

Managing Housing and Infrastructure Needs for a Fully-Fledged Involuntary Resettlement: the Case of Central Expressway in Sri Lanka

Abstract

Housing with infrastructure needs are basics in resettlement projects having a public stake. As part of a study investigating how these needs can be effectively addressed, this paper identifies the gaps in managing these infrastructure needs in one of the highway construction projects in Sri Lanka namely Central Expressway the phase 1. This case study provides a perspective in exploring the issues encountered by the affected people using grounded theory. The paper presents the recommendations to minimize such gaps. Data was collected through unstructured interviews comprising both the beneficiaries and the government officials. Gaps were mainly found in the measures related to ad-hoc erection of houses, lack of infrastructure facilities, security, safety and health issues, delay and insufficiency of compensation and inefficiency in administrative functions. Some kind of interventionist approach is recommended to enhance beneficiary participation and knowledge sharing in order to reduce information asymmetry and minimise these gaps, the majority of which has been outweighed by the perceived land value. The findings of this research will help detect the existing gaps in involuntary resettlement including institutional inefficiencies that hamper the progress of resettlement.

Keywords: involuntary resettlement, housing and infrastructure needs; policy gaps; grounded theory

Introduction

Land acquired in linear projects often consists of the strip along property frontages (HMT Dharmawardhana, 2017). Some kind of 'interventionist' approach is therefore required to ensure faster resettlement of families displaced due to linear projects such as highways. However, a deep concern is that many of the housing policies are not adequately embedded the reconstruction practices in local realities and people's own preferences and contributions (Brun, Cathrine & Lund, Ragnhild, 2009). By taking into account the limitations and interests of all participants involved in the reconstruction process only a realistic progress could be expected in human resettlement (Barakat, S, 2004). Timely action, being one of the important facets of a housing policy, does contribute not only the social and economic well-being of the affected people (APs) but also the psychological steadiness of these people. Resumption of livelihood is imperative to gender equity and family empowerment (Barakath, Zyck 2011). While reaping the benefits of large-scale infrastructure projects, it is important to recognize, both monetarily and otherwise, the sacrifices that have been made by the people who were displaced "for the greater good". A resettlement project should be proactive in thinking about the ways in which benefits to local communities can be enhanced by the way the project is implemented (João et al, 2011; Wang, 2012; Vanclay et al, 2015). It is imperative to ensure that the people displaced by a

project receive a replacement which should be at least as well-off as they would have been without the project. However, many researches have revealed the governments often invoke the power of eminent domain, to implement expropriation procedures lavishly. Perera, T.G.U.P et al, (2012) argue that these resettlements are sometimes turning into unproductive informal communities. As a result, the people are usually made worse off by being resettled (Frank Vanclay, 2017). Although there is ongoing improvement in the discourse and practice of project-induced resettlement, being resettled is still likely to be an impoverishment risk and have an emotional toll.

This paper attempts to address a part of the foregoing lacuna using a case study. It tells us about the efforts that were made by the administrative entities to address concerns of the displaced, as well as the successes and failures of those efforts, related to a resettlement site located in Mirigama. This study argues that a lack of concern for housing and infrastructure needs has given rise to a plethora of problems such as irregular erections, lack of services, security, safety and health issues, to name a few. Hence, this study is aimed to investigate how the housing and infrastructure needs can be effectively managed in the overall resettlement process. The study's objectives are to identify the gaps in managing housing needs and derive recommendations to minimise such gaps.

Practical implications

A number of studies have identified the gaps in different contexts such as post conflict reconstruction (Seneviratne K, 2017), Southern Expressway (H.M.T. Dharmawardhana, 2017) and (Akira Ozawa, So Morikawa, 2017), expansion of built up areas (Kathryn Gomersall, 2018), remote relocation mixed with another community (Vanclay, 2017), spatial effects (Rogers, S., & Wilmsen, B. (2020), landslide resettlement (PA Vijekumara, 2015) and Norris, L (2020). This study particularly identified the gaps in addressing housing and infrastructure needs in resettlement related to a major highway construction in Sri Lanka. Hence, this paper captures the different viewpoints on key issues, and the delays and difficulties faced in addressing these viewpoints, while presenting valuable lessons to be learnt. It will not only address the outcomes of land acquisition and resettlement, but also provide insights on how the development process could better be improved to accommodate the needs and aspirations of the affected persons (APs). The knowledge emancipated in this study will provide useful insights into resettlement planning, implementation, and monitoring for policy makers, government officials, resettlement specialists, and researchers on social and institutional development.

Central Expressway project

The Central Expressway, also known as the Colombo-Kandy Expressway project will link Colombo and Kandy, duplicating the existing A1 road thereby reducing traffic congestion to a greater extent. The first stage from Kadawatha to Ambepussa (48.2 km) will be a four-lane, divided carriageway with provision for two more lanes in the future). There will be interchanges

at Kadawatha, Gampaha, Balabowa and Mirigama, with fifty overpasses and thirty underpasses along the route. The initial estimated cost of phase one was approximately Rs. 70 bn, with more recent costs estimated at Rs. 158 billion under a concessionary loan from the Exim Bank of China. The investor is expected to fully finance the construction, maintain and operate the expressway, collect the toll and after an agreed period transfer it to the government. The construction of the section from Kadawatha to Mirigama (Phase 1) is scheduled to be completed within the next two years. 6,432 people from 1,742 families have been affected due to loss of landholdings. To-date, the scheduled completion of the project has been delayed by four years.

