

**INVOLUNTARY DISPLACEMENT AND  
RESETTLEMENT DUE TO EXPRESSWAY PROJECTS  
IN SRI LANKA : AN IMPACT ASSESSMENT**

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**August 2020**

## **DECLARATION**

I declare that this is my own work and this thesis does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or Institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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Signature of the Supervisor:

Date: 14.08.2020

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## ABSTRACT

Unlike many developing countries in the Asian continent, Sri Lanka has a rapidly developing road network. Currently it stands at 112'997 km and is been extended as we speak. Given the magnitude of the road density, it is correct in saying that it is yet inadequate to meet the demands of the growing passenger and freight transportation needs. In order to meet this demand the government is constantly looking at alternatives. Therefore, the government has prioritised the improvement of the entire road network by 2020. While this development is indeed a positive step economically, in order for this development to be carried out land extent in residential areas is required, and more often than not these lands are used lands. Because of that involuntary displacement and resettlement has become a huge issue. This research evaluates the impacts of involuntary displacement and resettlement due to expressway construction in Sri Lanka and is based on Stage 01 of the Central Expressway project. The study is intended to achieve four (04) objectives. The literature review was done based on the themes of the study. The study was based on the Cernea's IRR model (1990), its acts, policies, and procedures relating to involuntary displacement and resettlement. The Land Acquisition Act (LAA) and National Involuntary Resettlement Policy (NIRP) were used herein. The study was carried out in a survey design, through a questionnaire and validated through interviews. A random sampling method was used in order to select 100 Project Affected Persons and another 20 interviewees. These respondents took the questionnaire in order to gather the necessary information. Through these interviews it was ascertained that many issues are in fact on the rise due to involuntary displacement and resettlement. While some of these impacts are indeed negative, there are others which produce a positive outcome. These include the fact that many of these affected families are able to improve the quality of their houses. While of the flip side they have lost the green environment which they were previously residing in, and its natural calm environment. While some of these residents survive of agricultural farming they lost their livelihood though these development projects. This in turn resulted in physiological and psychological stress, which resulted in an unhealthy family environment. However some best practices were identified through the research which included the land-for-land compensation schemes which should be a major option for resettled individuals. The main cause of these impacts is the lack of compensation. The need for proper resettlement planning was identified though the research, as this is currently a slack area. The need to develop mechanisms for people's participation in proper resettlement planning and implementation needs to be updated and all acts, policies and procedures relating to this relooked at in order to carry out successful resettlement.

**Keywords:** Infrastructure, Involuntary Displacement, Resettlement, Central Expressway, Project Affected Persons

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

RDA – Road Development Authority  
ADB - Asian Development Bank  
MASL – Mahaweli Authority of Sri Lanka  
PAPs – Project Affected Persons  
PAHs – Project Affected Households  
17 – Government Valuation Gazette number  
LAA - Land Acquisition Act  
NIRP - National Involuntary Resettlement Policy  
AP – Affected Persons  
IDP – Internal Displaced Persons  
DIDR – Development Induced Displacement and Resettlement  
IRR – Impoverishment Risk and Reconstruction Model  
NPPC – Policy on Payment of Compensation  
SPS – Safeguard Policy Statement  
SEDP - Southern Expressway Development Project  
GoSL - Government of Sri Lanka  
ADB - Asian Development Bank  
RIP - Resettlement Implementation Plan  
LERP - Lyari Expressway Resettlement Project  
CEP – Central Expressway Project  
LARC - Land Acquisition and Resettlement Committee  
RII - Relative Importance Index

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Background

As described by Flumer, 2009, (P30-32) the definition of infrastructure could be described as structural foundation which supports a society and helps in to develop. There are many components which fall under this term 'structure' these include the road network, water network, electricity and telecommunications networks. These are the support systems which are visible and hence is deemed as the physical commodities which are entwined in order to support and develop a society. Accordingly, infrastructure development means basic physical and organisational structures and facilities that are needed for upgrading and sustaining the livelihood and societal, economic, political, environmental, and cultural development in a country.

While many scholars have defined the term 'expressway' in many varied terms, the definition provided by Wright (1996) seemed to be the most pat. In his definition Wright concludes that an expressway has a very simple definition of a network of high speed roads which have controlled access into and from it. These Expressways have become a necessity in the development of a country as it provides infrastructural facilities necessary to attract investment (Dash, 2009). Therefore, transportation projects need high population density areas. When widening the roads, according to the geographical location land acquisition is a major step and also it is the first step in this process (Aggarwal & Mohammad, 2008). Most of the lands are used lands. Because of that resettlement is the main issue. Therefore it is very essential to evaluate the impacts of involuntary displacement and resettlement due to Highway construction projects (Zaman, 2002 & Kurruppu, 2000).

“Involuntary resettlement consists of two (02) closely related yet distinct processes: displacing people and rebuilding their livelihoods” (Asthana, 1996). The involuntary movement or displacement which may come about due to natural or man-made disasters, war, and conflict and in the name of development is defined as resettlement. He also went on to add that forced movement also could be added into this category (Kurruppu, 2000). There are always two parties involved in this resettlement process

who are the affected people and the implementers or authoritative body. In most instances both of these individual parties are throw in and try to make the best of the situation. While the affected people try to look at it in a positive light and authorities try to best provide the basic needs which are necessary in order to make a fair and easy resettlement (P.Fernando, K. Fernando, & Kumarasiri, 2009)..

Mainly there are two (02) resettlement methods internationally and locally. However, the non-presence of any of the proper methods leads to local contexts with many problems arises. According to the Kuruppu (2000), Cernea (2006, 2007, 2008 & 2015), Perera. (2014), and RDA project report (2017), following issues were founded. Such as; Meager compensation (insufficient compensation), Cultural Problems – Different cast and cast reluctant to living together, Loss of livelihood, Lack of facilities, Increase in stress, Increase health problems, Secondary displacement – There are many people who come from surrounding areas for employment in the land which are been used for development. While the authorities only take into consideration the people living in the area, they should also not forge the people who visit the area in order to sustain a livelihood. The loss of a livelihood imparts undue stress on these folks as they do not have a way and means of providing for their families. As thoerased by Das & Shukla (2011); Bennett & McDowell (2012) resettlement in general whether it is voluntary or involuntary creates an emotional tug on the person, as they have grown roots and have many memories in that particular area. Resettlement may destroy existing patterns of social networks and cohesion because people are separated due to the displacement (Cernea, 1997; Robinson, 2003).

Those two (02) resettlement methods internationally and locally are providing land and monetary compensation. Providing land means providing land for resettling the victims (Dwivedi, 2002). An example is Lyari Expressway Resettlement Project (LERP), This project was studied in depth by many scholars and many theories were ascertained though this project. However Stanley (2004) stands out among them, he mentioned that while an astounding 25,000 + people near these lands were made homeless due to this project, the areas of Hawke's Bay, Baldia and Taiser Town were used as resettle them. Some of these areas themselves were newly developed settlements. (Stanley, 2004)

While there are many studies carried out with regard to resettlement programs around the world, Gautam, Er & Dangol, Susheel, (2005) carried out a study on the displacement of approximately 3500 indigenous people who were affected by the Kulekhani hydroelectric project in Nepal. While resettlement lands and houses were not provided to these folks, instead a monetary compensation was given to them. This is also considered a fair settlement under the resettlement laws.

There are many resettlement policies available in different countries. With the land extent reducing due to urbanization and development in many South Asian countries, the law has also been thus adapted to offer monetary compensation rather than resettlement plans which include land and housing. (Perera, 2014). Most of the issues are arising due to the lack of compensation in the resettlement process. However, there is a problem in the current scenario and the local context. The absence of this kind of policy could lead to many issues as discussed above.

The development goals of the local government in order to make Sri Lanka not only the most sought out tourist destination but also a developed economical hub with modern conveniences, several large scale projects were undertaken. These projects extended into the areas of sea, air, road, power and telecom ([www.ccisrilanka.org](http://www.ccisrilanka.org)), for which a substantial funds have been allocated. While throughout history Sri Lanka as periodically embarked on such mega scale projects, the Mahaweli Development project; is by far the largest multipurpose national development program. Other include the Southern Expressway Project, Colombo–Katunayake Expressway Project, etc. Ongoing infrastructure development Projects of Sri Lanka are, Port City Development Project, Uma Oya Development Project, Condominium Development Project, Central Expressway Project, etc. Most of the projects were included with the resettlement of the people.

According to the RDA, a country's development could be determined by its infrastructure developments. While the projects require substantial funding there are three main methods which are used in order to come up with the require funds, they include public funding, private fund or public-private funding (National Road Master Plan–RDA, 2007-2017). Besides, developing countries like Sri Lanka invest national resources worth billions of rupees to develop infrastructure (The Investment Policy Review of Sri Lanka, 2004). It is particularly important to make sure that such a



significant investment achieves its objectives. Good management of such initiatives is essential to achieve these objectives.

Through out history can see that the ‘transport sector’ played a vital part in development and the day-to-day lives of people. Many market places, school, hospitals, social services and work places were centered on these transportation routes and thus these establishments and the lives of the people were lucrative (The Mission Statement of National Road Master Plan, 2008-2017). Further, as mentioned by Road Development Authority ‘these networks of national expressways are established to ensure that necessary mobility and accessibility is established to all citizens, at an acceptable level of safety for the transportation of goods and services’ (Road Development Authority, 2007).

Establishment of a High Mobility Road Network is one of the areas of infrastructure which is also essential. The thirty year old civil war which ravaged the country left the roads in deplorable state. While the country’s main concern was the war, little or no prominence was given to development activities including road development Kuruppu (2000). While the national Road Master Plan was already drawn up, the country was not in a position to embark on such a venture. Hence the end of the civil war propelled Sri Lanka into a development stage. The development of roads and expressways become vital in order for the nation to embark on a new chapter of development (RDA project report (2017 & Perera, 2014).

With an area of around 112’997 km in road density, Sri Lanka been a small island nation possesses the highest road density in comparison to other developing countries. Although 90% of the passenger traffic and 98% of the freight transport use roads, conditions and standards of the roads are not adequate to meet the demand of this rapidly growing freight and passenger traffic. In order to bridge this gap adequate priority has been given to this area, which is expected to be completed by 2020 (ADB Development Effectiveness Brief Sri Lanka, 2012).

As discussed previously when implementing the infrastructure projects in the vast area that project is going to be used as it in the site. Therefore, it is unavoidable; the resettlement needs. These above issues will arise if the resettlement needs will not be addressed properly in the projects. Yet there is an issue of non-presence of proper strategic resettlement leading to this kind of huge problem to the high number of

people. The issue will be arising due to the non-presence of a proper resettlement plan. There are resettlement policies available in other countries. Resettlement methods also available and may be needed to be customized. Though a basis is available in the local and international context, it is not implemented strategically.

This study will take a look at the impacts created by involuntary displacement and resettlement due to Expressway construction in Sri Lanka in a way that it does not have this kind of issue as well to suggest methods of compensation.

## **1.2 Research Problem**

Many development projects such as expressways, hydroelectric dams, city development and even commercial development such as mining has brought about the involuntary resettlement of people residing in the affected areas. While there is no stipulated number with regards to the number of people which may be displaced during resettlement, the number may vary from a few hundred to thousands depending on the magnitude of the project and the land area which needs to be cleared. It is also a notable fact that although many of these people will receive land, a house or monetary gain, through this resettlement they are losing their jobs, livelihood and even their food supply through home gardening etc. Many resettlement issues are arising after in the resettlement areas. Such issues mainly appear along with the land acquisition process. Due to these resettlement issues, the project implementers found difficulties in completing the projects within the project time and also could not do the land acquisition works smoothly and within the time frame.

There are no many previous pieces of research found in the area of strategic resettlement of displaced people due to infrastructure development. Therefore, this study is to assess the impacts due to expressway construction in Sri Lanka. We will also be looking at issues which arise due to resettlement and how these projects could be efficiently "what are the impacts of involuntary displacement and resettlement?"

### **1.3 Research Question**

- What is the process of involuntary displacement and resettlement due to Highway construction projects?
- What are the possible impacts of involuntary displacement and resettlement?
- What are the solutions and problems from relevant expertise related to resettlement activities?
- What is the model that exhibits the positive and negative impacts of involuntary displacement and resettlement happening due to the Central Expressway project in Sri Lanka?

### **1.4 Aim of the Research**

The study aims to evaluate the impacts of involuntary displacement and resettlement due to expressway construction.

### **1.5 Objectives**

- Critically review the aspects of the involuntary displacement and resettlement due to construction activities
- Explain the possible impacts of involuntary displacement and resettlement
- Develop a model exhibit the positive and negative impacts of involuntary displacement and resettlement happening due to Central Expressway project in Sri Lanka
- Propose solutions to the identified impacts related to resettlement activities

### **1.6 Limitations of the study**

The sample size which is used thought this research in order to ascertain the research problem is of a small quantity, hence this cannot be ascertained as the general findings. This is only related to the Central Expressway project (Stage 01). There are three (03) Highways in Sri Lanka. Yet, due to the time limitation it is limited to this particular project.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter reviews the impacts of involuntary displacement and resettlement due to expressway construction. It includes; Definitions of Involuntary Displacement and Resettlement, Types of Resettlement, Impacts associated with Resettlement, Legal background of involuntary displacement and resettlement, Practices in Sri Lanka Related to Southern Expressway Development Project and involuntary displacement and resettlement Tpractices in other countries.

#### **2.2 Definitions of Involuntary Displacement and Resettlement**

Involuntary displacement and resettlement have been defined by different people in different ways. *“Involuntary Displacement causes the resettlers to have to adapt to their new environment, be it biophysical, administrative or social and is brought about though a planned or unplanned shift of people living in a specific area. This exercise causes undue stress to the resettlers, also known as APs or Affected People”* Woube (2005). As mentioned by Jubril (1990) this shift of people could be either voluntary or forced. Akpanudoedehe, 2010 describes it – as the forced or voluntary shift of people from their existing habitat to a new habitat and this movement could bring about unnecessary consequences therein. Whereas the COBUILD Advanced English Dictionary, provide a definition which states that the movement of people to an alternate place due to certain restrictions which have come about to their existing living place is what is known as resettlement.

According to the Sri Lankan author defined *“An external shock in the form of a natural disaster, development project or conflict is known as Involuntary Displacement. While the movement one place to another could be described as resettlement”* Ariyaratne (2011).

Ariyaratne (2011) further states that the term resettlement is very poorly described and taken for granted, as it covers a much larger spectrum of consequence. Whereas Fonseka(2010) states that in the case of IDP’s the link between the word ‘resettlement’ and ‘return’ and if the displaced persons resettle in a place close to their

original habitat and not their original place of residence its good enough (P.10 – P.11).

Therefore, considering all the parameters that they have considered for research, purpose resettlement will be operationally defined as; masses of people move from their homes to a new place or changed geographical or cultural settings. It can be involuntary or voluntary.

### **2.3 Different Types of Resettlement**

The direct outcome of involuntary or voluntary movement is displacement and is brought about as a surprise to the inhabitants of the affected area. The reason for the surprise could be either natural or manmade, but however it comes as a surprise to the people living in the said area. There are three (03) types of Displacement and Resettlement. Resettlement is a response to displacement (Bartolome, De Wet, Mander, & Nagraj, 1999 ; Patkar, 1999).

Development Induced Displacement and Resettlement (DIDR), this form of resettlement is often the aftermath of a development activity which will benefit the greater cause and comes in the form of irrigation, power, and roads. Cerena (2000), states that *“resettlement comes as a surprise there are global laws which are in place which protect the resettlers from the aftermath of the resettlement. The main risks which arise post resettlement are the lack of jobs, homes, healthy environment, food insecurities to name a few (P.3659)”*.

Conflict Induced Displacement and Resettlement (CIDR) are brought about through conflict. This type of resettlement stems due a conflict where the habitants are forced to leave due to the fear of loss of life. Resettlement in this case is most often at camps and other safe heavens, until either the conflict is resolved or new settlements are provided outside of the conflict zone (Adhikari, 2013 & Lischer, 2007).

Natural disaster Induced Displacement and Resettlement (NIDR) is third type. This type of resettlement brings about ‘environmental or climate refugees’. “This is the outcome of displacement due to natural disasters” (Muggah, 2008). This type of

resettlement could be broken into two categories which are pre disaster and post disaster (S. Martin, 2009). Pre disaster is when the warnings are issued by the necessary authorities of the incoming disaster, in which case temporary shelter is provided. Post resettlement is after the wrath of the natural disaster has been witnessed the people either need to rebuild in the existing places or find alternative land to restart life (Laczko and Aghazarm, 2009).

