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REVAMPING THE LAND ACQUISITION PROCESS FOR INFRASTRUCTURE PROJECTS IN SRI LANKA: STRATEGIES FOR STREAMLINING THE EXISTING PROCESS

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ABSTRACT

Land Acquisition (LA) is a process of acquiring lands before constructing infrastructure projects for public purposes. Infrastructure projects often experience delays attributed to prolonged land acquisition processes. Compulsory LA becomes necessary, requiring compensation for the affected parties to mitigate these delays. Hence, various laws and regulations are enacted in different countries including Sri Lanka to ensure the validity of the process. The prolonged LA process raises the grievances of project-affected parties and leads to project delays. This study aims to enhance the existing land acquisition process for Sri Lanka to acquire lands for infrastructure projects. In Sri Lanka Land Acquisition Act, no 9 of 1950 is currently used for LA. Delays in infrastructure projects in Sri Lanka are caused by the problems in LA and those problems were identified through three case studies. Here, expert interviews were conducted with six experts and nine semi-structured interviews with other stakeholders involved in the LA process. The main problem with extending the LA is the time wasted from Section 2 to Section 9. The study recommended that providing technological facilities and establishing grievance readdress committees are the key suggestions. This study contributes to theory by categorising different strategies into short-term, middleterm and long-term bases. It further emphasises the necessity of explicit discussions to change the LA law in Sri Lanka to meet the industry's needs. Further, this study recommends implementing the suggestions in an action plan to revamp the land acquisition process for infrastructure projects in Sri Lanka.

Keywords: Infrastructure Projects; Land Acquisition Act; Land Acquisition.

1. INTRODUCTION

Infrastructure development positively relates to the economic development of a country (Nguyen et al., 2020). Expanding the infrastructure facilities is one of the key functions of any government and becomes fundamental for any sustainable growth strategy (Fay et

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al., 2017). Cook et al. (2017) linked the improvement of infrastructure with SDGs: 1, 2, 3, 4, 5, 6, and 8. Even though infrastructure projects are linked with sustainable development, delays in infrastructure projects have frequently occurred (Deep et al., 2022). This leads to time extension, cost overrun, disputes, arbitrations, litigations and adverse effects on national economic growth (Gardezi et al., 2014). Figure 1 visualises the severity of the occurrence of land acquisition issues among the other causative factors in delaying infrastructure projects. Elawi et al. (2016) discovered that the average delay in infrastructure projects in Mecca was 39% and the most severe cause of delay was found to be land acquisition. Consequently, 70% of delays in infrastructure projects in India are caused by land acquisition (Rao, 2018).

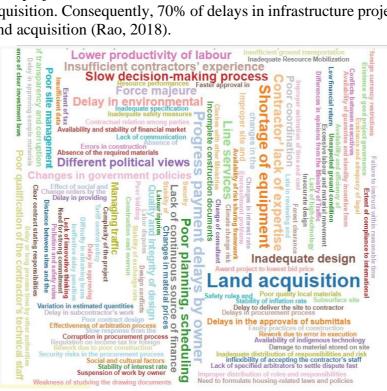


Figure 1: Word cloud of factors affecting delay the infrastructure projects

Land acquisition delays are categorised into owner-responsible delays (Elawi et al., 2016), technical delays (El-Sayegh & Mansour, 2015), socio-political delays (Dadhich, 2017) or external delays (Alfakhri et al., 2017). Hence, insight into the land acquisition process is crucial to reduce these delays in the existing land acquisition process. Acquisitions of land take place within a highly complicated land administration system and a politicised environment (Lay & Nolte, 2018). Hence, the length of the land acquisition process depends on the key influencing factors in the external environment. Wijekoon and Aththanayake (2012) identified issues in the land acquisition process as a key factor for delaying road construction projects in Sri Lanka. In addition, Silva (2016) emphasised that the Land Acquisition Act (LAA) is not friendly to the landowners. Therefore, a comparison of the LA process in different countries is required to propose an effective LA process. This paper aims to enhance the existing land acquisition process in Sri Lanka. The objectives are to identify the land acquisition processes used in different countries, to compare the land acquisition processes used in different countries with the Sri Lankan process, to investigate the problems in the existing land acquisition processes used in Sri Lanka and to propose suggestions to the land acquisition processes used in Sri Lanka to acquire lands for infrastructure projects.

