions. In order to examine whether a variation in the experience of livelihood impacts is associated with a strength of a livelihood portfolio prior to the change, I considered the kind and number of working members (employed or self-employed) and other sources of income in a household and analysed the features of those whose livelihoods were affected and those not affected. An aggregate picture after the change shows an overall trend of a weakened livelihood portfolio through a reduction in the number of livelihood activities.

In particular, those living on subsistence with two to three livelihood activities appear to have engaged with the physical and socio-economic environment around informal settlements most actively and thus were affected strongly. At the same time, it should be noted that households with varying numbers of livelihood options experienced livelihood impacts, which demonstrate that it is not only the resource-poor who invested in informally arranged physical capital or relied on the local livelihood network. Likewise, the group experiencing minimal livelihood impacts includes households with different kinds and numbers of livelihoods, which again corroborates that the experience of livelihood impacts was associated less with the security of livelihoods than with their characteristics.

However, in terms of coping with any livelihood impacts, the security of household livelihoods influences their recovery capacity. A household as a whole stays relatively resilient when it has secure sources of income that are not locally dependent. For instance, Pinky does not work herself but owns two jeepneys which she purchased with remittances sent by her husband from abroad. She collects the boundary (fixed rental fee) from the drivers and also receives remittances from her husband. In a number of cases, households with multiple sources of income could rely on other sources even though a few livelihood activities were affected by the changes in the locality. For example, although Nancy lost her small eatery business due to the clearance, her adult children are working at franchise shops, albeit on contracts, and thus can support the family. In the case of Paciencia, her small business suffered from a loss of customers but she is coping thanks to other limited sources of income such as rent from a room and a pension. This partly explains why people strive to diversify their income sources, in the hope of compensating for the vulnerabilities involved in each activity.

By contrast, those living on subsistence had to use up their meagre resources in coping with livelihood impacts. They sold productive durables like a computer or refrigerator to reconstruct a partially demolished house or to compensate for an income loss. Many had to tighten their budgets, often by reducing some major expenses such as education. Families help each other more by sharing income or dividing up expenses. Others had to borrow money, bearing a long-term burden of repayment and certainly, those who previously took on debt are likely to be least capable of recovering from impacts, having to borrow even more money. The majority persevere as they have done so far by working hard, or harder, and by doing whatever they can do.

In sum, whether or not one's livelihoods are adversely affected in a DID context is a function of livelihood characteristics, namely, the extent to which resources including livelihood networks are formally arranged, rather than a consequence of whether or not a household is poor or relatively resourceful. In terms of coping and recovery, diversifying a household's livelihood portfolio is proven to enhance resilience against external changes like land clearance and population displacement, since it is unlikely that different livelihood activities are affected in the same way or at the same time.

Conclusion

This case study of a railway upgrading project in Metro Manila demonstrates that non-displaced people experience significant changes in their livelihoods, although such indirect impacts may be less visible than the physical movement of displaced people. Empirical findings confirm that the demolition of informal houses, compounded by the mass-scale displacement, have considerably transformed the physical and socio-economic environment that was formed in and around informal settlements. Changes *in situ* unfolded in complex ways, impacting the endeavours of people to address livelihood challenges. Those whose house was partially demolished by the clearance and who had a shop, rental house, or other business space in the informal settlement experienced a tangible loss. A mass population outflow has reconfigured the local economy, in particular, weakening the customer base, and thus has affected small goods and service providers. This demonstrates that DID constitutes a change context where locally managed livelihoods or informally accumulated assets and socio-economic relationships fostered over time are lost. An attempt to understand an external change like DID has identified diverse manners in which people organise their livelihoods and it has become clear that informality has been a predominant local feature.

By suggesting that a developmental change can have far-reaching effects, this study expands the current conceptualisation of development impacts that is primarily centred on displacement. Furthermore, differential impacts among non-displaced people underline that it is hard to obtain an aggregate summary of impacts for individuals and is even harder to compare them between groups. Whilst this raises the need to deploy a disaggregate approach to unpacking the complexity of impacts, it still remains questionable to what extent such diverse effects can be incorporated into the formal planning regime. For a more comprehensive understanding, it is recommended that more systematic research be conducted to encompass a wide range of potentially affected people, ideally in a longitudinal manner that examines livelihood conditions before and after a DID event.

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Notes on contributor

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Notes

1. Some concerns about the population other than the displaced have arisen mostly in the context of dam construction in rural areas (Mahapatra 1998; Scudder 1996).

2. A conservative estimate of 150 million displaced people in the past decade (2001-10) is expected to be easily surpassed in the current decade (2011-20) (Oliver-Smith 2010).

3. According to the official figure, the relocation of 34,904 families was completed in May 2009 (National Housing Authority Relocation Status as of 31 May 2009; obtained 20 July 2009). However, in some areas along the railway, resettlement still continued in 2010.
4. In this paper, the formality of housing is defined in terms of whether or not land is formally accessed, whereby formal land ownership arises from possessing legal documents such as a land title.
5. One Philippine peso is approximately 0.02 US dollars.