## **2.4 Impacts associated with Displacement and Resettlement**

World Bank statistics indicate that around 10 lakh of people are displaced worldwide for one of the about stated reasons. One of the reasons is resettlement due to infrastructure projects. Due to the resettlement, many of the impacts raised. According to the Cernea and other Authors like Ota, Reddy, Dwivedi, Mathur & Marsdsen and etc. described following Impacts;

### **2.4.1 Landlessness**

Expropriation not only brings about the loss of land to the people who are affected by also makes them fall financially into poverty levels due to the loss of land (Cernea, 1995). The many people in these areas come from an agricultural back ground the loss of land also implicates a loss of income. If these matter are not taken into consideration during resettlement these people will be left below the poverty line with no income generating mechanism (Nikuze, Sliuzas, Flacke, & Maarseveen, 2019 ; Muggah, 2008).

Research carried out by Ota (1996) clearly defines this problem. The research which covered the Maharashtra Composite Project and the Rengali dam report clearly indicate a surge in landless families from 4.6 percent to 10.9 percent. The reason for this is as most of these people were from farming communities there was a loss of livelihood hence tricking down to increased debt which caused them to sell off lands in order to survive (Muggah, 2008).

### **2.4.2 Joblessness**

As mentioned above the loss of land has a direct impact on the loss of jobs and livelihoods, while many of these people engage in agricultural activities, people working in enterprises or services, workers, artisans, and small businessmen or even

have small home gardens which they grow in order to sustain their livelihoods (Maruyama, 2003). Many of these people are not academically qualified and hence when they relocate to new areas the distance to their work place increases and hence they are unable to go to their place of employment (Cernea, 1995). Dwivedi (2002) further added that job and asset losses are a direct outcome of displacement.

### **2.4.3 Occupational shift**

The unavailability of resources and specific labour opportunities result in an occupational shift as people have to find a way to survive. While this is possible for some people for yet others this is in fact a traumatic experience and is not viewed as a possibility ending up with unemployment (Tamakloe, 1994). However in most cases the urge to provide for oneself and the for one's family entices the individuals to embark on an occupational shift and find alternate employment. During a survey conducted post resettlement at the Upper Indravati Hydroelectricity Project it was detected that approximately 4719 persons from 2744 families were engaged in subsisted wage labor however post resettlement this number amplified to 5248 persons from 2814 families and the number of traditional skilled labour decreased from 67 to 60 (Mathur & Marsdsen, 1998; Tamakloe, 1994).

### **2.4.4 Homelessness**

Homelessness is not only confined to the loss of your structural home, but a loss to the loss of identity, a culture and a group. This is more prominent in the out skirts of the country where life in a specific village is born into your bones (Butcher, 1988). This could also be described as placelessness as established by Downing (1994). The students of 'place attachment' (Low & Altman, (1992) also describe the same. The catastrophic replacement which was seen in China in the 1960's at Danjiangkau and Sanmenxia Dam resulted in 20% of the resettlers been homeless (Dengcai, Guoqing, Zijiang & Haibao, 2017). This was indeed a learning curve for China who immediately relooked at their resettlement policies and brought about change in the existing ones. It was discovered through this exercise that proper planning and monitoring could avoid such catastrophes (Cernea, 1996).

#### **2.4.5 Marginalization**

The downward slide of economic, social and psychological power is interpreted as marginalization (Mathur & Marsdsen, 1998). This comes about when individuals cannot use their skills to its fullest potential in the resettled areas, thus creating a downward slide. A medium income household thus slides down to a small income house hold, and those who were in small income bracket slide down towards poverty (Mgbako, Gao, Joynes, & Cave, 2010). This causes a ripple effect of lack of confidence, drop in social status (Cernea, 1995).

#### **2.4.6 Relative economic deprivation**

Resettlement is a far planned action; however the actual displacement happens only months after the plans have been implemented. The area which is to going through this phase turns into a barren land once the plans for resettlement are passed. The existence of economic growth comes to a standstill with no method of growth, this causes economic deprivation to the settlers in those areas (IFC 2012a, 2012b).

A study on the Nepal Kulekhani Hydroelectric Project indicates that people had dropped in the social and economic standing due to the found that the majority of the displaced people were worse off socially and economically due to a drop in production, this resulted in marginalization (Bjonnes, 1983;IFC 2009). A similar experience was witnessed at the Kotmale Project which was co-financed by Sweden (Soeftestad, 1999). While adults seemed to be affected through displacement, the lives of children too are caught in this balance with many of them having to leave their school never to revisit another school (Vanclay et al. 2015). The proper planning out so that landlessness does not occur seems like the most apt remedy to avoid marginalization.

#### **2.4.7 Food Insecurity**

The prevalence of food insecurities and scarcities result in undernourishment. This in turn prevents the people from carrying out their day-to-day work and also hampers growth in the case of children (Scudder, 1997). As stated by Cernea, 1995 physical relocation causes a drop in crops and food production with hunger and malnourishment setting in as long-term effects to these issues (P.623–665). It was seen that more than 55% of the population which were relocated due to the Victoria



Dam project in Sri Lanka suffered from food shortages and food insecurities (Rew & Driver, 1986).

#### **2.4.8 Increased Morbidity and Mortality**

While displacement causes food insecurities this then causes shortages of necessary nutrients which affects the health levels of the people been resettled. The continues outbreak of communal and non-communal disease is yet another outcome which results in the increase in mortality rates (Kaida & Miah, 2015). A research conducted by Cernea; clearly indicated that it is the weaker people of the spectrum which are most often affected by this. In fact the people on the two extreme end of the spectrum, namely the infants and the elderly are the ones who are most susceptible to illness and disease (Cernea, 2000). Common disease include diarrhea and dysentery, and particularly water borne diseases due to unsafe water supplies and poor sewage planning (Turner & Associates, 1995). Research carried out by Thukral, on the Nagarjunasagar Dam project indicated that poor water purification resulted in a numerous number of water borne diseases been spread among the resettlers, including knock-knee (Thukral, 1989).

#### **2.4.9 Loss of Access to Common Property and Services**

As many of these resettlers live in a village like surrounding they share common property such as water bodies, farming land, grazing land and wooded areas (Mahapatra, 1999). During the recollection process this is lost to them which results in a drop of material used in daily life such as firewood, and the loss of grazing land for their milking cows, although these may seem insignificant to the authorities who are resettling these people, to these people it is a huge hit on their incomes (Jingliang, 2001 & Cernea, 1995).

Research carried out by Pandey,B. on the Orissa projects carried out between 1950 and 1954, indicated this clearly; while in the Rengali Dam area post relocation only 23.7% families had access to common grazing lands while 17.5% had access to a common burial ground (Pandey, 1996 & Mishra, 2005)

#### **2.4.10 Social Disarticulation**

Though ancient times people lived in villages sharing common amenities and common beliefs as one family. This village and oneness is yet prevalent among many Asian societies who have shunned urbanization. This bond has seen them through child birth, marriage, death as they celebrate or mourn as one family (Fernandes, 2008). Forced displacement tears these bonds of togetherness and disrupts the harmonious existence of these people. These bonds are not seen by the authorities who break these fierce bonds which have turned into livelihoods without even thinking twice about it (Cernea, 2005). While this causes traumatic experience to the people it also isolates them and eludes them. The rebuilding of these social groups are not priority for the authorities and thus these people face tremendous difficulties. This social disarticulation is seen clearly in the Rangali dam project in Orissa (Pandey, 1998).

#### **2.4.11 Lack of facilities**

While many of these areas which people are relocated to lack the basic amenities which are needed such as clean water supply and proper sewage systems, it is often seen that due to the delay in providing proper housing these people are encountered tremendous issues and have to live with minimal facilities (Fernandes, 2008).

#### **2.4.12 Increase in stress**

The uprooting of a person's life and livelihood emphasizes tremendous stress on the individual. Further as resettlement is sometimes paid in cash to the head of the family this causes rifts within the family and ultimately the end of a content family life. While the emptiness of not living close to people you have grown up with and your friends can also effect a person's mental state of mind. (Cernea 1999a; Human Rights Watch 2013) The ownership of land has through the generations held a noble purpose in society. The loss of the once owned land can also lead to social barriers when it comes to marriages and other matters of the same nature (Mathur, 2008).

#### **2.4.13 An increase in health problems**

While many of these people engage in agricultural activities the depression of these lands causes a lack in food supply which has a direct impact of their health, Further these people use many *Ayurvedic* and other traditional remedies which are found in the thickets and forests surrounding their houses, which is lost due to resettlement (W.B. , 2004).

#### **2.4.14 Inadequacy of compensation arrangements**

As cited by Cernea 1996, 2003, 2008 the untimely payment of compensation to the people who are resettled has had a huge impact of their lives, with undue stress and more financial burdens incurred due to the delays. While these payments are not properly timed they arrive months later and at which time the value has largely depreciated due to inflation. Hence it is advisable that these payments be made prior to the physical resettlement in order that the people would be able to partake in its benefits (Chan, 2003 & Sharma; Vanclay, 2017 & Niraj, 2012 ). Paragraph 9 of IFC PS5 clearly states that the authorities will be availed to the land only after compensation is made to the resettlers. And resettlement sites and moving allowances also granted prior to any movement to take place.

#### **2.4.15 Positive social impacts**

Resettlement may at certain times create a positive for the resettlers in the form of new and better housing, jobs and raising their income levels (McDonald et al., 2008). Galipeau et al. (2013) drew a parallel between a resettled community and a non-resettled community in which case the resettled community had an advantage in the form of income and land value along with better housing and transportation facilities. While McDonald et al. (2004) made inroads into the resettlement of people at the Xiaolangdi dam project, he was able to ascertain that these resettlers did enjoy better living standards once resettled. Wang et al. (2013) drew a comparison to people who were resettled at far off places as opposed to nearer places and came to the conclusion

that people resettled at these far off places received better housing, facilities and a greener and cleaner environment which they were thriving in (P.1162).

#### **2.4.16 Restoring Livelihoods**

While involuntary displacement, takes many forms, the bottom line is that it disrupts the lives of the people who are to be resettled. As stated in chapter 1, involuntary displacement may occur due to natural disasters, development project and civil conflict within the country. While laws are now in place which make it mandatory for the authorities concerned to ensure that proper resettlement plans are made available to the affected people ensuring that they have the same or a better standard of living which they were previously enjoying (Galipeau et al., 2013 & Cerena, 2000).

It is much easier for people who are displaced due to resettlement to get back onto their feet rather than people who are affected by war and conflict. The reason being that the latter issue does not give the resettlers adequate time to evacuate from their homes as it comes as a sudden issue. Hence in most cases these people lose all of their belonging and have no means of income (Amirthalingam and Lakshman, 2009). In the case of displacement due to development too this can occur which is brought about due to delays in communication. It is also understood that that the place of resettlement or the 'package' which it is known as determines what can and cannot be shifted to the new place (De Wet, 2006).

During the evacuation of the residence due to the building of the Southern Transport Development Project this issue came up with two land owners. One person who was a herdsman had to obtain a special license in order to relocate his herd and yet another resident who was a horticulturist had to undergo financial loss due to loss in assets (trees) (Ozawa & Morikawa, 2017). Amirthalingam and Lakshman's paper (2009) further states that the as each livelihood varies from one another the impact on each one of them also varies accordingly. This was deemed true during the Southern Transport Development Project (STDP), some resettlers were able to find better and better paying jobs once relocated into their new homes.

While certain other income generators such as home-based enterprises, may thrive in the new location but require time for them establish themselves (Gamaathige, 2014).

While it was noticed that people who engaged in desk or clerical jobs in the government and private sector did not face these difficulties and were able to bounce back quickly. All of these issues need to take in to consideration when the authorities are considering resettlement, and proper solutions need to be made available. During the resettlement of displaced person due to the Southern Transport Development Project these issue were taken into consideration which helped to minimise the impact of the livelihoods of the resettlers (Perera, 2014 & Ozawa & Morikawa, 2017).

Taking into consideration the issue which were mentioned above and in order to establish a successful resettlement it is evident the early warning is indeed a necessary factor. While this could be made possible during development related displacement, fair warning of natural disaster which is now available due to advanced technology could also provide a ‘heads-up’ on evacuation (Smyth, Steyn, Esteves, Franks, & Vaz, 2015). The second point which needs consideration is the fact that each livelihood is different and hence should be looked into on a case by case issue with the intention of finding a solution or an alternative which the resettler is comfortable with. While the loss of livelihood assets should be compensated for accordingly (Ozawa & Morikawa, 2017). The loss of social and economic networks is kept to a minimal. These issue need to take into consideration prior to embarking on resettlement as a successful resettlement can only be derived through the restoration of livelihoods of the displaced people (Gunewardene and Wickremasingha, 2009).

## **2.5 Resettlement Experiences on International & Sri Lanka**

Several countries have impacts due to involuntary displacement and resettlement. Especially there are some legal backgrounds and practices also described in this section.

### **2.5.1 Resettlement and Development in Indonesia**

The growing demand of electricity in Central Sumatra, Indonesia was the foundation stone of the Koto Panjang Dam Project. While this was one of the biggest resettlement projects which were undertaken during its time and resettlement work of the people in the surrounding villages took approximately 10 year for completion. The project which commenced in 1991 implemented a fool proof system and ensured that

all villages were uniquely looked at in order to find the ideal resettlement plan for each one of them (Karimi, & Taifur, 2013). Yet another important feature of this resettlement program is the fact that each of these individuals had control of their final destination, hence giving them a sense of importance in choosing the future of their lives. The project was successfully completed in 2000. A land expanse of 0.5 ha was allocated to each resident in the Koto Mesjid area, along with monetary compensation which was determined according to their assets (Manatunge, Takesada, Miyata, & Nakayama, 2009). While this area is known for its rubber production, people residing adjacent to these rubber plantations were provided with a higher compensation in order to purchase productive assets which were vital in continuing their livelihood. This approach which was adopted into this resettlement program saw better income distribution among the residents and saw very few if not none fall into poverty levels (Karimi, & Taifur, 2013). As theorised by Zaman, (2002), who used this project as his research the productive capacity of the people needs to be ascertained and used in a proper way in order to uplift the lifestyles of the people who are been resettled.

There will always be individuals who gain and yet others who lose through these programs. While varied researches indicate different types of mechanics which were used in the successful resettlement the compensation of land for land seems to rank high on the list of positives (De Wet, 2002). While many of the individuals who are entitled to these benefits are among the farming community, it was suggested that they look beyond their traditional avenue of work, hence embarking on a new paradigm shift in their lifestyles which is brought about through resettlement. It is necessary that these options too are considered going into the future with land becoming a scares resource (Tilt, Braun, & He, 2009). The necessity that these people could thrive though such a shift in their lifestyles and livelihoods is indeed a positive, not only for the individuals but for the country and the economy. Another important aspect which was ascertained though this particular project is the fact that the individuals level of satisfaction was not determined by the provision of agricultural lands as per their earlier vocation, but rather the means of a secondary income source which was available in the resettled lands (Fujikura, Ryo & Nakayama, Mikiyasu, 2013 & Zaman, 2002). Been in close proximity to urbanized settlements was also another area which was high up on the resettlers list of priorities (Fujikura, Nakayama & Takesada, 2012). While the reason for this was not initially understood by the

authorities, their conversations with the resettlers provided the key to this necessity (De Wet, 2002). While many of these resettlers possessed a high level of entrepreneurship they created trinkets, traditional ornaments, traditional sweets etc, which could be sold to the urban population, thus providing them with a secondary income (Manatunge, Takesada, Miyata & Nakayama, 2009).

Access to good schools and proper educational facilities were an important factor when these people choose the location to be relocated to. In this instance it was positive to note that all educational facilities which were made available were of a better standing than previously enjoyed (Fujikura, Ryo & Nakayama, Mikiyasu, 2013).

### **2.5.2 Lyari Expressway Resettlement Project**

A total of 250,000 residents living along the banks of the Lyari river in Karachi, Sindh, Pakistan were resettled through the Lyari Expressway Resettlement Project (LERP). Resettlement lands were provided to these individuals in the Hawke's Bay, Baldia and Taiser Town and surrounding areas (Hasan, 2004). This entire project was broken down into two phases in order that resettlement was done in a constructive and proper manner. The first stage which saw residents been relocated in Hawke's Bay, witnessed the migration of 5,000 families. This first phase was deemed successful as the individuals received appropriate homes with amenities (Barter, 2002).

The second phase saw the migration of over 21,000 families into the Taiser town, and surrounding areas. Each family received an 80 sq-yd plot for the rebuilding of their house along with a sum of Rs.50, 000 each (Hasan & Younus, 2006). The presence of schools, high schools, medical facilities, places of worship and all other modern amenities along with free education and medical facilities made this a successful resettlement project (Terminski, 2014). A total of 15,000 families have constructed their houses on the allocated lands and have successfully resettled their lives and livelihoods (Ferrer, 2015).

The creation of employment opportunities in the surrounding, Hawkers Bazaar, and cheap rates for supplies in order for people to build little shops to sustain and improve their livelihoods were also elements which added to this success story (Hasan, 2004).