2. LITERATURE REVIEW

2.1 LAND ACQUISITION

Land acquisition is the approach that governments use to acquire private properties to provide public facilities for the betterment of the public (Huggins, et al., 2013). The ultimate objective of the land acquisition process is to timely compensate the affected parties before the mobilisation of the contractor (Aditya et al., 2017). Further, it involves with a stipulated regulatory process involving with government institutes (Kumar, 2018) and hence, the land acquisition process needs to be prompt and transparent (Raghuram & Sunny, 2015). Land acquisition can be practised through voluntary purchase, land readjusting (consolidation) and compulsory acquisition (Belej & Walacik, 2008). Further, the authors expressed that voluntary purchase is the method of exchanging land while readjusting allows land assembly. Despite this, compulsory acquisition is predominantly practised in land acquisition for infrastructure development (Ghimire et al., 2017). Compulsory acquisition is a practice with eminent domain, which means without the consent of the landowner the required land can be acquired for public purposes (Adu-Gyamfi, 2012). Hence, this is empowered by separate rules and regulations to ensuring the method of compensation for the landowners and the affected parties (Wahi et al., 2017). However, various countries practice different land acquisition laws and practices to compensate affected parties for their loss (Rao et al., 2018). Despite, different laws imposed in different countries, delays in land acquisition are broadly dispersed (Elawi et al., 2016). Olanrele et al. (2017) declared that a fair approach to land acquisition is provided in different laws on the compulsory acquisition of land across countries and in the constitutions of different countries. Therefore, studying the land acquisition processes in different countries is vital to determine the efficient steps.

2.2 LAND ACQUISITION PROCESS IN SRI LANKA

The first legislative movement for land acquisition was initiated in 1876 as the Land Acquisition Ordinance of 1876. This was supplanted by the Land Acquisition Act No. 9 of 1950 (LAA). Currently, the provisions for land acquisition in Sri Lanka are governed by the above act. Initially, the applicant institute should apply to the respective ministry. Then Ministry of Land (MoL) issues a Section 2 order. Then Divisional Secretary (DS) acquires the respective land. Under Section 2 Ds request advanced tracing from the Survey department. The next step involves with calling objections from the PAPs. After conducting objection inquiries MoL issues Section 5 and performs the remaining duties by DS. Despite, more than 60 years have passed still no extensive amendments have been made to LAA (Silva, 2016). It implies that it is required to amend the act to ensure efficient and effective land acquisition. Therefore, a comparison of the LA process with other countries will facilitate to improvement of the existing process of LA in Sri Lanka.

3. METHODOLOGY

This research uses a qualitative method to achieve the aim of proposing modifications for the existing LA process in Sri Lanka. Polkinghorne (2005) stated that qualitative data can be gathered in either spoken or written forms from various sources, such as observations, interviews, document reviews, questionnaires, and drawings. The volume and richness of qualitative data can vary depending on the extent of different data collection methods used. Consequently, this study first employed a desk review. Topolewski (2020) explained that a desk review involves collecting data from secondary sources. Thus, in alignment with the first and second objectives, the review of LA processes in different countries was conducted through a desk review, referring to LA Acts in various countries, journals, conference papers, and websites.

Kumar (2014) noted that a case study provides an extensive, in-depth, and holistic exploration of the aspects that need to be investigated. Therefore, following the desk review, case studies were conducted to achieve the third and fourth objectives: identifying problems and proposing suitable solutions for the land acquisition process. The unit of analysis was the problems in the existing LA process, and the case boundary focused on infrastructure projects in Sri Lanka. Interviews are a commonly used method for collecting information from people (Kumar 2014). Hence, semi-structured interviews were conducted with two experts and three stakeholders involved in the LA process from each case. In total, 15 interviews, along with document reviews and observations, were conducted within the cases to ensure the robustness of the data collection. Findings were derived through manual content analysis within the case analysis. The findings and analysis will be discussed in subsequent sections.