Methodology

As the management of housing and infrastructure needs in a context of delayed resettlement is absent in the literature, the grounded theory approach is deliberately chosen. It is hoped, the grounded theory is capable of providing more insights into the phenomenon (delayed resettlement) through the explanations based on the reality influenced largely by the impacts of Covid 19 and the subsequent economic recession in the country. Moreover, the grounded theory approach provides flexibility in collecting and analysing qualitative data (Charmaz, 2006). Interviews were selected as the primary method of data collection for this study since they are valuable in exploring a phenomenon in depth. Interviews are acknowledged to be the preferred method of data collection in grounded theory studies (Creswell, 2007). Accordingly, less structured interviews were conducted with the affected people (APs) and civil administrators (Admin) on individual basis who have been directly experienced with the issues of resettlement. The subsequent participants were chosen to follow up the ideas prompted by data. Therefore, theoretical sample technique is used, where the sampling is based on the concepts evolved from the study. Data collection and analysis were done concurrently until the data ceased to reveal any new concept. Interviews were conducted in the month of June 2023 and each interview lasted between 45–60 minutes. The researcher identified and differentiated the levels of concepts that led to establish the links between the concepts. Accordingly, higher level concepts were differentiated from lower level concepts that define the properties of higher level concepts. Attempts were made to do some axial coding in the early stages of the analysis. Where practical, interview data were supplemented by creative visual images.

Findings and discussion

This section discusses the gaps in managing housing and infrastructure needs in resettlement.

Lack of benevolence

From a legal and human rights perspective, expropriation and involuntary resettlement can only be justified when: (1) the project is in the public interest (2) the principle of proportionality is satisfied (when the harm created is proportional to the benefits that derive from the project); (3) when due process has been observed (affected people have adequate access to legal advice and the ability to challenge the decision); and (4) the affected people have been given full and fair

compensation (that they are not worse off) (Hoops et al, 2015; United Nations 2014; BverfG, 2013). However the reality is far away from this conception mainly because of the bureaucratic approach taken by the authorities in dealing with the affected, according to the majority of interviewees. One interviewee whose background is a principal of a school told; *“People must be contacted humanely without any influence, position or otherwise. It is natural that people affected by resettlement will be apprehensive since they have lost their livelihoods and communities and more over they are ill-prepared for complex negotiations over entitlements”*. One interviewee expressed his utter discomfort on the title ‘ex-gratia’ or in Sinhala ‘*karunasahagatha deemanawa*, the title assigned to the compensation. *“Strictly speaking the term gives a wrong impression. We need no special sympathy, only the actual replacement cost as long as it covers a mental compensation for agony that the entire process of resettlement creates. The term disrespects the humanity. We are proud citizens of this country, not kallathoni (illegal migrants)”*.

In all interactions, the first impression matters a lot. One interviewee showed a letter which instructed him to participate in a meeting has the last sentence, in case of absence; it will affect the timely payment of compensation”. *“This is a passive threat”*, the interviewee told. Another interviewee said that *“the Administration is not responding to our letters”*. Yet, another interviewee said *“we had received letters asking at any time we should allow tree cutting, changing boundaries, excavation of soils, etc, while quoting some provisions in the Lands Acquisition Act” This is what authoritative means”*. The interviewees expressed their agony over a statement made by one official at the preliminary briefing held at the temple, *“Lands belong to the king and no one can challenge. Therefore we had to rally around ourselves to stop officers visiting our locations”*. All APs were unhappy about another statement made by an official at the initial meetings -*“Those who are vacating houses faster will be rewarded with a rice cooker, fridge and an oven. “This statement clearly led down the proud citizens who have been living in this village for generations, one old interviewee said. All this has created a gap of understanding between the APs and the Administrators generating agony.*

Lack of choice over land selection

At the resettlement site, a lottery system was used to allocate land parcels to the resettlers with a view to avoid bias and favors. Land plots located close to access roads and the land plots suitable for special needs were not separately identified. This method of plot allocation was perceived as rational and fair by the majority of resettlers. The resettlement site that is located closer to the expressway entrance is considered to be of high economic value especially once the highway is completed and launched. One interviewee told that *“the officers have no other choice to distribute land plots”*. Another interviewee told that *“at least few plots at the entrance should have been allocated to those who were residing in houses facing the main bus routes”*. The officials said, *“We only know how difficult it was for us to find a land for resettlement”*. It is understood that the lands are in short supply.

Poor living conditions during the transition

It was found that households spent long periods of time between official notice to evacuate the premises and the actual displacement. This prolonged transitional phase was disruptive and traumatic for them and generated anxiety, anger, frustration, and hopelessness. Though this matter has been quite evident, only a handful of research locally done such as (Dharmawardane HOMT, 2017). As a result, the households with persons needing care to look after babies, the aged, and the sick were particularly affected. Although each affected household is supposed to receive a house, many APs preferred the option of receiving cash to build up their own house elsewhere. However, until they get a sufficient amount to kick start erection, they had no choice but cheaply poor temporary structures. Some households spent more than two years in such poor and unhealthy dwellings. The elderly found the disruption caused by displacement and relocation too much to cope with. *“We are really despite about the living conditions. We have now fallen “kabalen lipata”- out of frying pan into fire’* (AP).