### **2.5.3 Southern Expressway Development Project (SEDP)**

This being the first project of this magnitude which was embarked on in Sri Lanka, was also the first expressway which was introduced to the country. Commencing from Kottawa this four-lane access controlled expressway spans 128Km and ends up at the Southern town of Matara, With provision to extend up to six lanes with no further acquisition of land the Southern Expressway Development Project (SEDP) is indeed a asset to the nation (Godamunne, 2012). The project was funded by three entities, namely The Government of Sri Lanka, The Japan Bank for International Co-operation (JBIC), and The Asian Development Bank (ADB). The Resettlement Implementation Plan (RIP) handled all resettlement related activities (Jayasingha, 2009).

A total of 1338 were displaced due to this project amounting 10,271 lots of land (Morikawa, & Miura, 2018). 77% of the people who were affected due to this development project were engaged in cultivation activities on paddy, tea, cinnamon, rubber and pepper. Business establishment such as mill and quarries too were forced to shut down due to the land acquisition which took place (Centre for Poverty Analysis, 2009).

*“As in any resettlement that were positives and negative, while some families were positive about the chance to rebuild their houses and upgrade their living standard there were yet some who were negative owing to each fact that they had lost their green environment and closeness to nature”* (Kumarasiri, 2009).

32 resettlement sites were developed by the Road Development Authority to facilitate the resettlement activities. However approximately 60% of the families who were displace choose to self-relocate while availing themselves to monetary compensation (Road Development Authority Report, 2002). It is indeed positive to note that the RDA consulted with the displaced individuals to ascertain their requirements prior to choosing the lands for resettlement. While these lands were located adjacent to or in close proximity to the displaced lands, thus avoiding social disruption (Godamunne, 2012 & Perera, 2016). However noise pollution from the construction work of the expressway was indeed a hazard which was encountered by these people, especially families with young and older members in their family unit, faced many issues pertaining to noise and environmental pollution (De Silva & Gunatilleke, 2009). The construction work and vehicle activities also hampered transportation in those routes,



making it difficult for people and school going children to travel. This resulted in high levels of stress on the resettled individuals (Ozawa & Morikawa, 2017).

The loss of agricultural lands witnessed many families struggling to make ends meet, while trying out alternate income generating avenues (Godamunne, 2012). Local enterprises which are generally run by the women folk suffered great losses, with most of them losing their livelihood due to relocation. While these small house based markets are popular among such communities, they also serve the larger houses in the vicinity (Perera, 2016 & Kumarasiri, 2009). The loss of this income crippled these families and propelled them into hardship. As cited by Fernando, (2009).while many of the larger business were able to bear the losses incurred and restart business, the small business found it difficult to restart themselves post relocation, hence dropping some of the individuals below the poverty line.

#### **2.5.4 Mahaweli Development Programme – 1<sup>st</sup> resettlement Program in Sri Lanka**

Established in 1977, The Mahaweli Development program holds a place in Sri Lanka history as the largest multipurpose national development program undertaken within the domicile of Sri Lanka (Scudder & Wimaladharma, 1989 & Muller & Hettige, 1995). This project unlike others with a singular agenda, had several purposes which it was intended to cover, these included the generation of hydroelectricity, controlling flooding and sluice gates, providing water for crops in the dry zones and providing homes and jobs for many landless and jobless people in the surrounding areas and beyond (Siriwardane, 1981; Mahaweli Projects and Programmes, 1987; Karunatilake, 1988; Rajasinghe, 2015 & Peiris 1996). There were two social impacts which were identified during this process which are the displacement from the areas surrounding the reservoir and resettlement adjacent to the new irrigation system (Ulluwishewa, 1991).

A large number of families living near and about the Victoria and Kotmale reservoir sites were migrated due to this project. While some were relocated in downstream settlements yet others had opted for the option of resettling in lands provided in the Kandy district (Vitanage, Bulankulama, Adikaram, and Madduma Bandara, 1986).

Many of the villagers who were resettled engaged in Chena cultivation (slash and burn), the loss of these lands took away their livelihood, However with resettlement adjacent to the reservoir and the reservoirs abundant with fish, these villages were able to take on a new skill and livelihood of fishing, therefore been able to provide for their families and sustain their lives (Werellagama, Jeyavijithan, Manathunga, & Nakayama, 2004).

Many of the resettlers who choose to resettle in the downstream areas were from the dry zone, and found the climate more bearable than what they were used to (Karunatilake, 1988). The prevalence of wild animals in these areas that had been driven out of their habitats and were displaced due to the construction work in progress also affected many of these people resulting in physiological and psychological stress (Werellagama, Jeyavijithan, Manathunga, & Nakayama, 2004). The resettlement program was handled by a team of individuals of varied disciplines and included vocational training experts. The supply of electricity to these villages and the entire Mahaweli development area through the Mahaweli Hydropower Projects was indeed a positive which gave the villagers to a sense of accomplishment (Moonasingha, 1991 & Rajasinghe, 2015).

Several environmental impacts came about due to this project, which include the pollution of water in ground wells in the Nuwara Eliya district, the pollution of the main reservoirs with chemicals, fertilizer bottles and other material used in fertilizing the tea bushes and other crops polluting the reservoirs, the reduction of flood peaks, the reduction on oxygen levels in the reservoirs (Sivaramanan & Sivakumaran, 2015, Siriwardane, 1981 & Karunatilake, 1988). While the villages use this water for their daily consumption and needs these are issues which need to address in order to ensure that they receive clean, unpolluted water their needs. The prevalence of chemicals in the water has also taken its toll on the local aquatic and wild life (Moonasingha, 1991 & Siriwardane, 1981)

This project witnessed the clearing of acres of forests which were the natural habitat of many animals indigenous to Sri Lanka and many endangered species (EML Consultant report, 2011). The habitat was also the home to many heard of wild elephants who have had no place to relocate to unlike the settlers, hence they have started venturing into the villages and damaging houses. The destruction of their food

source has also made them venture into cultivated lands, destroying crops and all in their path. In order to mitigate this problem a new wild life sanctuary was established, in a scheme to safeguard both man and beast (Sivaramanan & Sivakumaran, 2015 & Siriwardane, 1981).

## **2.6 Legal framework for Involuntary Displacement and Resettlement**

### **2.6.1 National Involuntary Resettlement Policy, India**

The National Policy on Resettlement and Rehabilitation for Project Affected Families, 2003 was successfully replaced by the National Policy on Rehabilitation and Resettlement of 2007 in India (Kumar, & Mishra, 2018). This legislation was passed parliament and to date is used as a successful measure in resettlement. The amendment of the Land Acquisition Act, 1894 along with this was indeed a positive step which was taken towards resettlement of displaced people (Sharma & Niraj, 2012).

This policy and the amended act therein looks at creating an equilibrium in the need for development and the successful resettlement of the resettlers while ensuring that their livelihoods too are sustained though out the move and after. All persons who are affected by resettlement immaterial of the cause of the resettlement would be eligible to this provision (Vanclay, 2017 & Kumar, & Mishra, 2018). Some benefits which will be offered under this new policy include the land for land benefit, where title land would be offered to the resettling family to start life over again. The provision of work within the resettlement project is yet another option which will be provided, thus creating a steady income for the family of the affected person (Fernandes, 2009 & Kumar, & Mishra, 2018).

The availability of scholarships in order that the people can create sustainable avenues of work within the project and there on (Kumar, & Mishra, 2018). While these possibilities ensure the sustained livelihood for the individuals and their families compensation is also offered in the form of houses and land so that they could rebuild their lives to a better standard from previous(Mathur, 2012 & Vanclay, 2017).. The construction of work sheds for carpenters and other skilled works are also undertaken,

along with the building of animal shelters for those who sustain their livelihood through animal husbandry. The provision of basic health amenities including clean water, proper sanitation, health care services and electricity will also be supplied by the respective authorities who are undertaking the resettlement process (Vanclay, 2017 & Kumar, & Mishra, 2018).

Special monetary benefit scheme similar to a pension plan for disabled, destitute, orphans, widows, unmarried girls, abandoned women, and people who cannot find alternative livelihood vocations and are above the age of 50 will be provided (Perera, 2014; Clark, 2009 & Modi, 2006). These and all other monetary gains are based upon the existing Consumer Price Index and will change accordingly. A prompt grievance handling scheme was also implemented along with a social audit of the rehabilitation and resettlement schemes and its plans and policies (Perera, 2014 & Modi, 2006).

The policy has stringent guideline as to the type of land which is acquired for this purpose. Some of the legislations include – the minimal usage of lands which are necessary for their project should be acquired. The use of farming and agricultural lands is to be avoided at all cost and to be used only if alternatives could not be found (Clark, 2009 & Modi, 2006). The use of multi crop lands and existing irrigated lands are to be avoided at all costs unless no substitute is available. The use of waste land, non-farming lands and lands with minimum human, animal and foliage habitation is to be used in most cases and where ever possible. Once these lands are acquired by the government or the resettlement authority, its titles will remain with the state and hence these lands cannot be utilized for other purpose other than deemed by the state. Prior approval from the state has to be obtained in using these lands for any other purpose than what it was intended for (Mathur, 2013; Thakur & Verma, 2012 & Modi, 2006).

## **2.6.2 Sri Lankan laws and policies**

The local legal framework covering the laws and policies relating to land acquisition and resettlement come under act No. 9 of 1950 (LAA). Amendment to this legislation is including in the National Involuntary Resettlement Policy (NIRP), and the National

Policy on Payment of Compensation (NPPC) (Gunatilleke, & Nathaniel, 2014; McDonald, Webber, & Yuefang, 2008 & Godamunne, 2014).

The LAA which is the basic and fundamental legal document allows the government and other related authorities to acquire lands for development purposes authorised by the state (Wyndham, 2006). It also strictly endorses the provision of a compensation for this transaction. However the rules and policies governing valuation of the land which is acquired and the compensation therein are not very clear and forthcoming (Perera, 2014 & Rupasinghe, 2008). In order to bridge this gap the NIRP was drawn up and approved by parliament in 2008, thus providing a clearly indication pertaining to valuation and compensation relating to acquired land and the people who from which the land is acquired receive adequate compensation in order to rebuild their lives at another location (Godamunne, 2014).

#### **2.6.2.1 Land Acquisition Act**

The Land Acquisition Act (LAA) allows the ‘purchasing’ of privately owned land by the government or governing authorities, to be utilised for ‘public purpose’, or which is deemed as development efforts for the public. While this is seem ambiguous, it could be interpreted in many a ways. Thus not offering a clear cut definition. While the thirty year civil war drained the government coffers, with little or no efforts placed on the development of infrastructure. The end of this heralded a new face of development in Sri Lanka. Thus the emergence of expressways, industrial zones, and economic hubs (Peiris, 1978; De Silva, 2016; Palliyaarachchi, 2012 & Wickramasinghe, 2014).

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#### **Shortcomings of the LAA**

The LAA clearly outlines the process which needs to be carried out in the event of acquiring private lands for public utilisation. While there are three main steps which need to be followed, they are the acquiring land, paying of compensation to the

individuals, and resettling the affected persons. However this legislation seems to have many loose ends, some of which are listed below;

1. Arbitrary nature of land acquisition – The given process in relation to acquisition of lands requires due notice to be given to the affected parties, with time allocated in order to discuss grievances. However the LAA has a special clause stating that land required on an urgent basis could be acquired immediately after notice is given to the individuals. The term urgent was ambiguous in this instance.

2. Insufficient compensation – according to the LAA, compensation will be provided only to land owners who provide written proof of their interest in the lands to be claimed. Further compensation is calculated on the depreciated value of the construction which is on the said premises, the loss of livelihood, replacement cost and other additional costs which are necessary in the resettlement process are not taken into consideration. Further there is no policy which states the time frame in which the compensation needs to be made out; especially in the case of urgent acquisition this does pose a problem.

3. Handling of Resettlement Disputes – According to the written policy in the LAA, the authoritative body which is acquiring the land is not obligated by any way or means to take into consideration issues relating to resettlement nor come into negotiations with the individuals whose property is been acquired.

The Land Acquisition and Resettlement Committee(LARC) was birthed in order to try and sort out the issues arise from the LAA. The LARC which consist of a panel of government servants determine a value which is not based on the depreciation method and which is a feasible payment for land been acquired. If this value is not agreed upon, the matter is accelerated to the Super LARC.(Morikawa, 2015 & De Silva, 2016)

#### **2.6.2.2 Asian Development Bank Involuntary Resettlement Policy (ADB's Policy on Involuntary Resettlement)**

This policy which was established in 1995 was made operational in January 1996 it clearly states that involuntary resettlement is an important part of project planning and should be looked into at the inception of the project. This action should be the last resort which is embarked on, and only come about when all other options have been

looked at and not offered a viable solution. It also offers the following benefits (Asian Development Bank, 2001; Perera, 2014 & Godamunne, 2012) ;

- Compensation for lost assets and loss of income and livelihood
- Relocation assistance
- Provision of economic and social assistance
- Provision of appropriate land, housing, infrastructure and other compensation.
- Authorities to closely consult with individuals to come up with workable resettlement options.

The policy names all persons residing in the area to be resettled as ‘property owners’ immaterial if they possess a deed to the property. It also provides special compensation to female-headed households, and indigenous peoples while also helping them to move up the social ladder (Fujita, 2013; Perera, 2014 & Godamunne, 2012).

### **2.6.2.3 National Involuntary Resettlement Policy (NIRP)**

The National Involuntary Resettlement Policy (NIRP) which came about in 2001, was initiated by the Asian Development Bank (ADB) in order to bridge the shortcomings of the LAA. The main objective of this policy was offer a viable solution to the displaced individuals while up lifting their living standards. The following are some of the clauses which are found in the NIRP (Godamunne N. ,2014 , Perera, 2014 & Anver & Wickrematunge, 2011).;

- Involuntary resettlement must be avoided at all costs, and embarked upon only unless no other alternative is available.
- Where alternatives are not available, a viable resettlement plan should be put into place, where the benefactors receive a better quality of life.
- Gender equality should be present at all times.
- Resettlers should be consulted with regards to all aspects of the resettlement process.
- The first option of compensation should be relocated land, followed by monetary compensation.

- Compensation for loss of land, and other assets including income should be made in full and without any delays.
- The proper planning and implementation of resettlement should be overseen by the Provincial and Local Authorities. And all other benefits there on.
- Resettlers should be availed of all and relevant public services.
- People without a valid title deed should also be entitled to benefits received by other resettlers.
- Vulnerable groups should be assisted at all stages of the resettlement process.
- Authorities spearheading the projects should bear all compensation and resettlement costs.

(Anver & Wickrematunge, 2011; Asian Development Bank, 2001; National Involuntary Resettlement Policy, 2001 & Kumarasiri, 2009)

## **2.7 The conceptual framework**

Theoretical background to the conceptual framework base on the Cernea's Impoverishment Risk and Reconstruction model (1990) (IRR Model) as given in Figure 2.1.

The IRR model was developed by Professor Michael Cernea, an American-Romanian social scientist in the 1990s. This Model for Resettling Displaced Populations (IRR model) enables and provides a conceptual tool for identifying the key impacts that cause impoverishment through involuntary displacement and resettlement. IRR model is derived from an extraordinary amount of accumulated empirical data captured over two decades of resettlement research, globally. It provides a detailed analysis of the confrontations the resettled individuals are faced with which come about through various development projects, such as dams, Expressways, industries, and waste management plants (Cernea, 1997; Forced Migration Online, 2004; Mahapatra, 1999; Cernea, 2000 & Eguavoen & Tesfai, 2012)

Apart of this model there is another resettlement models called the Chamber's three-stage model and the Scudder-Colson model which describes the resettlement and displacement. Chamber's model looks at the recruitment, transition and development which will occur. This model and another which was developed by Nelson take a



holist view of the individuals who come under the resettlement program and come up with the framework which would be deemed as a viable settlement program (Gizachew, 2015; Cernea, 2004; Cernea, 1998 & Cernea & McDowell, 2000).

In 1982 Scudder and Colson came up with a theoretical model which comprised of four stages. These been recruitment, transition, development, and incorporation (Xiao, Liu & Feldman, 2018; Eng & Hirobata, 2009 & Cernea, 2007 ). This model looked at the emotional aspect of the resettlers and was applicable to both voluntary and involuntary resettlement. Cerena’s also looked into the behavioral patterns of these individuals and suggested that all hardships which they undergo should be looked into – these include economic, social, and cultural hardships (Cernea & Schmidt-Soltau, 2006; Cernea, 1998 ; Eguavoen & Tesfai, 2012 & Muggah, 2000).