4. **RESULTS AND DISCUSSION**

4.1 INTERVIEWEE PROFILE

The 15 interviewees including six experts and nine other interviewees were interviewed to explore problems in each step in LA which affected to delay of the LA process in Sri Lanka and solutions were identified for mitigating identified problems in the LA process. The data saturation was achieved at the 13th interview. The methods of qualitative data collection are mentioned in Table 1.

	Case 1-highwa	y project	Case 2	2- irrigati	on project	Case 3- irrigation project Project value: LKR 16000 million				
Project	t value: LKR 445.30 bi	llion	Project value	: LKR 80	00 million					
Desk r	eview LAA	, Land manual, LA prog	ress review me	eting min	t, Newsletter					
Observ	vations Proj	ect meetings, Workshops	5							
	Exp	ert interviews		Semi-structured interviews						
Code	Designation	Profession	Experience (years)	Code	Designation	Profession	Experience (years)			
I1	Social and Resettlement Safeguards Specialis (National)	Retired Secretary	47	I7 Project Director		Chartered Engineer	21			
I2	Programme Director	Chartered Engineer	42	18	Senior Superintend of Surveying	Surveyor	30			
13	Consultant Land acquisition and resettlement		37	I9	Divisional Secretary	Land acquisition	6			
I4	Acquiring officer	Land acquisition	15	I10	Project Director	Chartered Engineer	15			
15	Deputy projec director	t Land acquisition and resettlement	27	I11	District Valuer	Valuation of acquired land	25			
I6	Inquiring office (Acquisition)	r Land acquisition	12	I12	Divisional Secretary	Land acquisition	8			
				I13	Project Director	Chartered Engineer	18			
				I14	Superintend of Surveying	Surveyor	12			
				I15	Divisional Secretary	Land acquisition	5			

According to Table 1, expert interviews were conducted with the professionals who are experienced in LA process while semi-structured interviews were conducted with the stakeholders who are engaged in LA process at different levels. Moreover, selected experts gained experience in LA at least two infrastructure projects. Since DS are frequently involved in LA they were selected in each case. Further, data obtained through document review and observations in each case were subjected to data analysis and presented in subsequent sections.

4.2 LAND ACQUISITION PROCESS IN DIFFERENT COUNTRIES

Land acquisition is executed in different countries by using different laws and statutes (Olanrele et al., 2017). In India, the land acquisition process is regulated by the Land Acquisition Act enacted in 1894 with a variety of processes (Wahi, 2017). Recently, this act was amended as Land Acquisition, Rehabilitation and Resettlement Act, 2013 (LARR) by resolving some of the issues in the compensation process in LA. By reviewing LARR representatives of the state collector held inquiries to the objections after declaring a land acquisition for a particular project. After hearing to objections, the government will decide what will be declared to the requested party. After that the collector proceeds with notifying the notices to survey the land and subsequently conduct the valuation process and its objections and the compensation will be paid. LA in Malaysia is governed by Article 13 of the federal constitution 1957 and Land Acquisition Act [LAA] 1960 (Alias et al., 2011). As mentioned in LAA, the LA process in Malaysia comprises with major six steps i.e. issuance of notice, entry and survey, gazetting, investigation and awarding the compensation. There are laws and regulations related to the land acquisition process in Indonesia and Law No. 2 of 2012 on Land Acquisition for Development for Public Interest, Law No. 11 of 2021. Yasuhiro (2015) mentioned the two methods of land acquisition in Japan i.e. (i) land purchase by an agreement, and (ii) land expropriation for compulsory land acquisition. The land acquisition process for public purposes is termed land expropriation and is regulated under the Land Expropriation Law of 1951 Article 29 Paragraph 3 (Boro, 2022).