None of the resettlement sites had been developed to the levels required when resettlers arrived to establish their dwellings. Although the locations of most of the resettlement sites were acceptable to the displaced households, the provision of basic facilities such as water, electricity, and access roads was lacking for those who first moved to these resettlement sites.



Figure 1: Delayed electricity, tarred road and drainage

Figure 1 shows the current status several months after this survey. The government was to provide essential services before the relocation of affected households, but in most cases the provision of such facilities was delayed by more than two years.

“At this resettlement site, relocation planning was poor and as a result, the infrastructure facilities were incomplete when resettlers moved into their new houses” (AP). The agony and frustration that the APs experienced during the transition phase continued to the early relocation

phase. Five households have been resettled, but only a well they dug provided water. Since people in these areas mainly depend on well water, water facilities have not yet been provided

Figure 2: Half erected house with no finishes and protection from weathering effects



through a community well. Inadequate water facilities appear to have resulted from the lack of finance that led to excluding the construction of domestic wells within housing reconstruction. *“Our well has water throughout the year, drinkable but edges tend to collapse.”*(AP). It seems some measures are required to stabilize soil for long run use. Poor access roads, flooding during the rainy season due to poor land leveling are some of the issues identified. There is a

widespread dissatisfaction among the resettlers, however, with regard to the quality of access roads, drainage, and water supply. The administration attributed the high cost of developing resettlement sites. Since the specification of habitable finishes limited the door and window sashes for a bedroom, other doors and windows were left without sashes and thus led to a lack of protection from wind and rain (Figure 2). Some APs covered the doors and windows with temporary materials and they blamed this on the limited compensation granted.

Delay in the issuance of title deeds

APs have no idea as to handing over the resettlement site to the local authorities but confirm that they have not received the land title deeds. This may be because the issuance of title deeds to the resettlers is never been a priority of the authorities, as it was involved in land acquisition and relocation. Difficulties in land surveys and valuation, delays in landownership transfer to the authority from the owners, and the delays in registration may have also contributed to this delay. *“We are not in a position to do any permanent erection without deeds in hand”*, all the interviewees said. *“As a family, we tend to settle somewhere else and we have been waiting to sell this 12 perches to meet the cash requirement but delay in the issuance of deeds has halted everything”* (AP). APs who have secured a plot of land and who wish to erect their own house get no priority in the queue for planning approval at the local government authority. *“We have been in queue for three months to get the approval for the proposed house due to an issue with the master plan, which is beyond our control”*. *“It is surprising to see that the authorities push families for faster resettlement to vacate the right of way to the highway but exert no intervention to get the planning approvals done for the applicant”* (AP). As Brun, Cathrine & Lund, Ragnhild, (2009) mentioned, some kind of interventionist approach is indispensable where the officials have a pivotal role to act as an arm of liaison in order to ease out these legal barriers.

Insufficiency and delay in compensation

It is natural that the APs are expecting compensation on par with payments made in previous projects. APs have been exposed to various stories surrounding the previous project of similar nature which is Southern Expressway. Compensation is a sensitive issue when private properties and settlements, whether small or large, are disturbed. As such, it is imperative to have a matrix in place that proposes the basis of eligibility and extent of payment for all types of losses (e.g., land, housing, businesses, and other income sources, temporary loss of income, displacement and moving costs (Jayalath, 2016). The next step is to develop entitlement guidelines to cover all project-affected people, including non-titled persons, and ensure that the common needs of the masses are fully met. Those affected should be fully informed and closely consulted on resettlement and compensation options. Compensation, as said earlier, is one of the key considerations where the government authorities must be insightful. Therefore, it is important that the eligibility matrix works on a fair and humane basis covering, though it is impossible to replace the mental agony and depression monetarily, the key cost components that are ascertainable scientifically.

Many interviewees were of the strong opinion that they have not been reasonably compensated. *“We have been blessed with only the basics needed to shift the location. We received peanuts for crops and vegetation”*. For example a cost of a house ascertained merely on a square metre basis does not necessarily amount to a fair compensation. Costs depend on a myriad factors such as type of construction, height and volume, number of rooms, types of finishes used, external amenities, and locational factors that heavily influence the quality, workmanship and performance characteristics inherited in these houses. There will also be professional fees for design, supervision and a fee for government agencies including stamp duties. Land too has variables such as road frontage, local government payments, notary charges, and stamp duty. *“None of these variables have been considered in the valuation, (AP)*. In a nutshell, the value should replace the loss due to displacement and not the purchasing value of the property decided by an individual valuer. *“This is involuntary resettlement and not the result of a buying and selling transaction”*, (AP).