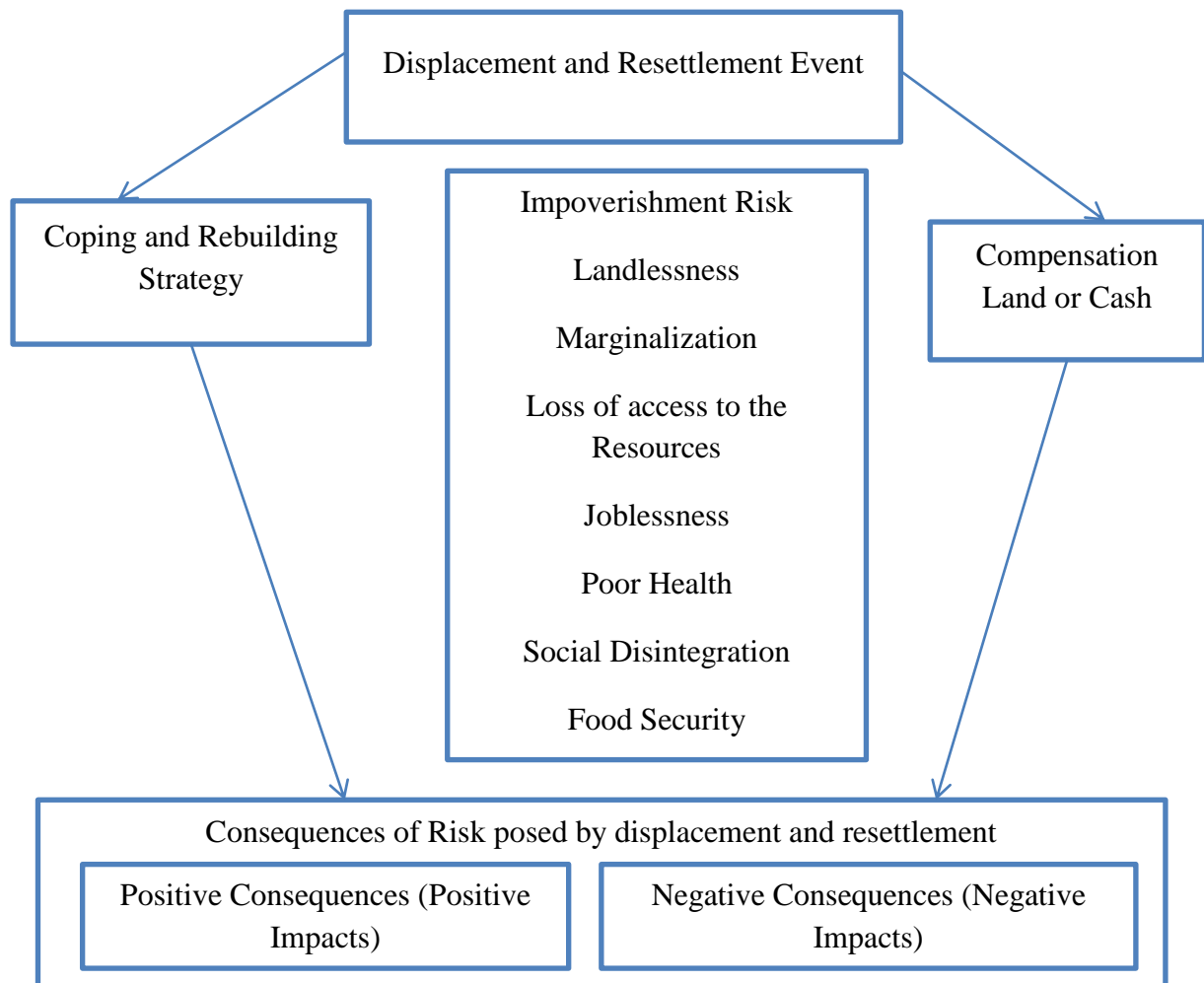
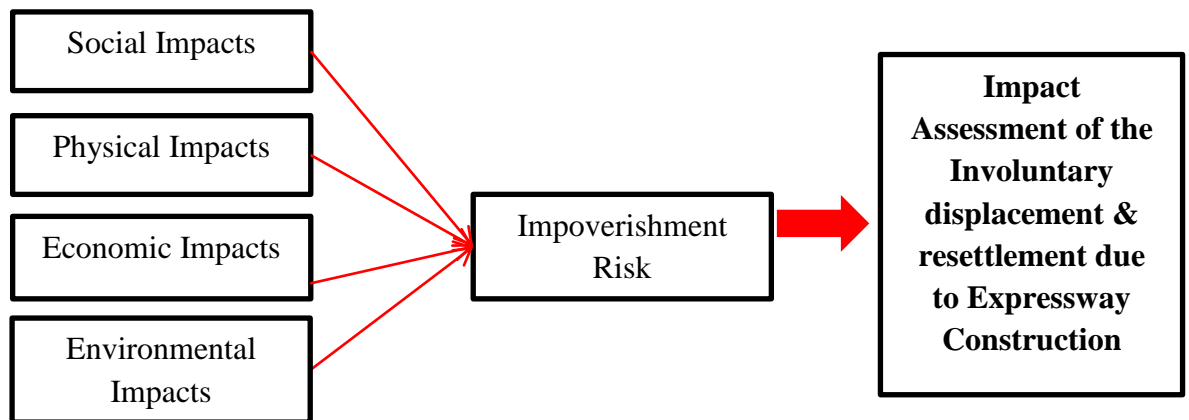


Figure 2.1: Cernea’s IRR model

Source: Adopted from Cernea’s IRR model (1990)

Based on this model researcher adopted this framework and data collection done based on this framework



*Figure 2.2: Conceptual framework*

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the methodological decisions made along with the progression of the research. It includes the following topics: Research design, target population, sample selection, sample size, research instruments, data collection procedures, and data analysis techniques.

#### **3.2 Research Design**

This study adopted a mixed-method research design. “A *mixed methods research design is a procedure for collecting, analyzing, and “mixing” both quantitative and qualitative research and methods in a single study to understand a research problem and to utilize this design effectively, must understand both quantitative and qualitative research*”(Creswell , 2012). Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e. g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration (Johnson ,2007; Johnson, Onwuegbuzie& Turner, 2007 & Johnson & Onwuegbuzie, 2004).

Mixed method research design was used in this study to critically evaluate the process of the involuntary displacement and resettlement due to expressway construction projects, appraise the possible impacts of it, explain the background of the displaced people particular to the Central Expressway project in Sri Lanka and develop a model exhibit the positive and negative impacts of involuntary displacement and resettlement happening due to Central Expressway project in Sri Lanka by collecting qualitative data via questionnaire survey to form the model and by collecting quantitative data from interviews to propose strategies in resolving negative pacts while validating the model.

The studied area was the Central Expressway project – stage 01. The Central Expressway (E04), is a proposed road project that will link the Sri Lankan capital,

Colombo, with Kandy. Its first section is to be commenced at Kadawatha on OCH phase – 3 and then to proceed up to Gampaha, almost following the earlier Colombo – Kandy, alternative Expressway (CKAH) for which a feasibility study had been completed in 2001. Stage 1 - Kadawatha (0.0km) to Meerigama (37.1km). The study area is located in the Western Province of the Gampaha District. There are seven (07) Divisional Secretariat Divisions covers this project and has a total affected population of 2175 with 83.5% male and Female 16.5%. The highest impact of land acquisition in CEP stage 01 is on private lands. It is 95.8% of the total lands to be acquired. The rest 4.2% is government land and common/public lands. From the private lands, 73% are agricultural lands while 20.9% represent residential lands. About 3.6% of lands are barren lands and the least category is commercial lands 2.5% used for trade and business purposes (Road Development Authority Report, 2016; Road Development Authority Report , 2014 & [www.cep.rda.gov.lk](http://www.cep.rda.gov.lk)).

### **3.3 Population and Sampling**

The target population was project affected persons in seven (07) Divisional Secretariat Divisions for the survey, and consultants, Divisional Secretariats, project engineers, land acquisition officers, resettlement officers, government valuation officers, and other relevant officers relate to the resettlement for the interviews. Therefore, the samples include 100 PAPs; 03 Divisional Secretariats, 02 consultants, 04 project engineers, 02 land acquisition officers, 03 resettlement officers, 03 government valuation officers, and 03 other relevant officers relate to the resettlement for survey and interviews, respectively, making a total study data points to a total of 120.

The study employed simple random sampling to obtain respondents for the study. Thompson (2012) describes Simple random sampling is a sampling design in which distinct items are selected from the n items in the population in such a way that every possible combination of k items is equally likely to be the sample selected.

### **3.4 Data Collection Instruments**

This research has used primary and secondary data collection methods for the research. Primary data, in other terms, first-hand data are collected through a survey, since the number of respondents in the sample is larger and another alternative

method such as interviews seems less feasible due to time constraints and approaching difficulties. The instrument of data collection was the questionnaire and interview guideline.

The use of a questionnaire was the most preferred since the time of the study was limited. The questionnaire included a set of structured questions and which included Likert scale question items, as it is easier for the respondents to provide short and direct answers. The questionnaire was prepared and given to the randomly selected participants in the Sinhala language. The confidential details of respondents and the company have ensured at the research stage by removing their actual names and other direct identity methods. The distributed questionnaire is attached in Annexure 01 of this research report, in its English version.

Questionnaires were expected to enable the researcher to obtain results within a considerably short time. The usefulness of questionnaires in terms of their simplicity, time used, and easier for a researcher to administer (Amin, 2005 & Sarandakos, 1988). The respondents were kindly requested to respond to all items in sections, consistency, and freedom of expression by respondents. Interview is useful since they fetch a variety of ideas needed for the study (Mugenda and Mugenda, 2003 & Amin, 2005).

Collect data from interviews is based on the purpose of validating the survey data and to propose strategies to overcome the negative impacts.

Secondary data, in other terms, historical data were collected from previous literature through journal papers, magazines, books, websites, etc, as these sources contained readily available information that can be directly used. The researcher always focused on well-known sources, to ensure the reliability and accuracy of the secondary data.

#### **3.4.1 Questionnaire survey response rate**

The researcher gave out 120 questionnaires to respondents. The researcher collected 100 questionnaires from the respondents. This represented 90% of all the questionnaires given.

### 3.5 Data analysis technique

Data analysis depends on the research method. The data from the interviews were carefully read. The responses edited for grammatical correctness, coherence, chronology, and precision and presented as quotations to triangulate the data obtained through the administration of the close-ended instruments, which is quantitative. The analysis was done using descriptive statistics (use of tables, frequencies, and percentages). After the data had been collected, the response to the close-ended items in the data collection instrument was assigned codes and labels. Frequency counts of the responses were then obtained, to generate descriptive information about the respondents that participated in the study and to illustrate the general trend of findings on the various variables that were under investigation. This involved the use of percentages and tables because it's help to summarize large quantities of data whilst making the report reader-friendly (Mugenda and Mugenda, 2003; Kawulich, 2004 & Sarantakos, 1998 ).

Since this research followed a quantitative method also, where data have gathered through a survey, the data analysis also takes a quantitative facet, which uses tables, graphs, etc. These quantitative analyses were done through SPSS and Microsoft Excel.

To determine the ranking of different factors from the viewpoint of PAPs that means impacts related to involuntary displacement and resettlement, the RII was computed using the RII Equation (Battaineh, 2002; Gunduz et al., 2013; Muhwezi & Otim, 2014).

$$RII = \sum W / (A \times N)$$

Where

W = Weightage given to each factor by the respondents

A = Highest weight (i.e., 5 in this case)

N = the total number of respondents

Table 4.16 and 4.16 shows the ranking of negative and positive impacts into four (04) categories that relate to the resettlement. There are 20 negative and positive impacts

identified from the literature survey and each impact of each category rank according to the severity (Rating scale: 1-very low, 2-Low, 3-Moderate, 4-High, 5-Very High).

### **3.5.1 Validity of instrument**

Validity is the degree in which the results obtained from the analysis of data present phenomena under study (Mugenda & Mugenda, 2003). It is a measure of how well a test measures what is supposed to measure (Kombo & Tromp, 2006; Best & Kahn, 2003). The researcher constructed a questionnaire; validity checks from the literature review findings. It is ensured that the items in the questionnaire captured the intended information accurately according to the objectives of the study (Kyunghee & Sujin, 2013; Mastaglia, Toye & Kristjanson, 2003).

### **3.5.2 Reliability of instruments**

Reliability as that which measures the degree of accuracy in the measurement that an instrument provides (Grinnel, 1993). The reliability of the instruments will be established using Cronbach's alpha. The researcher used the Cronbach Alpha coefficient to establish reliability by calculating it using the formula;

$$\alpha = \frac{k}{k-1} \left( 1 - \frac{\sum SD^2_i}{\sum SD^2_t} \right)$$

(Where:  $\alpha$  = alpha coefficient,  $k$  = number of items,  $\Sigma$  = summation,  $SD^2_i$  = squared standard deviation within each item and  $SD^2_t$  = total standard deviation squared). If the result was found to be above 0.5, then the instrument was consistent and, therefore, reliable (Frankel & Wallen, 2000 & Mugenda & Mugenda, 2003).

## CHAPTER FOUR

### DATA ANALYSIS, FINDINGS, AND DISCUSSIONS

#### 4.1 Introduction

This chapter consists of data analysis, presentation, interpretation, and discussion. This chapter has background information on the Project Affected Persons (PAPs) and organised according to the objectives of the study. The analyzed data are presented using frequency distribution tables preceded by interpretation and discussions of findings on the impacts of involuntary displacement and resettlement due to Expressway construction in the Central Expressway project (stage I).

#### 4.2 Background information - Survey Respondents

The demographic information of the resettlers was analyzed. The areas analyzed included relating to households, family size, the wrestlers, gender, age, marital status, education, employment, and monthly income of the Project Affected Household (PAH).

##### 4.2.1 Gender of Project Affected Persons (PAPs)

The first questions were asked about the resettlers' demographic status. In demographic status, gender was one question. PAPs showed that majority 54.0% were male and 46% were female.

Table 4.1: Gender characteristics of PAPs

<b>Gender</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Male	54	54.0
Female	46	46.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

*Source: Primary data*

Male's domination among the PAPs over and above female's PAPs shows that more men than females are effected in involuntary displacement and resettlement due to the central expressway project.



#### 4.2.2 Age categorisation of PAPs

The study obtained details about the age groups of the PAPs for purposes of understanding their age composition and effect of the resettlement. Details of the findings are shown in Table 4.2 below;

Table 4.2: Distribution of PAPs by Age Groups

Age group	Frequency	Percentage (%)
15 - 29	13	13.0
30 - 44	37	37.0
45 - 59	38	38.0
60>	12	12.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

Source: Primary data

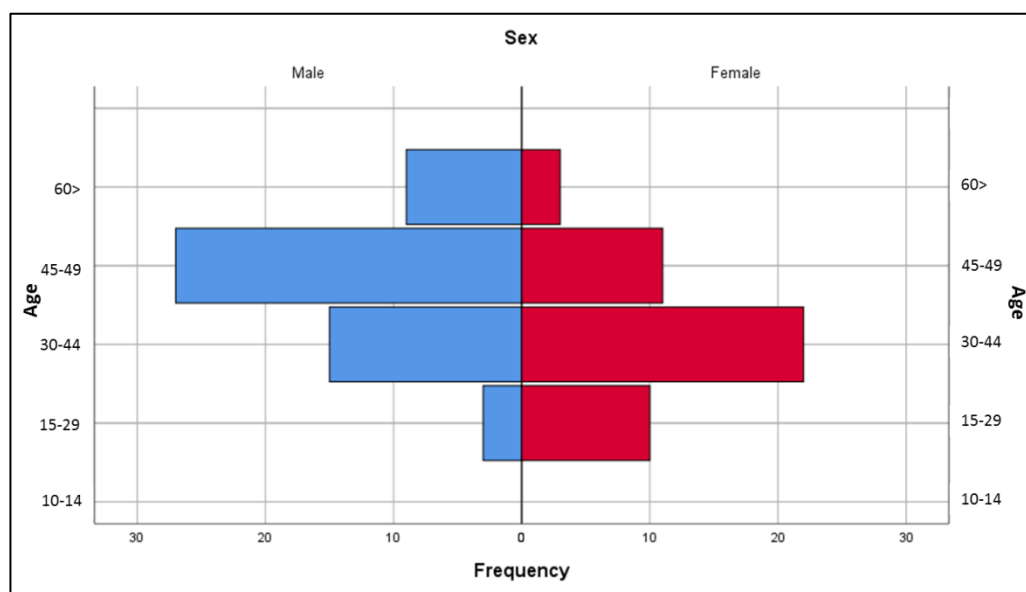


Figure 4.1: Distribution of Resettlers by Age Groups and Sex

The findings showed that 38% of the PAPs are of age between 45-59, 37% of age between 30- 44, 13% between 15- 29, and lastly 12% between the age of 60 and above. According to this chart also shows a majority of sample male population is aged between 45-59 and sample female population is aged between 30- 44. The majority of the sample of PAPs is of age between 45 – 59 and who are at age 59 told they cannot a new house and they are struggling to resettle a new place.