In the **USA** land acquisition is divided into four types i.e. (i) donation, (ii) condemnation, (iii) exchange, and (iv) purchase. According to Section 7 of the Reclamation's Act of 1902, the Secretary of the interior is authorised to acquire the land for the state under judicial process and payment will be made from the reclamation fund. In **Australia** initially minister gives the consent to acquire a particular land plot through predeclaration and the people who will be affected are informed within 14 days after publication by forwarding the following documents: a) a copy of the declaration, (b) a notice, (c) a compensation claim form. Under Section 47 (1) (a) the entry to the possession is vested to the acquiring authority in a compulsory acquisition.

General information										
I A provision embedded into	1 amagin1 pat	2	3	4	5	6	7	8		
LA provision embedded into constitution (a)/special act (b)	special act	special act	constitution	special act	constitution	special act	constitution	special act		
Authorizing officials for LA (a)- Delegated central government officer, (b)- Local authorities, (c)- Delegated officials in State and federal states	Delegated central government officer	Delegated central government officer	Delegated officials in State and federal states	Local authorities	Delegated central government officer	Local authorities	Delegated officials in State and federal states	Delegated officials in State and federal states		
Used term for land acquisition (a)- Expropriation, (b)- compulsory purchase, (c)- compulsory acquisition, (d)- resumption (e)- Eminent domain	compulsory acquisition	compulsory acquisition	compulsory acquisition	Expropriation, compulsory acquisition	Expropriation, compulsory acquisition, Eminent domain	Expropriation, compulsory acquisition, compulsory purchase, resumption	Eminent domain	Expropriation, compulsory acquisition, compulsory purchase, resumption		
Other form of land acquisition (a)-Voluntary exchange, (b)- Compulsory acquisition (c)- Purchase by agreement (d)- The sale and purchase, (e)- Public expropriation (f)- Trust law	Voluntary exchange, Compulsory acquisition	Voluntary exchange, Public expropriation, Trust law	Voluntary exchange, Compulsory acquisition, Purchase by agreement	Compulsory acquisition	Compulsory acquisition, Purchase by agreement, Trust law	Compulsory acquisition	Compulsory acquisition	Compulsory acquisition, Purchase by agreement		
Frequently used method of LA (a)-Voluntary exchange, (b)- Compulsory acquisition (c)- Purchase by agreement (d)- The sale and purchase, (e)- Public expropriation	Compulsory acquisition	Voluntary exchange, Compulsory acquisition	Purchase by agreement	Compulsory acquisition	Compulsory acquisition	Compulsory acquisition	Compulsory acquisition	Compulsory acquisition		
Presence of stipulated period (a)- Yes (b)- No		No	No	Yes	No	Yes	Yes	Yes		
Country- 1-Sri Lanka, 2-India, 3-I	Malaysia, 4-Inc	lonesia, 5-Japan,	6-UK, 7-USA,	8-Australia						

Process step	1	2	3	4	5	6	7	8
Submit the acquisition proposal by the requiring agency			\checkmark					
Acquire for public purpose	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark
Provide resettlement plan		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark
Acquire for private companies	*	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark
Acquiring order is given by the minister to land/ infrastructure	\checkmark	\checkmark		*	*	\checkmark	*	\checkmark
Initially gazette the acquiring notice	*	\checkmark	\checkmark	\checkmark	*	\checkmark	*	\checkmark
Gazette the notices more than one time		*	*	*	*	*	*	*
Surveying respective land lots		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark
Calling for objections		\checkmark	\checkmark	\checkmark	*	\checkmark	\checkmark	\checkmark
Emergency clause		\checkmark	\checkmark	\checkmark	*	\checkmark	\checkmark	\checkmark
Conduct inquiries to determine land ownership		\checkmark	\checkmark	\checkmark	*	\checkmark	\checkmark	*
Compensation procedures		\checkmark	\checkmark	\checkmark			\checkmark	\checkmark
Compensation is based on market value of the land and other acquired assets	\checkmark							
Appeal committee		\checkmark	\checkmark		*		\checkmark	\checkmark
Create a land pool for procuring lands when it requires	*	\checkmark	*	*		*	*	*
Country- 1-Sri Lanka, 2-India, 3-Malaysia, 4-Indonesia, 5-Ja	ipan, (5-UK, '	7-USA	A, 8-A	ustral	lia	Yes: √	No:*