In spite of the importance, the success of housing reconstruction is hindered by a number of problems, such as delay in paying compensation (Figure 3). The principle that governs for the land acquisition is payment of compensation no better off or worse off. *“I have been looking bleak after I vacated my 100-perch ancestral land four years, and yet to receive compensation from the Government. At a meeting held in 2014, the Government promised fair compensation and said we would be compensated in line with the market value of the land, after the villagers’ signatures indicating their agreement to release the land to the Government were obtained, the villagers had to go chase the officials, seeking compensation and other relevant details about the project. I was not the only one affected; hundreds of other families whose lands were taken over by the Government for this project”*. While officials were preparing documents for compensation, I had noticed that my properties had been undervalued and estimated at a lower amount to what they were promised in 2014. Initially, they said they will compensate us for everything including trees but in 2016, they prepared estimates at lower prices. I opposed the amount, and then the officials threatened us saying that the lands are owned by the Government and therefore, they could remove us at any time,” he said. *“After they threatened us, we became afraid and thought we would lose the lands and not be given a cent from the Government. Therefore, we signed the papers agreeing to the Government’s estimates. But up until now, the Government has not given us a cent,” (AP)*. This payment of compensation is a question in most of the time, and there are grievances by landowners saying mode of compensation is not satisfied due to reasons of the insufficient amount of compensation or not filling the requirement they used to enjoy before the acquisition (Dharmawardhana, HMT, 2017).

Security, safety, health and physical issues on isolated lands

Sejal Patel et al, (2015) argues that the displaced poor households have been further impoverished as a result of limited attention. The APs who are relocated in the first instance of opening the resettlement site are subject to security, safety, health and physical issues posed by the isolation itself (Figure 4). This is understood when there is a new human settlement that

requires faster orientation, both physical and psychological. New comers are subject to vulnerabilities, both safety and health such as lack of access to safe drinking water and sewerage, inadequate solid waste management etc. M. Sirajul Islam, (2016) showed that the safe distance from the tube well to the pit latrine varied from site to site depending on the horizontal and vertical distances of the tube well as well as hydrogeological conditions of a particular area. Pit latrines are generally constructed close to tube wells, and this is mainly due to space constraint, hygiene and convenience. Widespread use of pit latrines in rural and suburban areas makes them a major source of groundwater contamination. Effluent from pit latrines contains pathogenic bacteria, viruses, protozoa and helminths. The pathogens from the pit latrine may filtrate through the ground (unsaturated and saturated) and ultimately reach the groundwater. One interview told that *‘We have no option. Do everything within the 12 perches given.’* There are 63 plots of land in an extent of 4 acres of site where in the worst case, the 63 toilets and 63 wells may cause health hazards unless a proper action plan is set out from the beginning.



Figure 3; Fire caught land (Source of fire unknown)

Dengue is one of the major public health problems in Sri Lanka. Its outbreak pattern depends on a multitude of drivers, including human mobility. The burden is increasing and considered driven by population densities, human mobility, vector proliferation, and climate variability. (Prasad L., 2021). The Environment section of the Sri Lanka Police, Grama Niladhari of the relevant division and the Public Health Inspectors are chasing behind uncleared areas including isolated plots of lands having a growth of shrubs. *‘We have to look after a land having no legal stake. It is just assigned in a letter (AP).’*



Figure 4: Protection of plants from wild boar and porcupine attack

It is witnessed that there are a couple of wells dug and unused for some time with no safety fence around. Shrubs surrounding these wells and pits restrict visibility in lightly thick jungle. Abandoned wells pose numerous safety concerns every day that don't receive as much attention as a dramatic rescue or fatal accident. Pump houses make some abandoned wells easy to spot. Others are hidden beneath grass and brush. These hidden holes can lead to personal injury or equipment damage (Figure 6). Worse yet, many hand-dug or bored wells are large enough to trap an unsuspecting child, wild animal, or pet. Abandoned wells also threaten groundwater quality. Layers of soil and rock that cap groundwater supplies naturally filter out silt, bacteria, and some



Figure 5: Abandoned well

chemicals

One interviewee stated , ;*I had to call upon the authority to resurvey the plot of land and mark the pegs demarcating the boundaries again due to some workers who had come to install overhead electricity lines. We have no idea when they came*". These labourers have dumped excavated earth into plots belonging to APs damaging timber pegs. There is no way of contacting each other for any information. Lands unattended may be subject to various other problems such as dumping garbage, debris etc in the neighborhood. Wild boar and porcupine attack to newly rotted vegetation such as coconut etc was chiefly involved in crop raiding (Figure 5).

Difficulty in enabling works

The majority settled in the same village for many obvious reasons such as the physical attachment like school, temple, etc and psychological attachment such as relatives, friends, familiarity and sense of security etc. Though these relocation efforts cannot be a 'boom' as such, in its strictest sense, this essentially entailed new constructions or at least renovations of the existing houses where skilled labour is found to be indispensable. Masons and carpenters had a big involvement in this initial change-over and the building materials are in a short supply. A couple of interviewees told that *'We have been chasing 'basunnahes' (skilled labourer) who grab every job they are invited. It is a windfall to them as they can demand high process. Even with high rates, they do not regularly come and work. Indeed they collect more money than they do'*". In the construction trade, this is termed as front end loading. In Sri Lanka, the construction labour is scare, costly, informal organized and seasonal.