### 4.2.3 Size of the PAHs

Respondents were also asked to indicate the number of family members lives in their homes and sub-families live in their dwellings before resettlement. Their responses were tabulated below:

Table 4.3: Size of the PAHs

Number of family members	Frequency	Percentage (%)
1	5	5.0
2	4	4.0
3	12	12.0
4	21	21.0
5	23	23.0
6	14	14.0
7	11	11.0
8	10	10.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

Source: Primary data

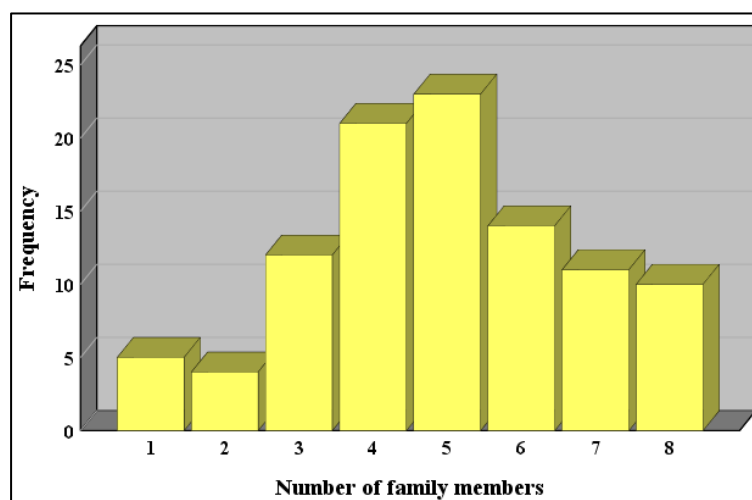


Figure 4.2: Size of resettler's family

The size of the family is the most important factor when resettling. That means when allocating the space and paying compensation have to consider the size of the family and sub-families live in this family.

Table 4.4: Sub-families lived in the home

Type	Frequency	Percentage (%)
Extended family	51	51.0
Nuclear family	49	49.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

Nuclear family means consists of two parents and children and extended family means two or more adults who are related, either by blood or marriage, living in the same home. In simply extended family means sub-families live in the same house. In this sample, there are 51% of the sub-families live in the same house.

The findings show a majority of the family has five (05) members. This is 23% of the sample population. 21% have four (04) members of the family. According to the survey identified most of the extended family has more than five (05) members.

#### 4.2.4 Marital Status of the PAPs

Respondents were also asked to indicate their marital status. The findings were tabulated as shown in Table 4.5.

Table 4.5: Marital Status of the PAPs

Type	Frequency	Percentage (%)
Married	70	70.0
Unmarried	5	5.0
Divorce	7	7.0
Separate	10	10.0
Widow	8	8.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

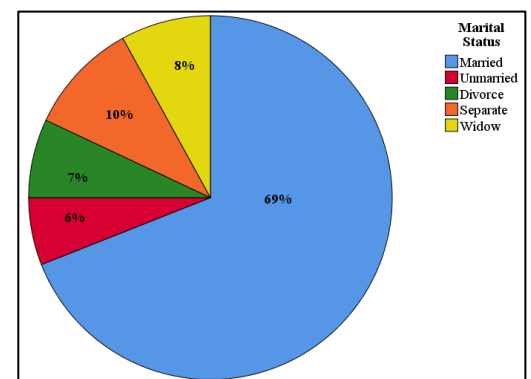


Figure 4.3: Marital Status of the PAPs

70% of the people are married and 10% of the people are separate. Unmarried people are 5%. Those unmarried people live with a caretaker in his/her house.

#### 4.2.5 Education of the PAPs

Respondents were also asked to indicate their educational qualifications. The findings were tabulated as shown in Table 4.6.

Table 4.6: Education classification of the PAPs

Education	Frequency	Percentage (%)
Can place signature	6	6.0
Class 6 – G.C.E. (O/L)	16	16.0
G.C.E. (O/L) Pass	23	23.0
G.C.E (A/L) Pass	41	41.0
Undergraduate	4	4.0
Graduated	10	10.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

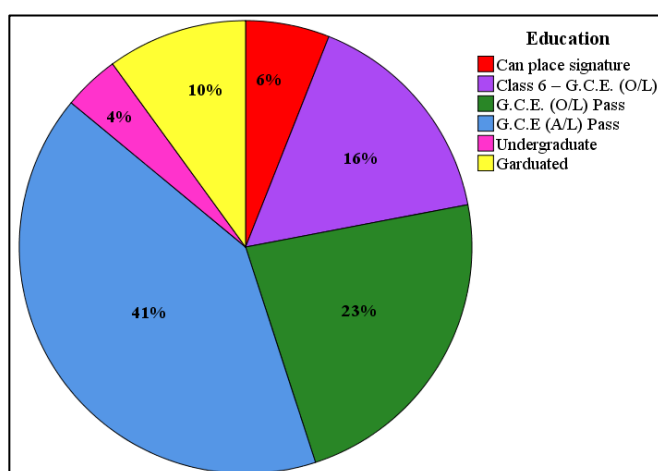


Figure 4.4: Education classification of the PAPs

The sample population shows a majority of the PAP's education level is passed G.C.E. (A/L) examination. That is 41% of the sample population.

23% pass the G.C.E. (O/L) and 10% of the population is graduated ones. Those are employed in higher positions in government sectors and private sectors and who are engineers, doctors, managers, etc.

According to the findings, 6% of illiterate people live in this area. Those can only place the signature. Those are very poor people (e.g. street vendors). The findings from their education level some people do not know about cash management. There are some social issues also rising due to a large amount of monetary compensation.

That is, the money is spent without any fuss when it comes to compensation. In the end, he/she had no money to even make his dwelling in resettlement place. Therefore, it needs a mechanism for managing their compensation, especially in people who are in low-level education and poor people.

#### 4.2.6 Employment and monthly income of the PAHs

Respondents were also asked to indicate their employment pattern and monthly income of the PAHs. The findings were tabulated as shown in Table 4.7 and 4.8

Table 4.7: Employment classification of the PAPs

<b>Employment</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Self- employment	13	13.0
Govt. Services/Other Grades	11	11.0
Private Sector/Other Grades	11	11.0
Commercial activities	10	10.0
Retired person	9	9.0
Private Sector/Executives	7	7.0
Armed forces	7	7.0
Non-agriculture labor (unskilled)	5	5.0
Weaving	5	5.0
Vendors	5	5.0
Agricultural labor	4	4.0
Govt. Services/ Executives	3	3.0
Housewife	2	2.0
Non-agriculture labor (skilled)	1	1.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

The majority of the people are engaged in self-employment. That is 13%. Those are doing mushroom cultivation, ornamental fish breeding, ornamental flower gardening, making sweets, lunch packets, tailoring, etc. Those people lost their market and resettled place is far beyond their previous place. Therefore, they lost their income. Its main impact on their family expenditures. 11% engaged in agriculture-related activities. Those who are maybe farmers. Who lost their agricultural lands and lead to income and food security of their families. There are 10% of people doing their own business. That means commercial activities.

An example is in Gampaha town there is a big wood collection center. A respondent is doing cutting trees and collects and sells those wood to customers. Also, he lives in the same place and his shop is completely acquired and the house is partially acquired. There are ten (10) workers working there and the subject is a paralyzed patient. Now he struggles to cope with this situation and leads to many financial and social problems.

There are 14 and 18 people engaged in government and private sector occupations and 5% do weaving and street vendors' jobs in the town area.

Table 4.8: Monthly income classification of the PAH

Monthly Income (Rs.)	Frequency	Percentage (%)
7,501 – 10,000	8	8.0
10,001 – 15,000	20	20.0
15,001 – 25,000	29	29.0
25,001 – 50,000	31	31.0
50,001 – 100,000	9	9.0
100,001 – 200,000	1	1.0
>200,000	2	2.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

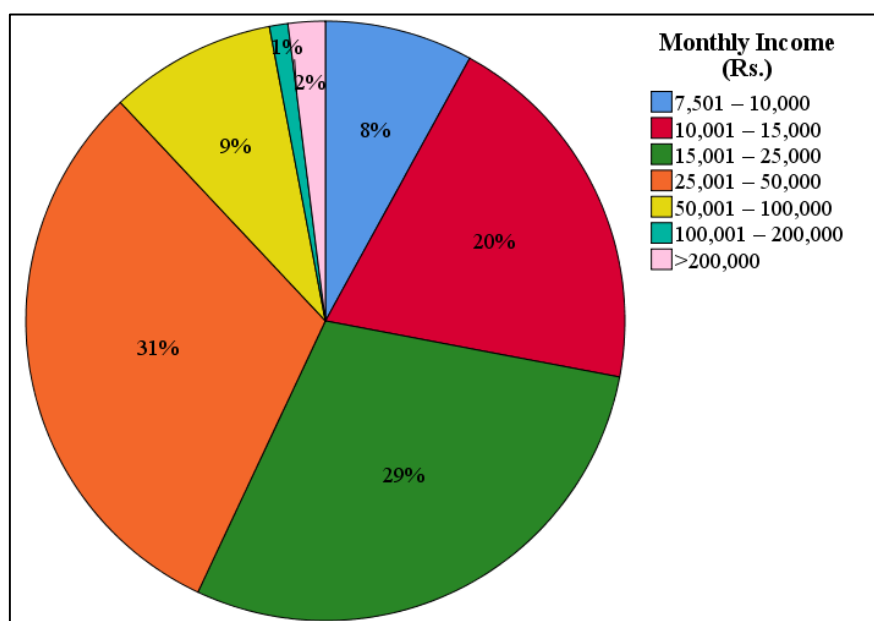


Figure 4.5: Monthly income classification of the PAH

Findings revealed that 31% of families have an income of the Rs. 25,000 – 50,000. Most of the people are working in the private sector. Two (02) families are earning Rs.200, 000 per month and who is doing their own business. According to the survey findings, those who are engaging in commercial activities earn more than Rs.50, 000 per month.

There is 28% of PAH's income per month is less than Rs.15, 000, who are doing self-employment, street vendors and agricultural and laborers.

### 4.3 Condition of the affected area of the land or Building

The study sought to establish the effect of the land and building of PAPs. That means the acquisition type of land and building. Their responses were tabulated in the table below:

Table 4.9: Effect of the land and building of PAPs

<b>Description</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Partially affected the land	4	4.0
Fully affected the land and building	39	39.0
Fully affected the Land	18	18.0
Partially affected the land and building	16	16.0
Fully affected the building and partially affected the land	23	23.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

According to the table, 39% fully affected the land and buildings, 18% partially affected the land and building, and 23% fully affected the building and partially affected the land. People who are fully affected buildings and land need to be resettled in another place and they have to find a better place to resettle and restore their livelihoods. Partially affected the land and building and partially affected the land (if there is a building that land) can be resettled in the same place, but it may depend on the remaining plot size and PAP's perception.

#### 4.4 Condition of the land and Building

Respondents were also asked to indicate the type or use of the land and building. The uses were as shown in the table below:

Table 4.10: Use of the Land

Use	Frequency	Percentage (%)
Residential	61	61.0
Trade/business	15	15.0
Agriculture	24	24.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

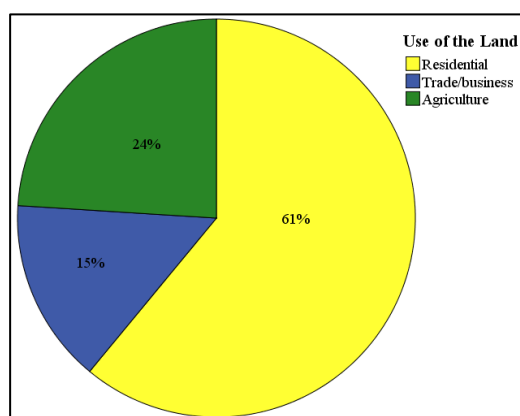


Figure 4.6: Use of the Land

As per Table 4.9, 61% are residential uses, 24% agriculture and 15% trade/business. The majority are residential uses. This means the majority of the dwellings of the PAPs were acquired from this project.

Table 4.11: Use of the Building

Use	Frequency	Percentage (%)
Residential	50	66.0
Rented house/building	2	3.0
Shop	12	16.0
Shop and house located in the same building	6	8.0
Tent	3	4.0
Other	3	4.0
<b>Total</b>	<b>76</b>	<b>100.0</b>



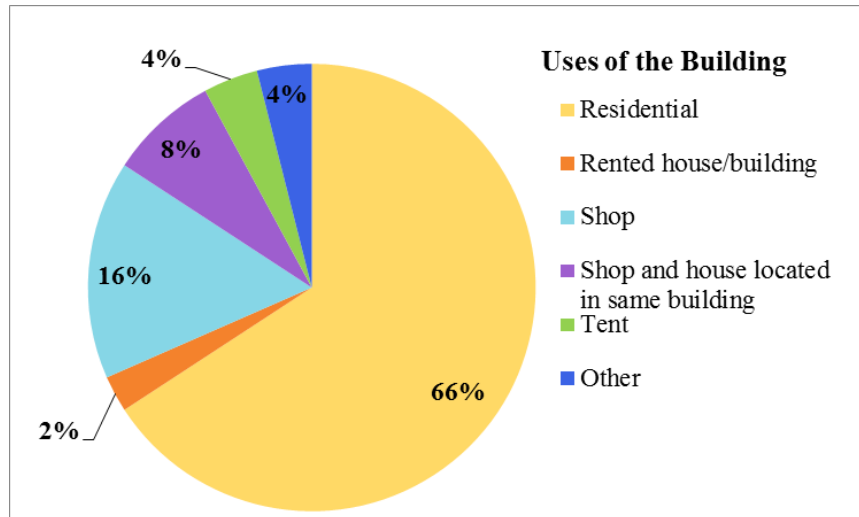


Figure 4.7: Use of the Building

From the table and chart, it is visible that 50(66%) use for building for residential purposes, 12(16%) shops, 6(8%) shop and house located in the same building, and 3(4%) are tents and other. Other category includes commercial uses like a factory, bakery, and tuition class. The other 24 are agricultural lands. Those are not included in this table and not buildings located in those lands.

#### 4.5 Type of the area PAPs has been lived before the resettled

The table below was to establish identified the type of area PAP has been lived before the acquisition process.

Table 4.12: Type of the area lived before the acquisition process

Type of the area	Frequency	Percentage (%)
Urban	12	12.0
Semi-Urban	88	88.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

As per the study, 88% lived in a semi-urban area and 12% live in urban areas. But no one was living in rural areas. This Expressway goes via Kadwatha to Mirigama and it belongs to urban and semi-urban areas and not rural areas.

#### 4.6 Type of the area PAP has been resettled

The study sought to identify PAP'S condition or current status after their resettlement. That means if the PAP resettled place provided with services or facilities or not.

Table 4.13: Type of the area victims has lived after the acquisition process

Description	Frequency	Percentage (%)
Semi-Urban	42	55.0
Rural	10	13.0
Still not resettled	11	14.0
Resettle within the Land	13	17.0
<b>Total</b>	<b>76</b>	<b>100.0</b>

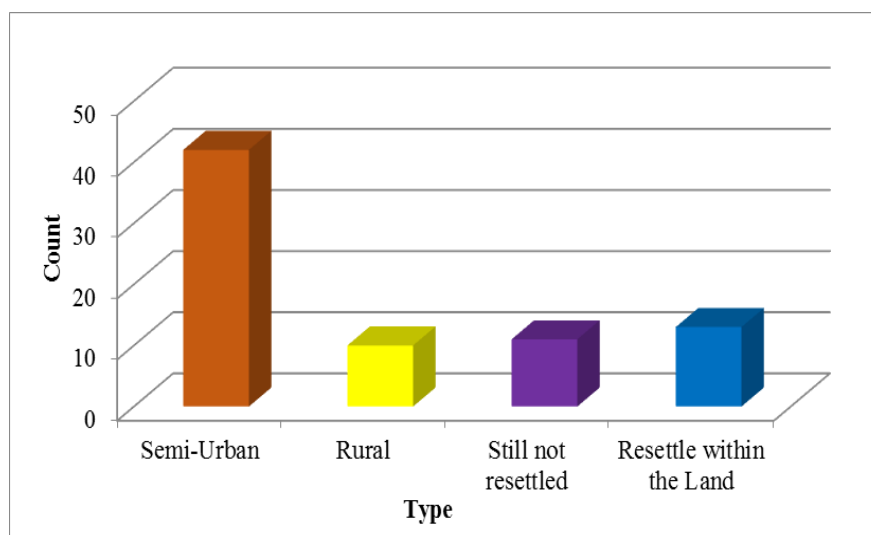


Figure 4.8: Type of the area PAPs has lived after acquisition process

The result indicated that 42 (55%) resettle in semi-urban areas. It is a positive side of this study. Yet ten (10) people (13%) have been resettled in rural areas. That means they have not obtained sufficient compensation and they have been resettled in a rural area and 13 (17%) resettled within the land. That means they have partially affected their buildings and they like to stay there place with renovated or newly constructed buildings.

## 4.7 Land Ownership

Table 4.14 also gave indications about land ownership before resettlement and after resettlement.