Table 3: Comparison of the LA process in different countries

4.3 COMPARISON OF LA PROCESS IN DIFFERENT COUNTRIES

By reviewing LAAs in different countries identified similarities and dissimilarities are mentioned in Table 3. Accordingly, LA is embedded into the constitutions of some countries such as Japan, Malaysia and the USA. Further, some of the country's LA process is centralised to the government and others are delegated to the federal states. Initially, LA in India was governed by the Land Acquisition Act, 1894 and it was replaced by Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCT LAR&R 2013). Further, LA in the UK is legislated by the Acquisition of Land Act 1981. Moreover, the LA process in Australia is governed by commonwealth legislature while federal states are embedded with separate laws for land acquisition. This is comparable to LA laws in the USA. Land acquisition for development in Public Interest No. 2 of 2012 is applied in Indonesia while Land Acquisition Act 1960 was enacted in Malaysia. In addition, the law for land expropriation in Japan is governed by Law of 1951 Article 29 Paragraph 3 as a law of land's compulsory expropriation for public purposes. Apart from that India and Japan adhere to the Land Trust Act which creates a pool of land which provides suitable land for the infrastructure development projects conducted by private companies. Eventhough, LA is done for the public purposes provisions for acquiring land for private companies are also legally established in India. Further, different officials are devolved with LA authority such as in India, district collector or deputy collector (Tehsildar), in USA Secretary of the Interior and the Secretary of Agriculture General Services Administration Regional realty officers (RROs) in Sri Lanka divisional secretaries are the authorised officials for acquiring lands for infrastructure development.

The land acquisition process in most of the countries is started by submitting a proposal to the government. Except for India, Malaysia, and Indonesia land acquisition is done for public purposes and the above countries can acquire land for private companies. Further, the acquiring order must be given by the minister. Then it is published for the general public through a gazette notification. The order of acquiring the land is given by the minister to the land. In Sri Lanka, a gazette is published after conducting objection inquiries. LA processes in the UK, the USA and Australia are comprised of stipulated period for the steps in LA. Compared with Malaysia, the USA and Japan, the LA process in SL has been described as a special act. Further, In Sri Lanka, the term for land acquisition is used as compulsory acquisition. Although, voluntary acquisition is applicable in Sri Lanka compulsory acquisition is a highly used method for the LA in SL. The stipulated period for some steps is demarcated in LA laws there is no period for each step in LA act of SL. Although, LA provisions are applicable to acquire land for private companies in India, LA provisions in Sri Lanka are formulated for acquiring land for only public purposes. Moreover, the resettlement of affected parties from LA is considered in India in the recently enacted law Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCT LAR&R 2013). However, in Sri Lanka, a separate policy as National Involuntary Resettlement Policy (NIRP) for the project-affected parties through LA was established in 2009 under the purview of the Asian Development Bank. Comparable to India, Malaysia and Indonesia, an emergency clause for urgency acquisition is mentioned in LAA. Therefore, land can be acquired instead of objections from the affected parties.