Enabling works are temporary works of preliminary nature such as site fencing, site accommodation, temporary electricity, water and sanitary requirements to enable the contractor to kick start the erections. At this juncture, the labourers who will come from other areas will have to stay full time at site. *"luckily we got electricity almost after six months and it is a big achievement"*(AP). Delay in facilitating the site with electricity and water has discouraged APs to relocate housing. Sanitary facilities were identified as important within the minimum housing requirements. Accordingly, resettlement programs should ensure the protection from disease. Nonetheless, APs in the resettlement site has left out sanitary facilities. Water facilities have not been provided through rebuilding some community wells. There is one big well unused for some time. Domestic well also served as a means of supplying drinking water and beneficiaries even shared domestic wells when community wells were not available. Nevertheless, some beneficiaries were confronted with difficulties in their supply of drinking water due to the lack of wells close-by. One interviewee said, *"...Drinking water is supplied from a well in the distance. We fetch water from far away"*(AP). Inadequate water facilities appear to have resulted from the lack of finance that led to excluding the reconstruction of domestic wells within housing reconstruction.

Artificial Price hike up in the vicinity

Open market vacillations are a day today phenomenon and resettlement projects have no exception unless some kind of 'interventionist' approach is taken to deal with price escalation. Individual APs have become necessary victims of price escalation when building materials are purchased. APs face a lesser chance to obtain a trade discount when bulk purchases are not possible. In fact, APs tend to purchase materials from time to time in small quantities. *"We have no option but to live with the conditions. However we are very upset with the notion of the general masses that we are economically better off with the project and it is no harm of sharing a piece of cake with us"*(AP). Sri Lanka's economic crisis has forced the government to stop many projects including highways and roads as it cannot afford to continue them without increasing the state revenue. Industry experts say essential building items such as Aluminum, tiles, water pumps, and rain water gutters have been included under the temporarily banned imports, a move to stop foreign currency outflow. *"We have been seriously handicapped by the opportunistic hardware shops selling building materials relatively at a high price"* (AP).

Increase in land value with the economic expansion

All expects a considerable demand for lands, thereby increase of land value once the highway is launched for the public. Since the resettlement site is located nearby one proposed interchange (Mirigama North), the APs are in high contemplation that the prices of their land will go up at a galloping rate. However, this 'dream' can come true only when an isolated site is converted to a developed urban housing scheme energized with water, electricity and other facilities with easy access to the highway. This is possible as long as the APs and Administrative arms work together. Land value depends on accessibility to nearby land uses, implying that infrastructure is the most important components of land value. APs perceive that *"the land value is high as four to five times by now- something which we can be happy about"*. This is a common perception of those living inside and outside the resettlement site. However, as Perera, T.G.U.P et al, (2012) contended, a doubt is cast behind an unproductive site with informal, irregular and ad-hoc physical expansion.

Recommendations to minimize the gaps

This section discusses the recommendations to minimize above gaps in managing housing and infrastructure needs in resettlement.

Treating with respect

Morality and respect are immeasurable and priceless. Lack of sensitivity and respect for humane concerns has been evident throughout the entire process. Even where project proponents have obtained legal rights over land, any displaced families have human rights under international law that must be fully respected and fulfilled by project proponents and contractors. One interviewee told that *"the style of writing letters in a government set up is such that they quote various rules to induce people"*. Participation in planning and managing resettlement helps reduce any fear or obscurity and gives an opportunity to participate in key decisions that will affect their lives.

Resettlement implemented without consultation may lead to inappropriate strategies and eventual impoverishment. Without consultation, the people affected may oppose the project, causing social disruption, substantial delay in achieving targets, cost increases or even abandonment. Negative public and media images of the project and of the implementation agency may develop. With consultation, initial opposition to a project may be transformed into constructive participation. Consultation can be fostered by holding public meetings and identifying focus groups. Planners might draw on participatory problem-solving methods, supplemented by the use of the media in scattered or broad areas.

Fair allocation of land plots

In allocating land plots at the resettlement site to displaced households, several difficulties have been encountered. The completion of the land acquisition process, site development, and the construction of infrastructure facilities at resettlement sites has taken longer than anticipated. The next best alternative to cope with this issue is the mode of adequate cash without land where the APs can self-relocate. Many displaced households who originally opted to move into resettlement sites have decided to accept the incentive payment and to self-relocate. This helped the government to reduce the number of resettlement sites to be developed saving money for resettlement site development.

A key best practice is to engage the displaced households in selecting locations for resettlement sites. As the APs requested, the administration negotiated with private plantation companies to acquire land for resettlement sites in suitable locations not far from the communities of the displaced households. Affected households in about 70 villages were allocated land at the resettlement sites within the range of 100 meters to 2 kilometers from their original village communities. This was possible because the administration conducted continuous and meaningful consultations with displaced households and because it vigorously searched for suitable land in the vicinity of the displaced communities. The results of such consultations and search led to the selection of resettlement sites to the satisfaction of the resettlers.

Attention at Transition

It is required to hand over resettlement sites to local government authorities such as Pradeshiya Sabha and urban councils to manage and maintain common services. Funds must be available to local authorities to complete outstanding infrastructure works at the resettlement sites, but the local authorities did not have the capacity or experience to attend to such works. The key reason for this was the absence of linkages between the government bodies. *“the level of liaison with the local government authorities is not known to them”* (AP).