Table 4.14: Land ownership before resettlement and after resettlement

Ownership Type	Before Resettlement		After Resettlement	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Single Deed	87	87.0	46	77.0
Undivided Joint Deed	13	13.0	7	12.0
Expecting the permits	-	-	2	3.0
Deed of Lease	-	-	5	8.0
<b>Total</b>	<b>100</b>	<b>100.0</b>	<b>60</b>	<b>100.0</b>

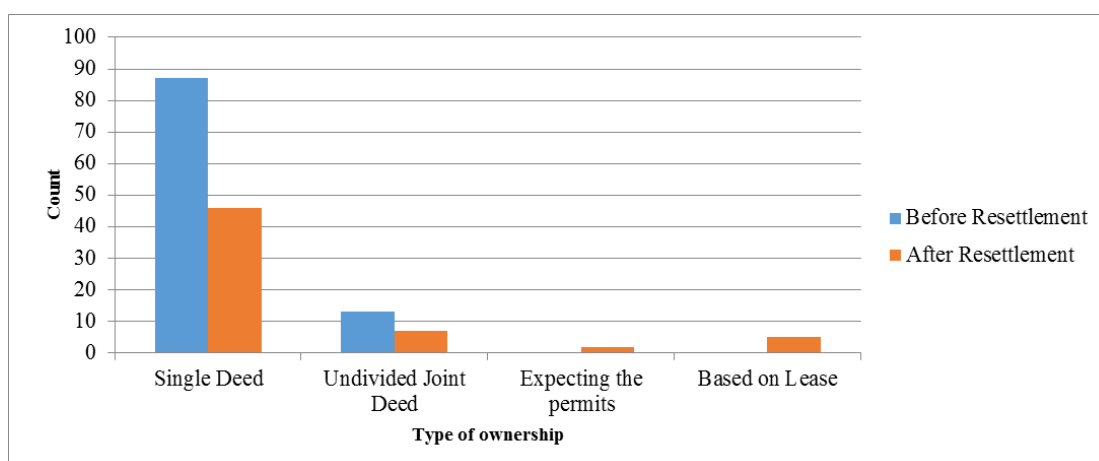


Figure 4.9: Land ownership before resettlement and after resettlement

For the study, before resettlement or before the acquisition process; 87% have single deed ownership and 13% have undivided joint deed ownership. That means some lands have more than one owner and the compensation also divided among these owners. After resettlement or after acquisition process 46 (77%) have single deed ownership, 7 (12%) have undivided joint deed ownership and there are 5 (8%) live in rental homes and they have ownership deed of lease.

#### 4.8 Method of Compensation PAPs has attained

The study too was to determine the compensation type victims have obtained.

Table 4.15: Method of Compensation victims has attained

Method of Compensation	Frequency	Percentage (%)
Monetary	100	100.0
Land	0	0.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

All (100%) the respondents or victims obtained monetary compensation instead of land compensation. The resettlement and compensation packages have been designed to ensure adequate compensation for PAPs who will lose assets or livelihoods as a result of the implementation of the project. These packages have been developed by regulations and in consultation with the affected communities.

#### 4.9 Benefits attained from the project by PAPs

To find out the type of benefits obtained from the project by PAPs the following information in Table 4.16 was established.

Table 4.16: Benefits attained from the project by PAPs

Benefits	Frequency	Percentage (%)
Land	10	10.0
Cash	90	90.0
None	0	0.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

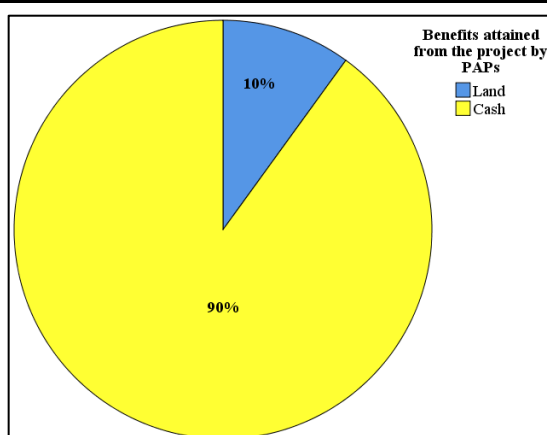


Figure 4.10: Benefits attained from the project by PAPs of involuntary displacement and resettlement

As per the table, 90% obtained cash benefits, and 10% obtained land benefits from the project. The land benefits mean some people obtained land instead of obtaining monetary benefits of resettlement allowance. The monetary benefit is Rs.500,000 allowances for people who are living in suburban areas or Rs.1,000,000 allowances for people who are living in urban areas. It depends on the type of area PAPs live before resettlement.

#### **4.10 Impacts related to the involuntary displacement and resettlement**

The contribution of each of the impacts relates to the involuntary displacement and resettlement was examined and the ranking of the attributes in terms of their criticality as perceived by the respondents was done by use of the Relative Importance Index (RII) which was computed using the equation and the results of the analysis are presented in Tables 4.17 and 4.18. To determine the ranking of different factors from the viewpoint of PAPs, the RII was computed using the RII Equation.

Table 4.17 and 4.18 shows the ranking of negative and positive impacts into four (04) categories that relate to the resettlement. There are 20 negative and positive impacts identified from the literature survey and each impact of each category rank according to the severity (Rating scale: 1-very low, 2-Low, 3-Moderate, 4-High, 5-Very High).

##### **4.10.1 Negative impacts relate to the involuntary displacement and resettlement**

For a five-point response item, RII produces a value ranging from 0.2 - 1.0. Accordingly, the group index is the average of the relative importance index of the variables in the various groups. The values 0.7412, 0.7116, 0.7048, and 0.7036 indicate, respectively, the RII values of Economic, Physical, Social, and Environmental impacts, as shown in Table 4.17.

Likewise, the RII values indicate that, primarily, Economic, Physical, Social, and Environmental impacts relate to involuntary displacement and resettlement. Similarly, it suggests that Economic impacts ranked the first significantly influential impacts that relate to involuntary displacement and resettlement due to the Central Expressway Project (Stage I). This was followed by Physical impacts. Then Social and Environmental impacts ranked third and fourth respectively.

Table 4.17: Negative impacts relate to the involuntary displacement and resettlement

Impact	1	2	3	4	5	W	RII	Rank
<b>Economic</b>							<b>0.7412</b>	<b>1</b>
Lack of compensation	00	4	11	15	70	451	0.902	
Loss of wage employment	7	4	12	35	42	401	0.802	
Can't pay the past loans due to the displacement	00	14	28	32	26	370	0.74	
Shift in the occupational pattern	13	8	32	31	16	329	0.658	
Change the level of job	26	10	24	16	24	302	0.604	
<b>Physical</b>							<b>0.7116</b>	<b>2</b>
Loss of Home, shelter and properties	00	00	10	16	74	464	0.928	
Distance from our village/indigenous community	00	12	21	30	37	392	0.784	
Loss of Access to Common Property and Services	6	12	32	31	19	345	0.69	
Lack of facilities in new location	8	13	38	24	17	329	0.658	
Undergone hardship during the project construction period	21	40	20	7	12	249	0.498	
<b>Social</b>							<b>0.7048</b>	<b>3</b>
Children's education would be disrupted	6	12	7	32	43	394	0.788	
Break the social network with neighbors	14	7	14	18	47	377	0.754	
Break the Social network with relatives	9	15	17	29	30	356	0.712	
Certainty in our food insecurity and access	12	15	30	18	25	329	0.658	
Increase the health problems	10	23	33	19	15	306	0.612	
<b>Environmental</b>							<b>0.7036</b>	<b>4</b>
Changes the green environment	00	00	29	7	64	435	0.87	
Experienced flooding frequently	0	8	24	44	24	384	0.768	
Damages to the remaining property	14	9	19	10	48	369	0.738	
Noise and air pollution / Dust	15	17	28	16	24	317	0.634	
Experienced poor water quality	24	17	48	3	8	254	0.508	

#### **4.10.1.1 Economic Impacts**

The economic impacts grouping variable was ranked as the first significantly influential impact that relates to involuntary displacement and resettlement by the PAPs. Individually lack of compensation was ranked highest impacts under the economic impacts. This indicates that lack of compensation is more critical to relate to the resettlement in the Central Expressway Project (Stage I) than the other variables in the group of economic impacts. This supports the findings of Caron (2009) that, lack of insufficient compensation leads to many problems related to resettlement. There are 70% of people rank this impact is very highly affected by resettlement.

Loss of wage employment and cannot pay the past loans due to the displacement are secondly and thirdly highest impact in this category. Some findings in this survey revealed due to the loss of wage employment people have to find a new location to start a new business. Most of this problem faced by the people who are self-employed as a source of income. Some people do make sweets, short eats, preparing lunch packets and selling, planting ornamental flowers and selling, breeding ornamental fish and selling, etc. Therefore, people who are doing those jobs lost their customers, and especially ornamental fish breeding, ornamental flower planting need more space and good weather conditions. Hence they have to restore their livelihoods to find a suitable place to start their business, find a new job, or shift their occupational pattern. Therefore this leads to an increase or decreases in their income level. This can create underemployment that can be psychologically quite traumatic for the affected people.

As per background information analysis, 32% ranked that the debt problem would be highly effected for the resettlement of PAPs. Most of the people taken the loans from the banks and financial institutions for their personal needs like housing renovation, completing the house, start or improve the business. Sometimes some people took the loans by mortgaging their properties. If their property lost, their compensation will not be sufficient to resettle the new place after paid their mortgage. PAPs often face financial difficulties when relocating to a new location or restoring their livelihoods due to debt issues.

#### **4.10.1.2 Physical Impacts**

The respondents ranked Physical group of impacts as the second significant, influential impacts that affected to the involuntary displacement and resettlement. The physical impact is a huge impact on people's livelihoods. It highlights the impact on their physical life such as losing their homes and properties, distance from their villages, problems during construction periods (Wall eruptions, dust, tearing down the floor of homes, etc.)

Individually, the highest impacts under physical impacts are the loss of home, shelter, and properties. This supports the findings of Low and Altman (1992) that, loss of house and shelter may be only temporary for most of the displaced during the transition period. Yet for some, homelessness remains a chronic problem. Most of the people are very depressed about this problem. This impact is the biggest of all the other impacts. This problem leads to many problems and people have to restore their life new. (Asif, 1997)

Distance from our village/indigenous community and loss of access to common property and services are secondly and thirdly the highest impact in this category. When people lose their homes, they have to relocate, and their place of residence may be far from their village/indigenous community. When people are resettled in a new area, basic infrastructure and amenities are not provided in that area. (Pandey, 1998)

#### **4.10.1.3 Social Impacts**

Social Impacts, ranked the third influential impact that relates to the resettlement. When people economically and physically affected simultaneously social impacts also rise. Individually, children's' education would be disrupted was the critical impact that relates to the resettlement. Resettlement disrupts the entire life of the people. This supports the findings of Pandey (1998), higher in projects that relocate people in a dispersed manner rather than as social groups and units. In such cases, it is very difficult for the ousters to reconstitute similar social structures and networks. Forced displacement tears apart the existing social fabric and disperses and fragments communities, dismantles production systems, often scatters kinship groups and family



systems, disrupts local labor markets, and puts at-risk people's sense of cultural identity.

According to the questionnaire findings (Question No.19), when people move from one area to another, they have to separate from the neighbors' relatives and friends, and their relationship is also strained. This often has a direct impact on their social relationships. At the same time, children's education is interrupted. When the residence is changed, the distance between the house and the school where the child is currently studying is much greater. Then schools have to change. Here the child's education changes in this environment. Sometimes the relationship between the child's friends is affected and his mental state is affected. All these problems can cause people to suffer such as stress, the outbreak of relocation-related diseases, and psychological trauma caused by displacement. They are unable to bear the shocks of emptiness and purposelessness created in their lives.

#### **4.10.1.4 Environmental Impacts**

Environmental impacts ranked the fourth most influential impact that affects to the involuntary displacement and resettlement. Individually, the impact changes the green environment was the highest impact that affects to the resettlement. According to the findings changes in the green environment due to acquiring the paddy lands, marshlands, and some small scrubs lands. There are about 40% of paddy lands acquired in this project. Hence it led to food insecurity also.

Respondent ranked experienced flooding frequently and noise and air pollution/dust impacts as the second and third highest impacts in the group of environmental impacts. The respondents said this project goes into a flat terrain land. Naturally, the paddy field acts as a multi-functional surface due to its structure. According to Question 19 findings, Then the paddy field helps to mitigate flood, recharging groundwater, and purifying water. When paddy fields reclaimed, then flooding occurs naturally. Air pollution and noise pollution/dust can occur during the construction period and the surrounding property may also be damaged. Therefore, these environmental impacts change to the environment, whether adverse or beneficial, wholly or partially resulting from the livelihood of the people.

#### 4.10.2 Positive impacts relate to the involuntary displacement and resettlement

The values 0.68, 0.5236, 0.4836, and 0.4272 indicate, respectively, the RII values of Physical, Environmental, Social, and Economic positive impacts, as shown in Table 4.18.

Likewise, the RII values indicate that, primarily, Physical, Environmental, Social, and Economic impacts relate to the involuntary displacement and resettlement. Similarly, it suggests that Physical impacts ranked the first significantly influential impacts that relate to involuntary displacement and due to the Central Expressway Project (Stage D). This was followed by environmental impacts. Then Social and Economic impacts ranked third and fourth respectively.

Table 4.18: Positive impacts relate to the involuntary displacement and resettlement

Impact	1	2	3	4	5	W	RII	Rank
<b>Physical</b>							<b>0.68</b>	<b>1</b>
National Road Development	0	0	19	21	60	441	0.882	
Improve road accessibility and transportation facilities in the area	5	9	22	40	24	369	0.738	
Regional Development	7	5	45	13	30	354	0.708	
Obtaining land as benefits of the project	13	7	32	40	8	323	0.646	
Owned a modern housing structure	36	32	20	7	5	213	0.426	
<b>Environmental</b>							<b>0.5236</b>	<b>2</b>
Reduction of air pollution due to traffic congestion	13	6	30	27	24	343	0.686	
Improvement in tourism	15	6	40	14	25	328	0.656	
Reduce road accidents	10	40	41	9	00	249	0.498	
New scenic beauty as a result of expressway	20	51	29	00	00	209	0.418	
Positive attitudes towards road safety	36	48	16	00	00	180	0.36	
<b>Social</b>							<b>0.4836</b>	<b>3</b>
Certainty in our food security and access	14	22	37	17	10	287	0.574	
Create the new social network with neighbors	10	33	43	14	00	261	0.522	
Identified and meet new cultures	12	33	41	14	00	257	0.514	
Improve residence condition	39	35	15	4	7	205	0.41	
Children's entered a new school better than old school	47	30	6	11	6	199	0.398	

<b>Economic</b>							<b>0.4272</b>	<b>4</b>
Reduce travel time, vehicle maintenance cost and travel/fuel cost	6	5	25	40	24	371	0.742	
Economic development in Sri Lanka	24	20	48	8	00	240	0.48	
Enhancement of the investment opportunities	41	42	11	6	00	182	0.364	
Found new income sources	59	32	9	00	00	150	0.3	
Reduction of poverty of the people	80	15	5	00	00	125	0.25	

#### **4.10.2.1 Physical Impacts**

The physical impacts grouping variable was ranked the first significant positive influential impact that relates to involuntary displacement and resettlement by the PAPs. Positive physical impacts are major positive impacts among all the impacts. Because most of the physical features are developed from this project. Individually, national road development was ranked the highest variable under physical impacts. Under the improvement of the road network, the importance of developing an expressway network with interconnectivity is of paramount importance this is the expressway development project and this expressway added to the national road network in Sri Lanka. It will lead to national road development. Improvement of interprovincial connectivity. This expressway directly connects with Colombo Outer Circular Expressway (E002), Colombo – Katunayaka Expressway (E003), Colombo – Puttalam Road (A003), Colombo – Kandy Road (A001 Road), Kandy Jaffna Road (A009 Road), Ambepussa – Kurunagala – Trincomalee Road (A006 Road), Katugastota – Kurunagala – Puttalam Road (A010) and many other National Expressways. There are only three (03) Expressway projects in Sri Lanka and this is another project. When increasing the no of expressways in Sri Lanka spontaneously improves the regional development and it leads to accelerate the national development and improve the transport network in Sri Lanka, improves the regional roads, etc. This will improvement of the efficiency of the transport system.

According to the RII value Obtaining land as a benefit of the project ranked fourth impacts of this project. It is 0.646. There are nearly 200 people request the lands. In this case, the land will be given instead of a resettlement allowance of 5 lakhs or 10 lakhs. This land is often given to sub-families of the main families. Owned a modern

housing structure ranked in the final impact in the group of physical impacts. This may be a positive impact on some PAPs. Because most of the PAPs said they have not obtained sufficient compensation and but they have to construct or buy a new house to resettle. This new house may be a modern housing structure. Some people do not have the income to construct a new house so this type of community is benefited from these projects.