4.4 PROBLEMS IN THE LA PROCESS IN SRI LANKA

As per Table 4, the main problems in the LA process in Sri Lanka identified through interviews are: Unnecessary time-consuming for proceeding with some steps, Lack of coordination between organisations, Improper progress monitoring, Lack of training, Transfers of experienced officers, Insufficient physical resources, Insufficient human resources and not given the priority for LA process. Further, each problem is further described with examples in the LA process steps. I1 stated, "lack of timely coordination between stakeholders who engage with LA process is the main obstruction for the effective LA". The acquiring officer stated that since the LA Act is not compatible with the present-day context and time taken to proceed steps 2 to 7 was extended. For instance, a survey plan is requested in two steps. If it reduces into one step time and cost will be saved. Further, I2 and I4 agreed with the suggestions to amend the LA law and I4 mentioned that it should be an extensive discussion with all the stakeholders who are engaged with the LA process. Extending the time allocation for conducting Section 9 inquiries for deciding the land ownership for acquired land plots is common in the LA process for implementing infrastructure projects. Certain inquiries are not completed due to the absence of all the parties who are entitled to land ownership. Further, submitting incomplete documents especially, land records on land registration is not compatible with proving the ownership of the affected person. Hence, inquiries must be conducted for more than one time. In addition, I4, I5 and I6 agreed that the lack of physical resources such as space, and office equipment is one of the main barriers to the timely implementation of the LA process. Identified problems and proposed solutions are tabulated in Table 4.

4.5 SUGGESTIONS FOR IDENTIFIED PROBLEMS IN THE LA PROCESS IN SRI LANKA

As Table 4 visualises most of the suggestions can implemented in the short term. For instance, use other sources for sending documents except the manual method, involvement of client organisation for supporting to perform LA processes by Divisional Secretaries and Ministry of Land. In addition, simplifying the applications, and charts by introducing checklists and simple formats will improve the clarity of the documents.

		Example of related step	Suggestion	Short	Middle	Lon
	Step Example			term	term	tern
Unnecessary	Section 2	Delaying in sending documents to the	Use other sources except to the manual method			
time		Ministry of Lands	Appoint Grievance readdress committee (GRC) Through GRC solve the		\checkmark	
consuming to			disputes of PAP time effectively			
proceed with		Extending the time for preparing advanced	Involvement of client organization			
some steps		tracing	Policy decision on review the step and amalgamate with section 5 and 7 step			
	Section 4	Extending the time for conducting inquiries for objections	Provide more facilities for conducting more inquiries		\checkmark	
		Delaying in decision-making for respective	Involvement of client organization			
		objections given by PAP	Policy decision on conduct objection inquiries as much as earlier before			
			issuing section 2 order			
	Section 5	Delaying for translation	Involvement of client organization			
		Delaying receiving documents	Involvement of client organization			
		Errors in submitted documents	Conduct an awareness programme for PAP			
			Use of formats			
	Section 6	Delays in receiving preliminary plan	Provide facilities for the Survey department			
			Involvement of client organization			
	Section 7	Delaying for translation	Hired a service from translators			
		Delaying receiving documents	Use other sources for sending and receiving documents (Handover, email,			
			WhatsApp)			
		Errors in submitted documents	Early check			
			Conduct awareness programmes for submitting documents for inquiries	N		
	Section 9	Delaying conducting inquiries for determining ownership of lands	Provide additional staff for conducting inquiries			
		Delaying submitting documents related to land ownership	Conduct awareness programmes for submitting documents for inquiries	\checkmark		
		Incomplete documents	Conduct awareness programmes for submitting documents for inquiries			
		Errors in supplied documents	Conduct awareness programmes for submitting documents for inquiries			
		Higher rate of absenteeism for the inquiries	Use different methods of meetings (online meetings)			
		Delaying in decision-making	Delegate powers to nearby Divisional Secretaries			
			Set a time-bound action plan			
	Section	Delaying issuing the decision-making	Delegate powers to nearby Divisional Secretaries			
	10	Delays in valuation	Coordination of the Valuation department			
			Coordinate intra-departmental progress by the Ministry of Land			
Lack of coordination	Section 2	Poor coordination between Client organisations: The survey department and the	Coordinate intra-departmental progress by the Ministry of Land			