Uncertainties during the pre-relocation phase are significant causes of impoverishment risks among the households likely to be displaced. Accurate and detailed information of the resettlement projects need to be communicated in the early stage of the process to avoid the unnecessary impoverishment risks of affected households. Clear transparent guidelines on

entitlements and compensation for each displacement type need to be disclosed and discussed with affected communities. Cash payment for rental allowance or cash value of remaining lease, assistance for finding alternate rental accommodation and support for income losses and during transition period will ease out the problems related to transition. Some beneficiaries had difficulties in accessing drinking water facilities due to the salinity of water and lack of availability of safe drinking water facilities close-by. By considering the limited finance, interviewees suggested constructing adequate community wells for beneficiaries who had experienced difficulties in accessing drinking water. *“As money is limited, they cannot assist beneficiaries to construct domestic wells. That is true. But at least they should construct common wells for these beneficiaries (PMN)”*.

Fair and reasonable recompense

A matrix that sets standards for compensation is inevitable to avoid anomalies over compensation and unnecessary political interference. Since the policies of typical international funding agencies is, at least, to maintain the level of living under 'without-project' situation, a strategy for maintaining their former standard of living must be of top priority. However, in some cases, construction of a better house exhausted their compensation, leaving little for investment or to restart their livelihoods. Since every beneficiary was provided with a fixed amount of financial assistance, vulnerable beneficiaries were confronted with difficulties in contributing their unskilled labour during construction. This hindered the construction of habitable houses by such vulnerable people. Moreover, vulnerable beneficiaries were presented with increasing difficulties in completing the remaining construction due to their low earning capacity. Interviewees suggested the need for diverse assistance approach in housing reconstruction.

“While everybody is treated almost equally you can treat different households in different ways because their requirements and their issues are different such as widows, female heads, disabled and elderly (AC)”.

Accordingly, it was suggested that vulnerable beneficiaries should be assisted through a vulnerability assistance programme that could be integrated with housing reconstruction. Regarding compensation, the administration has a criterion of payment based upon the value of the assets taken over. *“We have no control over the method of valuation, one official said. “Those who are dissatisfied with the valuation can go upward in the ladder, that is Superlaarc and Courts. Until such time, money will be deposited in a bank and no interests will be paid. Due to special nature of this project, people must vacate their premises. The law is strong enough to push people on resettlement”*, the official confirmed.

Monitoring mechanism

It seems that this particular settlement site has been given less attention and patronage by the government officials as they have some other priorities in clearing up the road trace for the

highway development. Once the APs have vacated their houses and lands, and the lands are made physically available for the APs to kick start the erection of their new houses, the most wanted segment for the highway construction is considered done. Unlike many other resettlement sites, the monitoring part has no significance. This inadequate monitoring has hindered the habitability of resettlement housing.:

“The technical officer passed the relevant installment to our account, other than that they did not visit to supervise during construction. We withdrew money from our account and paid for the masons. Even after construction, so far no one came to see these constructed houses (AP)”.

It also appears that post occupancy evaluations (such as this study at grass root level) have not been carried out any of the agencies having a public stake. This supports previous research, which suggests that the absence of post occupancy evaluation reflects the lack of interest in beneficiary satisfaction (Barakath et al. 2004). Lack of self-management of beneficiary desires prolonged their living in temporary housing which is in a way linked with inadequate monitoring. Therefore, effective monitoring is significant to establish the habitability of new houses. Since post occupancy observations and evaluations help identify the gaps in construction monitoring, administrative entities also have a role to play. *“Indeed, we must do post occupancy observations and evaluations to identify the issues in their habitation. Then they should avoid these issues subsequently (PMN)”.*

Beneficiary awareness

Beneficiary awareness is of utmost significance in any kind of resettlement where the information asymmetry can in most cases act as a barrier for soft landing. In its technical sense, soft landing is the gradual handover of a site with a period of professional aftercare. Ideally, it boosts up awareness among the APs on the matters of common interests such as minimum housing requirements, design cost optimization, cost control and technical advice on maintenance of common facilities as appropriate. Nevertheless, awareness regarding APs contribution is appeared to be lacking. As opposed to expending all money in one-go that received from time to time, some beneficiaries has wisely acted as befits the circumstances when they got to know that money is a hard resource. These APs have used their second hand materials such as timber, roofing sheets, water gutters, and almost every material dismantled and reusable, to the extent where possible. *“Enabling individual households to customize their property by re-using existing building materials is a big thing (AP)”.* However, the transactional cost involved in the dismantling, transport, cutting wastage, and the obsolescence of materials has severely limited this approach. As the beneficiaries’ own labour contribution was specifically important to accomplish minimum housing requirements within the limited financial grant available, the hiring of skilled labour has also hindered the accomplishment of minimum housing requirements. *“Masons are constructing my house with unskilled labourers. Masons charge high rates (AP)”.*



Figure 6: Half erected house with no funds in hand

Furthermore, the beneficiaries demonstrated a lack of awareness regarding habitable finishes. As opposed to settle in habitable finishes, beneficiaries' desire was to fully complete the housing which was not possible with the limited financial grant. Inadequate consideration of low financial gain, a livelihood support package is suggested to enhance the beneficiaries' capacity to generate their own income so that they could complete the remaining construction while occupying the house being rebuilt (Figure 7). Nevertheless, some beneficiaries experienced difficulties in completing the remaining construction due to the low financial income.

"I am a fish monger. I earn Rs500 a day. This is even not enough for the food expenses of the day.

The main problem we face is having not enough money to complete the house (AP)".