#### **4.10.2.2 Environmental Impacts**

The respondents ranked the environmental group of impacts as the second significant, influential impacts that relate to involuntary displacement and resettlement. Individually, the highest RII Value under environmental impacts is the reduction of air pollution due to traffic congestion. Road traffic congestion will be reduced when improvements to roads. As a solution to the traffic congestion on the Colombo – Kandy Road (A001 Road) and Ambepussa – Kurunagala – Trincomalee Road (A006 Road) which cannot be improved in their alignment to suit the travel speed required for the future traffic conditions. Then it affects reducing noise and air pollution. Reduction of air pollution due to traffic congestion and unnecessary combustion of fuel.

Improvement in tourism is the second-highest ranked in environmental impacts. The RII value of this impact is 0.656. Tourism will improve due to expressway construction. Kandy is a tourist destination and lots of people travel by train to Kandy because of the traffic congestion. After completion of this expressway can reach Kandy within one hour. Normal travel time by bus or car is approximately three (03) hours to reach the Kandy. Improvements in the road network will also boost the tourism industry.

Reduce road accidents is thirdly the highest RII value in environmental impacts. It is 0.498. When the improvement of the roads and reduce traffic congestions leads to reduce road accidents. Fourthly ranked RII value impact is new scenic beauty as a result of the expressway and finally lower RII value of the environmental impact is positive attitudes towards road safety. Above all positive impacts, results to be positive attitudes towards road safety.

#### **4.10.2.3 Social Impacts**

According to the RII Value, Social impacts ranked as the third positive influential impact that relates to involuntary displacement and resettlement. Individually, the highest impact under the social impacts, certainty in food security, and access. This project area is a semi-urban area. Affected persons are often resettled in the Gampaha District. There are fewer issues regarding the certainty in food security and accessibility within this district. This is because the transport facilities in this area are very advanced.

Secondly, the highest RII Value of the positive impact is, create a new social network with neighbors. When affected people relocate to another area, create relationships, and new network with the neighbors. It provides the opportunity for the affected people to identify with new social cultures and create a neighborhood. This will promote strong social relations and will also help them to improve their social life.

According to the RII value of the social impacts improve residents' conditions ranked fourthly. Some of the Housing condition of PAPs is poor. Due to this project, people can build a new house, and then they can improve their residence' conditions. This is impact benefited in individually. The lowest RII value of the social impact is children's entered a new school better than old school. PAP's children can enter the new schools after the resettlement. Some children can enter schools which are located in the town area. This is a better positive impact on children's educational life.

#### **4.10.2.4 Economic Impacts**

Economic impacts ranked as the fourth most influential positive impact that affects to the involuntary displacement and resettlement. Individually reduce travel time, vehicle maintenance cost, and travel/fuel cost was ranked the highest variable under the economic impacts. As mentioned earlier, with the development of the road network and the expressway transport network, traffic congestion will be reduced, making it easier to reach the destination. This will save fuel costs. It can seem the positive benefit of this is that the Galle Expressway has reduced transport time. This is a cost-effective mode to travel to the destination.

Economic development is the second-highest positive economic impact. Economically, Expressways are the most profitable sources of financing. Especially during the festive season, weekends, and holidays, this expressway can make a huge profit in the Sri Lankan economy. Especially Kandy Colombo road is one of the major passenger routes daily. This expressway will also enable the economic development of Sri Lanka.

The development of the transport network and tourism has attracted investors to invest. Increasing investment opportunities and job opportunities and directly contributing to the development of the country. Improvement of the social and economic conditions of the area will lead to the reduction of the poverty of the people.

The fourthly ranked RII value of the Economic impacts is found in new income sources. According to Galipeau (2013) compared the difference between a resettled community and a non-resettled community in terms of income and landholding, showing that resettled communities have a higher income level.

The lowest RII value is the reduction of poverty of the people. Wang et al. (2013) compared far-relocated people with the near-relocated people and found that far-relocated people have higher living standards and low poverty levels since they obtain advantages in housing conditions, possession of farmland and access to new information and techniques.

#### **4.11 Problems on new resettlement settlement sites and solutions for these problems**

The study sought to identify the problems with resettlement sites and solutions for these. Most of the respondents said the new resettlement locations are far away from the previous resident places or towns. Some PAPs lived in urban areas. Because of the high cost of the land value and the lack of adequate compensation, they have to move outside the city. Then, their lifestyle will be changed. According to PAPs, the distance to schools and workplaces is increasing.

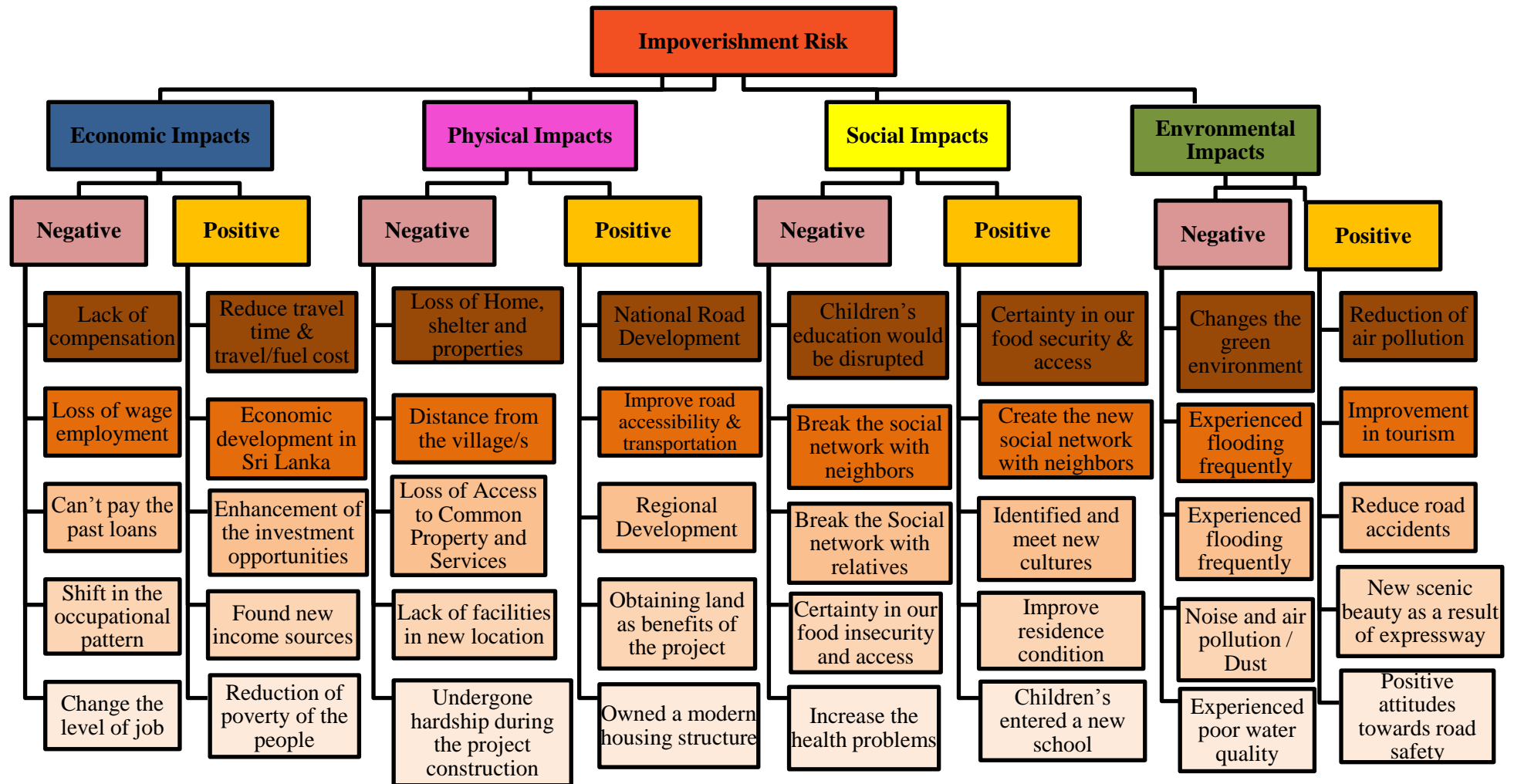
The PAPs have not been given land to be resettled from the project. Therefore, they are currently living in rented houses as they need to expedite the land clearance and give it to the project. It was proposed that they should be given land in an immediate and systematic system of granting the land.

‘Dansal Estate’ could be introduced as a proposed resettlement site and proposed a pipe borne water system and a proper drainage system so that there would be a shortage of water during the dry season and flooding during the rainy season.

Resettlement policies also need to be updated and a compensation mechanism must be worked out. According to the findings, PAPs of the project suggested that the government valuation 17 (Government Valuation Gazette Number) to be updated to meet the current valuation, such as new land prices and construction costs.

The other problem is the loss of jobs and the loss of employment and income, especially for those who are self-employed. Therefore, they need the training to identify new self-employment and need help for income restoration.

4.12 Model of the positive and negative impacts of involuntary displacement and resettlement happening due to Central Expressway project in Sri Lanka





The impacts of impoverishment risk are divided into four (04) parts. Those impacts are economic, Physical, Social, and Environmental. Such impacts are divided into two (02) parts, the positive and the negative, and the two (02) parts are rated at the highest RII value. The order in which the highest RII value of negative impacts is aligned is; Economic, Physical, Social, and Environmental. Sub impacts that fall under the main impacts are classified according to their severity. This model shows the highest severity impacts and which can use to overcome in future projects. Dark brown colour impacts represent the highest effected impacts. These impacts described in the above paragraphs.

#### 4.13 Analysis of the Interviews

The researcher interviewed Consultants, Divisional Secretariats, Project Engineers, Land Acquisition Officers, Resettlement Officers, Government Valuation Officers, and other relevant officers related to the said resettlement. A total of 20 people were interviewed.

The list of the Interviewees is presented in Table 4.19 below.

Table 4.19 - List of interviewees

No	Position	Sex	Age	Years of Experience
I01	Consultant	Male	60>	10>
I02	Consultant	Male	45 – 59	10>
I03	Divisional Secretariat	Female	45 – 59	7 - 9
I04	Divisional Secretariat	Male	30 – 44	4>
I05	Divisional Secretariat	Male	45 – 59	10>
I06	Divisional Secretariat	Female	45 – 59	4>
I07	Project Engineer	Female	30 – 44	4>
I08	Project Engineer	Male	30 – 44	4>
I09	Project Engineer	Male	30 – 44	4>
I10	Project Engineer	Male	45 – 59	7 – 9
I11	Resettlement Officer	Female	30 - 44	4>
I12	Resettlement Officer	Male	45 – 59	4>
I13	Resettlement Officer	Male	45 – 59	7 – 9
I14	Resettlement Officer	Male	30 – 44	4>
I15	Land Acquisition Officer	Male	45 – 59	7 – 9
I16	Land Acquisition Officer	Male	45 – 59	7 – 9
I17	Valuation Officer	Female	45 – 59	4>
I18	Valuation Officer	Male	30 – 44	4>

I19	Other Officer	Female	45 – 59	4>
I20	Other Officer	Male	45 - 59	4>

Source – Author’s Work

Of the total of 20 respondents who took part in the survey, 14 were male and the balance 6 were female. While a total of 60% of the respondent (12 in total) were between the age bracket of 45-59, of the balance, 35% (07 members) were between the age of 30-44, and the balance 1% were in the above 60 categories.

All the officers who were chosen to take part in the survey have prior experience in resettlement. Three (3) of these interviewees have more than ten (10) years’ experience in the field of resettlement, while five (05) have experience spanning 07-09 years. The balance number of persons have more than four (04) years' experience in this regard. The interviewees mentioned that there are underlining problems and factors of failure in involuntary displacement and resettlement

#### **4.13.1 Problems on new resettlement to settlement sites and solutions for these problems**

Problems arising in new resettlement sites are described herein by the respondents. According to respondents I04, I06, I11 – I16, I19 who stated that; *in most cases, resettlers are often placed far beyond where they were originally living. While their original place of residence was close to the town, services facilities, and their place of employment. Therefore once resettled they face enormous problems concerning the distance to the town and their place of work.*

While several of the interviewees also mentioned that although the displaced resettlers obtained the land compensation all other facilities such as the exact site demarcation and infrastructure facilities take time to obtain. These issues are mainly due to institutional and internal issues that have cropped up. Therefore the resettlers face a huge problem due to these issues, which remains unresolved. Respondent I02 commented that; *finding the lands for resettlement is a huge task for the project staff and many times they struggle to find a better place for the resettlers.*

The two (02) main reasons for the above-mentioned issues are;

1. Lack of a clear description of the property valuation by the LAA
2. A proper definition of valuation and compensation

Comments of interviewees I17 –I20 are as follows;

*The LAA does not provide a clear definition of public purpose. Compensation under the LAA is only available for those with written proof of their interest in the land. Further, the compensation is limited to the depreciated value of the structure. The compensation calculated does not consider replacement costs, loss of income, or improvements made to the land. Additionally, there are no guarantees of receiving compensation before the acquisition, mostly in the case of urgent acquisitions. So we need a clear definition of the compensation mechanism.*

To overcome the issues mentioned above it is recommended to - Update the land acquisition laws, policies, and procedures as this has a direct impact on resettlement, and once rectified could be a permanent solution that is necessary. There are many laws and policies relating to land acquisition. But what is mainly used is the Land Acquisition Act, National Involuntary Resettlement Policy, and Asian Development Bank Involuntary Resettlement Policy. According to the interviewees' statement, when comparing laws, policies, and procedures of other countries who face similar issues, it is evident that the Sri Lankan laws, policies, and procedures related to displacement and resettlement need to be reviewed urgently, as there are many shortcomings and grey areas. When ascertaining these laws and policies in other countries it was discovered that adequate consideration is given to elderly people, children, and pregnant mothers – who are categorised as vulnerable people. Hence some actions ensure their safety and taking into consideration their livelihood improvements. But in Sri Lanka, this is not the case.

I12 interviewee commented that,

*In India, a special provision has been made for the provision of a lifetime monthly pension to these vulnerable persons. But this is not the practice in Sri Lanka. While there are some livelihood restoration programs of mega-scale which have been suggested and carried out, many of these projects fail at the implementation stage.*

Hence, it is needed to update these policies, laws, and procedures by comparing and analysing policies and laws in other countries.

Most of these projects have proceeded up to the implementation and monitoring stage. But practically the monitoring part is covered only through the technical and physical sides and does not address the affected persons. At the project implementation stage there are many monitoring programs in the form of human development such as children's education, health, livelihood restoration, etc, however, most of these fall on the wayside after about one year of completion of construction, and it does not flow smoothly. There are no follow up and monitoring programs post project completion, therefore it ceases to exist mainly due to political and financial issues.

The compensation which is generally allocated to these affected people does not follow through the due channels and hence they struggle to obtain their compensation after the acquisitions and resettlement are over. This has an immense impact on their lives. To overcome this a formal monitoring program needs to be implemented.

Interviewees I11, I15, and I20 commented that – Delay in compensation payments are a huge problem for the affected people. Payment of compensation to the head of the family often leads to bitter quarrels over the sharing of the compensation amount within the family, leading to stress and many disputes. In many instances, the payments get delayed and with the rising inflation, these individuals are seen struggling to restore their lives. Many of them prioritize building their homes after which, they consider restoring their livelihoods. They invest more in a home building than income restoration. Hence, the need has risen to establish a timely compensation system, while using local labour for construction activities. This has a double fold benefit of labour been cheap as well as increasing job opportunities, while also saving local money within the country. It will benefit the country as well as the affected persons.

#### 4.13.2 Failure factors of resettlement

Several interviewees commented that many factors could be considered as contributory to the failure of resettlement projects. Accordingly, the views can be summarised as below;

Inadequate resettlement planning is a major factor contributing to failure. While inadequate planning in project management could be considered as the number one mistake which leads to project failure. With a project not starting in the right manner, it would be delusional to think that it will end in the right manner. Improper project cost and the time estimation are seen to occur due to poor risk management, lack of scope and change management all of these could be considered as contributory factors for inadequate resettlement planning, leading up to the failure of the resettlement planning.

Lack of consultation and participation of the affected people is another factor that contributes to failure. During the project period and after the construction has been completed, the consultation and participate in their problems is low. Due to this factor, the project team is only looking at completing it within the time and do not take into consideration the indirect impacts to the affected persons, which may arise later on. They only take into consideration direct impacts and mainly physical impacts. This leads to many problems with resettlement.

Budgetary shortfalls for timely compensation payments. The delay in compensation payments is a common issue in these projects. Interviewees I04 and I05 commented that; *delay in obtaining compensation leads to stress and social insecurity in these people's lives. Most of the time this issue arises due to budgetary shortfalls.*

Insufficient technical expertise and inadequate institutional capacity are additional factors affecting resettlement failure. In the past many technical experts have migrated to other countries as the demand for their line of work has increased, this has caused a huge vacuum in this sector resulting in inadequate technical guidance to these projects. This has resulted in delays within the project. While technical difficulties are encountered during the project are seen during and post-project completion.