References

- Beall, J. 2002. "Living in the Present, Investing in the Future – Household Security Among the Poor." In *Urban livelihoods: a people-centred approach to reducing poverty*, edited by C. Rakodi and T. Lloyd-Jones, xxii, 306. London: Earthscan.
- Beall, J., N. Kanji, and C. Tacoli. 1999. "African Urban Livelihoods: Straddling the rural-urban divide." In *Urban poverty in Africa: from understanding to alleviation*, edited by N. Nelson and S. Jones. London: Intermediate Technology.
- Brown, A. 2006. "Urban public space in the developing world – a resource for the poor." In *Contested space : street trading, public space, and livelihoods in developing cities*, edited by A. Brown and Cardiff University, xxiv, 242. Rugby: ITDG.
- Cernea, M. M. 1995. "Urban Settlements and Forced Population Relocation." In *Development, displacement, and resettlement: focus on Asian experiences*, edited by H. M. Mathur and M. M. Cernea, xvi, 260. New Delhi: Vikas Pub. House.
- Cernea, M. M. 2000. "Risks, safeguards, and reconstruction: a model for population displacement and resettlement." In *Risks and reconstruction: experiences of resettlers and refugees*, edited by M. M. Cernea and C. McDowell, xv, 487. Washington, D.C.: The World Bank..
- de Wet, C. 2006. *Development-induced displacement: problems, policies and people (Studies in forced migration)*. New York: Berghahn Books.
- Koenig, D. 2002. "Toward local development and mitigating impoverishment in development-induced displacement and resettlement." Working Paper No. 8. Oxford: Refugee Studies Centre, University of Oxford.
- Koenig, D. 2009. "Urban Relocation and Resettlement: Distinctive Problems, Distinctive Opportunities." In *Development & dispossession: the crisis of forced displacement and resettlement*, edited by A. Oliver-Smith, x, 330. Santa Fe, N.M.: School for Advanced Research Press.
- Mahapatra, L.K. 1998. "Risks for the Tribal Oustees." In *Development projects and impoverishment risks : resettling project-affected people in India*, edited by H. M. Mathur and D. Marsden, xvi, 296. Delhi: Oxford University Press.
- Mathur, H. M. 2006. "Urban Development and Involuntary Resettlement." In Hari Mohan Mathur (ed.. *Managing resettlement in India: approaches, issues, experiences*, edited by H. M. Mathur, viii, 317. New Delhi: Oxford University Press.
- Mathur, H.M. and D. Marsden. 1998. *Development projects and impoverishment risks: resettling project-affected people in India*. Delhi: Oxford University Press.
- Moser, C. O. N. 1998. "The asset vulnerability framework: Reassessing urban poverty reduction strategies." *World Development* 26 (1): 1-19.
- Muggah, R. 2008. "Protection and Durable Solutions: Regimes for Development and Conflict-Induced Internally Displaced and Resettled Populations." In *Forced displacement : why rights matter*, edited by K. Grabska and L. Mehta, xvi, 261. Basingstoke: Palgrave Macmillan..
- Oliver-Smith, A. 1996. "Fighting for a Place: The Policy Implications of Resistance to Development-Induced Resettlement." In *Understanding impoverishment : the consequences of development-induced displacement (Refugee and forced migration studies)*, edited by C. McDowell, ix, 257. Providence, R.I ; Oxford: Berghahn.
- Oliver-Smith, A. 2010. *Defying displacement : grassroots resistance and the critique of development*. Austin: University of Texas Press.
- Penz, P., J. Drydyk, and P. S. Bose. 2011. *Displacement by development : ethics, rights and responsibilities*. Cambridge: Cambridge University Press.
- Portes, A. 2010. *Economic sociology : a systematic inquiry*. Princeton, N.J: Princeton University Press.

- Portes, A., M. Castells, and L. A. Benton. 1989. *The Informal economy: studies in advanced and less developed countries*. Baltimore: Johns Hopkins University Press.
- Potts, D. 2006. "Restoring Order'? Operation Murambatsvina and the Urban Crisis in Zimbabwe." *Journal of Southern African Studies* 32 (2): 273-91.
- Rakodi, C. 2002. 'A Livelihoods Approach – Conceptual Issues and Definitions .' In *Urban livelihoods: a people-centred approach to reducing poverty*, edited by C. Rakodi and T. Lloyd-Jones, xxii, 306. London: Earthscan.
- Robinson, C. 2003. *Risks and rights: the causes, consequences, and challenges of development-induced displacement*. Washington, D.C.: The Brookings Institution-SAIS Project on Internal Displacement.
- Roy, A. 2005. "Urban Informality: Toward an Epistemology of Planning." *Journal of the American Planning Association* 71 (2): 147-58.
- Scudder, T. 1996. "Development-induced Impoverishment, Resistance and River-Basin Development." In *Understanding impoverishment: the consequences of development-induced displacement*, edited by C. McDoweel, ix, 257. Providence, R.I: Berghahn.
- Shatkin, G. 2004. "Planning to Forget: Informal Settlements as 'Forgotten Places' in Globalising Metro Manila." *Urban Studies* 41 (12): 2469-84.
- UN-HABITAT. 2011a. "Losing Your Home: Assessing the Impact of Eviction." UN-HABITAT.
- UN-HABITAT. 2011b. "Forced Evictions: Global Crisis, Global Solutions." UN-HABITAT.
- World Commission on Dams. 2000. *Dams and development: a new framework for decision-making*. London: Earthscan.