Therefore, interviewees suggested that reconstruction of habitable housing was not successful for low income beneficiaries. Lack of completion of the remaining work hindered the living of young women in particular due to the lack of security and privacy. On the other hand, inadequate irrigation facilities limited those beneficiaries who relied on agriculture for their living.

Architectural inputs

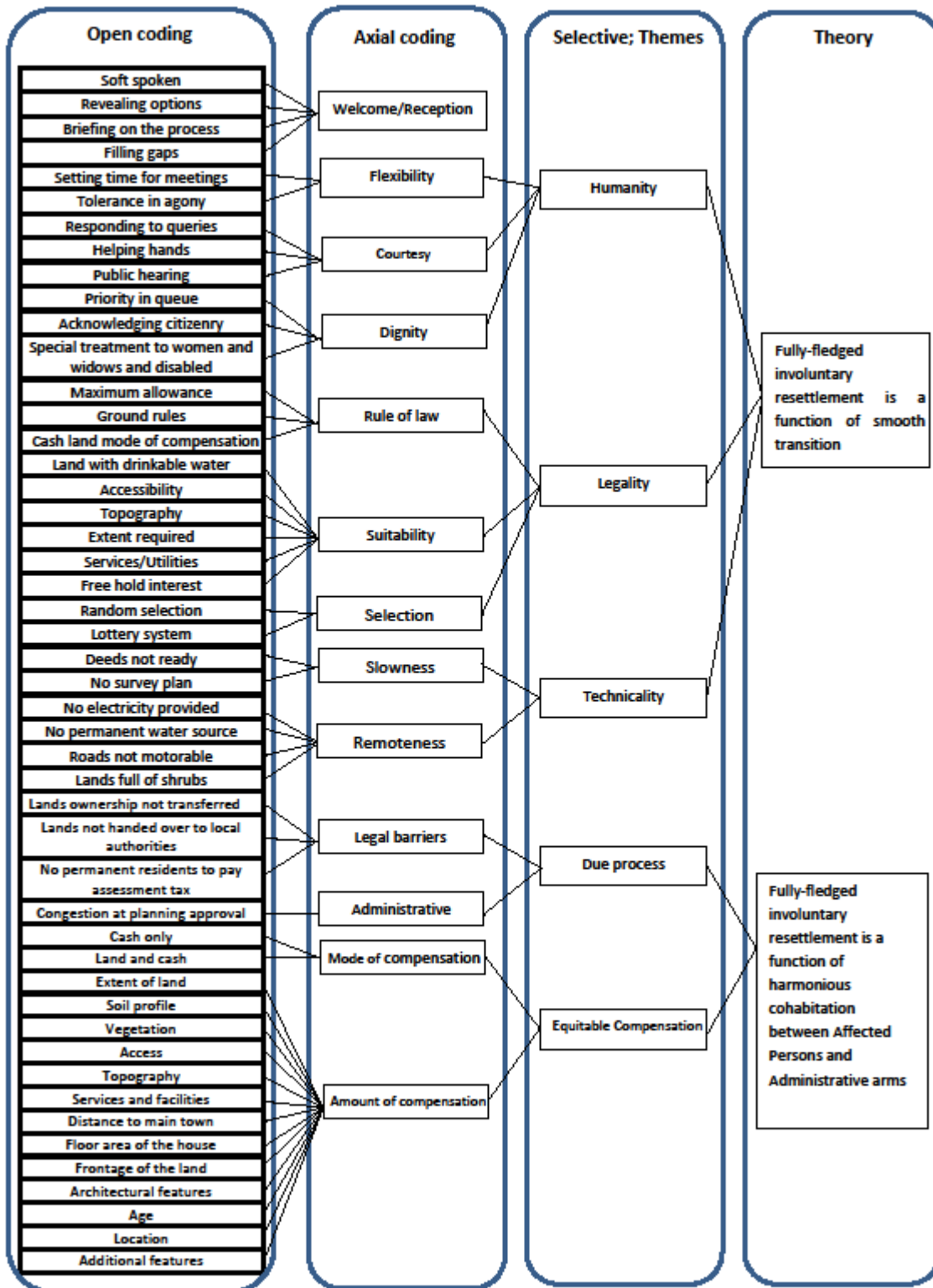
The law is clear in that the minimum housing requirements have been established under several strata such as condominium, housing schemes, private houses etc in the capital, suburbs and townships. Nonetheless, these minimum housing standards appeared to be unverifiable. This has been observed in many other studies (Seneviratne, et al, 2017). One of the unique features in this resettlement site is that the government is offering the land only and the APs are given full liberty to have their own house erected according to their individual/family aspirations. Unlike the findings of the research done by Seneviratne, et al, 2017, the APs are free to make their own design according to their traditional customs and beliefs. However, the APs have no idea as to how they should manage the house erection in terms of a project that entails an architectural language. Some interviewees proposed the government intervention on educating them the housing standards while some of the interviewees opposed on their previous experience working with the government officials. It is seen however that a gap of knowledge on articulating the end user requirements within the cost, time and quality parameters exists. This supports previous research, which suggests that the lack of technical oversight during construction led to poor quality housing (Barakath et al. 2008). This gap of knowledge has led to a cost overrun, slowness in resettlement and lack of modern architectural inputs. These newly developed housing

standards appeared to have considered a wide range of aspects relating to housing but a lack of consideration.