Weak monitoring of the program is a common issue. In most instances of these projects the allocated monitoring program did not continue smoothly. Project monitoring is the final phase of the project cycle. While time and money are spent to construct a monitoring system these are not carried out. Hence it is necessary to develop a proper project monitoring system to help better manage people, equipment, time, and money to ensure successful completion of the project.

Poor choices of the site for resettlement were identified. According to I01 and I02; *within the availability of the lands and project cost the project team selected the resettlement sites for the affected people. However, at times these selected sites fail to fulfill all their requirements. Leading to people complaining about these sites been a poor choice for them. In many cases these sites are the right decision for the project team, but not for the resettlers.*

*The project team works to provide the people with the best quality and sufficient infrastructure facilities within the sites. However, the sites do not suit the needs and wishes of those individuals. Resulting in a rejection of the site due to dissatisfaction with the resettlers which leads to project failure.*

Other factors which the local land acquisition laws do not pay attention to is the idea of communal ownership of property, which in turn increases the stress within the family and other significant issues relating to monetary compensation and land acquisition laws and policies.

#### **4.13.3 Success factors of resettlement**

There are many factors to facilitate successful resettlement and the study was also able to look into solutions for mitigating the resettlement impacts.

##### **People's participation in project planning and implementation**

Interviewees I01 and I02 commented that; *the need for people's participation in resettlement planning* - developing mechanisms for people's participation in planning and implementation is essential. Though it is time-consuming, it is a positive contributor to the decision-making system. This leads to a better understanding of issues, root causes, and the ability to assess the results of any proposed development action. Interviewees I07 and I08 commented that *it's a tool for managing conflicts,*

*identifying and prioritizing the needs, identifying the problems and solutions and it simply provides a broader basis and potentially more complete framework for analysis and evaluation.*

Peoples' participation in setting resettlement objectives, identifying reestablishment solutions, and implementing them. Public participation has many benefits. The main aim of public participation is to encourage the public to provide meaningful input into the decision-making process. One of the benefits of this can be seen when formulating and setting the objectives and goals of the project. It helps in planning the project. And can help in identifying the problems and solutions in the project.

### **Reliable cost estimates, and provision of required financing with resettlement activities phased in-tune with civil work construction**

According to the interviewees, cost estimation is a major activity of the resettlement plan. Good cost estimation is essential to keep the project within the stipulated budget.

The project must have sufficient funds and be able to raise funds where and when necessary. This is necessary in case the acquisition of land does not take place, compensation is to be paid to the people. Therefore, the project should have sufficient funds to adequately compensate the affected people when needed.

The political commitment of borrowers in the form of laws, policies, and resource allocations; self-selection of the relocation area by the community and sound social analysis, reliable demographic assessments, and appropriate technical expertise in planning for development-oriented resettlement were also proposed as positives.

## **CHAPTER FIVE**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

The study aimed to evaluate the impacts of involuntary displacement and resettlement due to expressway construction. The chapter focuses on the conclusions of the findings, and recommendations therein.

#### **5.2 Conclusions**

Through the study, it was possible to arrive at the following conclusions. The study aimed to evaluate the impacts of involuntary displacement and resettlement due to expressway construction. There were four (04) objectives that were aimed to achieve through this study. These objectives and consequently the aim of the study was achieved.

##### **5.2.1 Critically review the aspects of the involuntary displacement and resettlement due to construction activities**

Infrastructure development refers to the basic physical and organisational structures and facilities that are needed to upgrade and sustain the livelihood and societal, economic, political, environmental, and cultural development in a country. Therefore, a well-developed transportation network in high population density areas is an absolute requirement. More often than not these projects cut across highly inhabited areas, because of which resettlement is the main issue which is currently being faced by government authorities. Resettlement can be operationally defined as; a large number of people moving from their original habitant place to a new vicinity with new geographical or cultural settings. It can be involuntary or voluntary. Involuntary Displacement is the spontaneous movement of people from their original settlement sites to resettle in a new one.

Many theories, acts, policies, and procedures relating to resettlement were identified during this research. These include the Cerenea's IRR model, the National Involuntary Resettlement Policy (NIRP), and Land Acquisition Act (LAA) which is



mainly used. There are many other acts, policies, and theories of resettlement and displacement available both locally and internationally; while these do have some shortcomings they would have to be customised or updated to be made current.

### **5.2.2 Explain the possible impacts of involuntary displacement and resettlement**

Many impacts have been identified in the literature chapter. These impacts are both positive and negative. The negative impacts include landlessness, joblessness, homelessness, marginalisation, food insecurity, increased morbidity and mortality, social disarticulation, lack of facilities to name a few. The main cause of these impacts is the lack of compensation.

Some of the positive impacts which were identified are the increase in income levels, improved transportation, and housing conditions, higher living standards, possession of farmland, and access to new information and techniques. This objective describes in the next paragraph. Because these objectives were connecting and continuing with the third objective.

### **5.2.3 Develop a model to exhibit the positive and negative impacts of involuntary displacement and resettlement happening due to Central Expressway project in Sri Lanka**

The acquired field data of the Central Expressway project - PAPs indicated that a majority of 54.0% were male and 46% were female and 6% of illiterate people live in this area that can only place a signature. PAPs in general were very poor people such as street vendors. The findings which were derived with regards to their education confirmed that some people do not know of cash management. This has also caused several social issues due to the large amount of monetary compensation that is received by these individuals. From the sample which was used 39% of land and buildings were fully affected. People who fall into this category need to be resettled as they have to find a better place to resettle and restore their livelihoods. The majority of these buildings were residents. This means the majority of the dwellings of the PAPs were acquired from this project.

All (100%) of the respondents received compensation according to the stipulated parameters. From the sample, 90% obtained cash benefits, and 10% obtained land benefits from the project.

Many families were able to improve the quality of their houses and upgrade their living standards, but they were unhappy that they had lost their green environment and quiet rural setting; the loss of shade and a naturally cool environment, and the loss of access to fruit and other produce bearing trees. Several households saw a downturn in incomes because they lost either agricultural land or enterprises or because their access to employment was disrupted or lost.

People who were above the poverty line previously, saw themselves dropping below the poverty line due to the loss of assets and social networks. Enterprises with lower compensation had a less cushioning effect through the recovery period and found it more difficult to restart. New settlers who were starting new ventures underwent both physiological and psychological stress.

This study sought to identify the problems with resettlement sites and the solutions therein. Most of the respondents said the new resettlement locations are far away from their previous residential place and town. Another problem which arose due to this was the loss of employment and income, especially for those who are self-employed. Therefore, they need training in the newly identified self-employment avenues and need help concerning income restoration.

The contribution of each of the impacts related to the resettlement was examined after which a model was created of these impacts.

The impacts of the involuntary displacement and resettlement were both positive and negative. From the negative impacts, economic impacts ranked as number one of the significantly influential impacts that relate to involuntary displacement and resettlement due to the Central Expressway Project (Stage I). This was followed by physical impacts. After which social and environmental impacts ranked third and fourth respectively. Out of the positive impacts, physical impacts ranked the first in the significantly influential impacts that relate to the involuntary displacement and resettlement due to the Central Expressway Project (Stage I). This was followed by

environmental impacts, and social and economic impacts ranked third and fourth respectively.

#### **5.2.4 Proposed solutions to the identified problems related to resettlement activities**

Through the interview findings, it is revealed that there are many factors involved in making successful resettlement. These are - developing mechanisms for people's participation in planning and implementation; reliable cost estimate and provision of required financing, with resettlement activities, phased in-tune with civil work; reliable demographic assessments, and appropriate technical expertise in planning for development-oriented resettlement to name a few. The interviewees said that the factors of failure of the involuntary displacement and resettlement are; inadequate resettlement planning, lack of consultation, and participation of the affected people, budgetary shortfalls for timely compensation payments remain the most significant factors.

Finally, there is no 'perfect' resettlement scheme and there were both winners and losers among resettled individuals without exceptions. Some best practices were identified, including those case studies that indicate that a land-for-land compensation scheme should still be a major option for resettled individuals.

#### **5.3 Recommendation of the Study**

It was recommended that development projects will continue to be implemented in Sri Lanka, and the land will continue to be acquired to facilitate this form of development. Steps need to be taken to offer more durable solutions to persons who will be required to give up their lands for such development activities. There are so many impacts that arise due to involuntary displacement and resettlement which require a strategic resettlement plan and implementation of involuntary displacement and resettlement due to the development projects in Sri Lanka, especially expressway construction projects.

The active participation of displaced people in the resettlement process is essential if there is to be any possibility of risk management and livelihood restoration. There is evidence to suggest that the more people were involved in decisions concerning how, where, and when they move, the more likely they can adapt to the situation and

recover from the stress associated with being resettled as suggested by Reddy et al. (2015).

There are policies and acts relating to the involuntary displacement and resettlement. But there are some shortcomings when examining the policies concerning other countries concerning involuntary displacement and resettlement. Therefore it is recommended to update the local land acquisition laws, policies, and procedures, establish a formal monitoring program, establish a timely compensation system, and used local labour for construction activities. The Government thus must incorporate the National Involuntary Resettlement Policy (NIRP) into statutory law to safeguard the rights and entitlements of communities forced to relocate in the wider public interest of development and to ensure that the resettlement process is accountable and equitable.

It was recommended that the resettlement compensation mechanism has to be updated, especially the Government valuation scheme. Due to the lack of a clear description of the property valuation in the Land Acquisition Act (LAA), therefore a proper definition of valuation and compensation is required. Moreover, resettlement packages not based on farmland (i.e. Agriculture) could be shown as alternative options for resettled individuals. This implies that a new paradigm should be explored, in addition to land-for-land strategies, so that more options with solid viability can be offered for the resettled individuals.

It is recommended to identify the most vulnerable residents and provide them with project-related benefits, such as job opportunities or purchasing of the used construction materials from them. This could help to foster a good relationship between the developers and local communities and to achieve livelihood restoration.

Need human development training for (income restoration programs) to overcome the health problems related to involuntary displacement and resettlement.

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## Annexure 01 : Questionnaire

### Involuntary Displacement and Resettlement due to Expressway Projects in Sri Lanka: An Impact Assessment

Aim of Research: The aim of the study is to evaluate the impacts of the involuntary displacement and resettlement due to Expressway construction

Objective: Appraise the possible impacts of involuntary displacement and resettlement

Date .....

Questionnaire No.

#### 1. Social and Economic Status of the Resettler – Family Details

No.	Name	Relationship to Household	Age	Sex	Marital Status	Education	Employment	Monthly Income
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								

#### 2. Condition of the affected area of the land or Building

1	2	3	4	5
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#### 3. Condition of the Land

1	2	3	4	5
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#### 4. Condition of the Building

1	2	3	4	5	6	7	8
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#### 5. Type of the area you have been lived before the resettled:

Urban  Semi- Urban  Rural

#### 6. Type of the area you have been resettled:

#### 7. Ownership of Land before Resettled and after resettled: Before After

#### 8. Are there any Sub Families lived in your home before resettled? Yes / No



9. Method of Compensation you have attained: Monetary  Land

10. What are the benefits they attained from the project? Land  Cash  None

**Rating according to the severity of the impact**

**1 - Very Low, 2 – Low, 3 – Moderate, 4 – High, 5 – Very**

11. Negative Social Impacts relate to the resettlement (Rating according to the severity of the impact)

Impact	Rate				
	1	2	3	4	5
1. Break the social network with neighbors					
2. Break the Social network with relatives					
3. Children’s education would be disrupted					
4. Certainty in our food insecurity and access					
5. Increase the health problems (Stress, the outbreak of relocation-related diseases and psychological trauma caused by displacement)					

12. Positive Social Impacts relate to the resettlement (Rating according to the severity of the impact)

Impact	Rate				
	1	2	3	4	5
1. Create the new social network with neighbors					
2. Identified and meet new cultures					
3. Children’s entered a new school better than old school					
4. Improve residence condition					
5. Certainty in our food security and access					

13. Negative Physical Impacts relate to the resettlement (Rating according to the severity of the impact)

Impact	Rate				
	1	2	3	4	5
1. Distance from our village/indigenous community					
2. Undergone hardship during the project construction period					
3. Loss of Access to Common Property and Services					
4. Lack of facilities in new location					
5. Loss of Home, shelter and properties					

14. Positive Physical Impacts relate to the resettlement (Rating according to the severity of the impact)

Impact	Rate				
	1	2	3	4	5
1. Owned a modern housing structure					
2. Improve road accessibility and transportation facilities in the area					
3. National Road Development					
4. Regional Development					
5. Obtaining land as benefits of the project					

15. Negative Economic Impacts relate to the resettlement (Rating according to the severity)

Impact	Rate				
	1	2	3	4	5
1. Loss of wage employment					
2. Shift in the occupational pattern					
3. Change the level of job					
4. Lack of compensation					
5. Can't pay the past loans due to the displacement					

16. Positive Economic Impacts relate to the resettlement (Rating according to the severity)

Impact	Rate				
	1	2	3	4	5
1. Economic development in Sri Lanka					
2. Reduce travel time, vehicle maintenance cost and travel/fuel cost					
3. Enhancement of the investment opportunities					
4. Found new income sources					
5. Reduction of poverty of the people					

17. Negative Environmental Impacts relate to the resettlement (Rating according to the severity)

Impact	Rate				
	1	2	3	4	5
1. Experienced flooding frequently					
2. Experienced poor water quality					
3. Noise and air pollution / Dust					
4. Damages to the remaining property					
5. Changes the green environment					

18. Positive Environmental Impacts relate to the resettlement (Rating according to the severity)

Impact	Rate				
	1	2	3	4	5
1. Reduce road accidents					
2. New scenic beauty as a result of Expressway					
3. Positive attitudes towards road safety					
4. Improvement in tourism					
5. Reduction of air pollution due to traffic congestion					

19. What are the problems on new resettlement sites? And idea about the resettlement

20. What are the solutions you suggest to solve above problems?

**Thank you for the participation of this Survey**

## **Answers**

### **Q.1**

#### **Age**

1. 0 – 9
2. 10 – 14
3. 15 – 29
4. 30 – 44
5. 45 – 59
6. 60 >

#### **Relationship to the household**

1. Husband
2. Wife
3. Son
4. Daughter
5. Mother – in-law
6. Father-in-law
7. Niece
8. Nephew
9. Brother
10. Sister
11. Other

#### **Sex**

1. Male
2. Female

#### **Marital Status**

1. Married
2. Unmarried
3. Divorce
4. Separate
5. Widow
6. Other

#### **Education**

1. Illiterate
2. Still going to school
3. Can place signature
4. Expecting to going to school
5. Educated only class 1 – 5
6. Class 6 – G.C.E. (O/L)
7. G.C.E. (O/L) Pass

8. G.C.E (A/L) Pass
9. Undergraduate
10. Graduated
11. Post Graduate
12. Other

### **Employment**

1. Farming own land
2. Agricultural labor
3. Non-agriculture labor (skilled)
4. Non-agriculture labor (unskilled)
5. Fishing
6. Weaving
7. Animal husbandry
8. Commercial activities
9. Vendors
10. Govt. Services/ Executives
11. Govt. Services/Other Grades
12. Private Sector/Executives
13. Private Sector/Other Grades
14. Armed forces
15. Police, Home guard/Private security Services
16. Housewife
17. Retired person
18. Unemployment
19. Self- employment
20. Student
21. Child ( 0 - 5 Age)
22. Other

### **Monthly income**

1. <5,001
2. 5,001 – 7,500
3. 7,501 – 10,000
4. 10,001 – 15,000
5. 15,001 – 25,000
6. 25,001 – 50,000
7. 50,001 – 100,000
8. 100,001 – 200,000
9. >200,000

**Q.2**

1. Partially affected the land
2. Fully affected the land and building
3. Fully affected the Land
4. Partially affected the land and building
5. Fully affected the building and partially affected the land

**Q.3**

1. Residential
2. Trade/business
3. Agriculture
4. Non- agriculture
5. Abundant

**Q.4**

1. Residential
2. Rented house/building
3. Shop
4. Shop and house located in the same building
5. Storage
6. Tent
7. Abundant
8. Other

**Q.6**

1. Urban
2. Semi –urban
3. Rural
4. Still not resettled
5. Resettle within the land

**Q.7**

1. Single Deed
2. Undivided Joint Deed
3. Deed of Gift
4. Expecting the permits
5. Jaya Bhoomi/Swarna Bhoomi
6. Based on Lease
7. Permits Granted
8. Deed of Lease
9. No permit or deed granted
10. Deed of Declaration
11. Other

## **Annexure 02 : Interview questions**

1. Do you have any past experience related to resettlement?
2. What are the problems related to the resettlement sites?
3. Is there any factors to success the resettlement?
4. What are the failure modes of resettlement?
5. What are the solutions you will propose to mitigate the resettlement impacts?