“It is important to get the contribution of beneficiaries, while they also benefit. That is why capacity building programmes during the reconstruction is important. Thus people can be trained on the job. Meantime, the government must give patronage the resettlement from the project management perspective. There are many aspects of building that must work together to produce a buildable, aesthetically pleasing, useful, code compliant building which the owner will be able to use to his advantage for many years. (PM)”.

Grounded Theory aims to develop a theoretical framework that is grounded in the data, which enhances the validity and reliability of the research findings. The iterative process of data collection and analysis also helps to ensure that the research findings are reliable and robust. Grounded Theory can generate new and original insights into social phenomena, as it is not constrained by preconceived theoretical ideas or hypotheses. This allows researchers to explore new areas of research and generate new theoretical frameworks. The data analysis of the first interview, directed the next data collection. Accordingly, the researcher built upon the previous analysis using the data collected through the second interview and so on. The alternate data collection and analysis led to validate and enrich the research findings considerably as it allowed for follow-up on the concepts emerging from previous interviews. Picture 1 offers this conceptual abstraction as follows.

Picture 1. Conceptual abstraction



As such, managing housing and infrastructure needs in resettlement carefully requires working out strategies in response to the challenges posed by the characteristics of the displacement. As part of a main study exploring how housing and infrastructure needs can be effectively managed in the context of highway construction, this paper identified the gaps in managing housing and infrastructure needs and recommendations to minimise such gaps. It is unscrupulous to see that the aspect of human respect is missing in the overall resettlement process, mainly because of the bureaucratic working culture in the administrative entities where the decisions are taken with no public hearing. In one of the latest researches (Lin, A.T.; Yao, K, 2023) it is contended that the project proponents should participate in any resettlement site selection to ensure it is optimal. However, lack of choice over land selection is one such element where the administrators say they have no choice other than going for a lottery system. However it seems it does create some disparity in distributing lands. The issue of poor living conditions during the transition has been evident partly because of delay in issuing title deeds and delay in handing over resettlement sites to local government authorities. The impacted villages should not be relocated and resettled until the completion of the housing infrastructures in the resettled site. Accordingly, all fundamental infrastructures and other basic requirements need to be ready. While issue of title deeds has created delay in conferring legal ownership hampering any permanent touch upon the lands, the issue of delay in taking over the site by the local municipality has created a technical barrier to provide facilities to the site, posing further issues on security, health and so on. Ultimately the APs have become victims by the circumstances. The gravity of the issue of insufficient amount of compensation received has compounded by the delay in receipt of compensation and as a result, the APs are facing artificial price hike up in the vicinity.

In addition, APs operate in isolation so that the issue of information asymmetry is visible. Lack of shared effective knowledge and lessons learned was also evident. Moreover, it was revealed that some of the beneficiaries suffered from a lack of drinking water facilities. A lack of protection from weather resulted from the absence of door and window sashes and poor quality materials; and a lack of protection from structural hazards resulted from the poor quality structural materials and the absence of habitable finishes affected the overall habitability of housing. Monitoring during construction was inadequate while beneficiaries' awareness was not sufficiently raised regarding the minimum housing requirements. Furthermore, due consideration was not given to the architectural inputs. Professional involvement was also lacking in designs and estimates. Strategies also need to be developed in providing additional support for vulnerable beneficiaries such as female headed households. Accordingly, the interviewees highlighted the need for developing a vulnerability assistance programme integrated with the resettlement programme. Adequate beneficiary awareness raising was emphasized in order to meet the minimum housing requirements within the limited cash available. Agencies need to ensure an effective monitoring procedure during construction to enhance the habitability of housing. Good practices and lessons learned from previous similar projects need to be effectively used to enhance the success of managing housing needs. Provision of adequate drinking water facilities was asserted as essential while the restoration of the existing well was suggested in order to

enhance the livelihoods. These gaps and recommendations inform the policy development in post conflict housing reconstruction to enhance the sustainability in resettlement. However, it should be noted that the findings are based on Sri Lanka findings are contextualized to Sri Lanka. Grounded Theory is a context-specific method, which means that the theoretical frameworks developed through Grounded Theory may not be generalizable to other contexts or populations. This can limit the applicability of the research findings. Nevertheless, rich data enables to make judgments about how far the findings would apply to other comparable instances. Involuntary resettlement includes land acquisition, relocation, and rehabilitation of sources of income and livelihoods. Thus, the key message of the involuntary resettlement safeguard policies is that land acquisition and involuntary resettlement cause impoverishment, unless carefully planned mitigation measures are in place to combat them.

Conclusions and Recommendations

With an overview on the topic of project-induced displacement and resettlement, the case study raised a couple of key issues facing resettlement practice: under what conditions should projects and associated resettlements proceed; how resettlement can be a catalyst for economic and social development, what constitutes fair and reasonable compensation; can livelihoods be restored or improved; what is the role of benefit sharing; and in nutshell, how resettlement practices can be value-added. However, the problems they faced when relocating and trying to regain their lost livelihoods are universal and in some cases, unique. Some of the issues are project specific. Eventually, the matters would have been fully addressed in most cases, in terms of access to new land, the trauma of living in temporary accommodation for considerable periods of time, the psychological issues of loss of ancestral homes and properties and associated social status etc.

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