Table 4: Problems and solutions for the LA process in Sri Lanka

Problem		Example of related step	Suggestion	Short	Middle	Long
	Step	Example		term	term	term
between	Section 4	Poor coordination between Client				
organizations		organisations. Ministry to Lands and DS office	_			
	Section 5	Poor coordination between Client		\checkmark		
		organization. survey department and DS office	<u>.</u>			
	Section 7	Lack of coordination between, Client				
		organization, Government print			1	
Improper	Section 2	Lack of progress monitoring for publishing	Delegate authority to monitor the progress of the LA process in the district			
progress		section 2 notices Lack of progress monitoring for conducting inquiries	by the District Secretary			
monitoring	Section 4		Ministry-level progress monitoring with District Secretaries			
			Maintain a pool of inquiring officers and provide their services where			
	<u> </u>		necessary			
	Section 9	Poor monitoring the progress of conducting	Delegate authority to monitor the progress of the LA process in the district	\checkmark		
		inquiries	by the District Secretary		.1	
			Ministry-level progress monitoring with District Secretaries		N	
	Mala ati an	Poor coordination between the valuation	Develop key performance indicators (KPI)	V	N	
	Valuation	department and the Ministry of Lands	Coordinate intra-departmental progress by the Ministry of Land	N		
Lack of		Lack of experience in land acquisition law and	Conduct training programme by the Ministry of Lands, Project organization	2		
training		Lack of experience in fand acquisition faw and LA process	Conduct training programme by the Whitstry of Lands, Project organization Conduct capacity-building programme for government officers	N		
training		Lack of expertise in examining titles and	Conduct training programme by the Ministry of Lands, Project organization	1		
		effectively deciding on land ownership	Conduct training programme by the Winistry of Lands, i Toject organization	v		
Transfers of		Discontinue the progress up to some period	Maintain a pool of inquiring officers and provide their services where			
officers		Discontinue the progress up to some period	necessary	•		
Insufficient		Insufficient resources for field inspections,	Provide resources when it requires			
physical		space, equipment				·
resources			maintain a pool of resources and shift when the acquisition process is			
			completed			
Insufficient		Insufficient competent staff, Turnover of	Maintain a pool of inquiring officers and provide their services where it			
human		project staff	necessary			
resources		1 5	Recruit temporary staff when necessary		\checkmark	
			Monetary/ nonmonetary incentives for the extra efforts of the officers			
			engaged in LA			
			Appoint supportive staff temporary for external government institutes such		\checkmark	
			as divisional secretaries			
Not given the		Lack of experience in land acquisition law and	Conduct capacity-building programmes for government officers			
priority for		LA process				
LA process		Lack of experience in land acquisition law and	Delegate powers to conduct inquiries for nearby divisional secretaries			
		LA process				

As per the perspective of I5 LA may delay due to objections. If a proper grievance redress mechanism is established prior to initiating LA, most of the objections can be resolved at the early stage. Hence, I5 suggested that Grievance Redress Committees (GRC) must be established before receiving Section 2 orders. Further, I1 stated that since Electronic Transaction Act No. 19 of 2006 was enacted Section 9 inquiries can be conducted online with the landowners who are not physically participating. By reviewing the above comments, the acquisition process can be improved by following existing rules and regulations. Moreover, I3 explained that comparing the LA process with Malaysia, the LA Act is comprised of certain period to complete the process steps. If unable to complete within the timeframe, the LA process will be cancelled. Further, I3 mentioned that such type of time frame can be applied to Sri Lanka by improving the facilities such as computers, undisrupted internet facilities, scanners, and networking of involved government institutions. Further, I7 proposed that due to the viability of the suggestions it can be implemented on either short-term, middle-term or long-term basis. Accordingly, most interviewees agreed to demarcate the short term as the suggestion will be implemented within a year, middle term as within 3 years long term as or more than three years.

As mentioned in Table 4, establishing GRC to manage the grievances raised by PAP can be implemented on a middle-term basis. Providing facilities to institutions involved in the LA process offers a capacity-building programme for the officers involved in the LA process and can be considered into middle-term plan due to allocating funds to organise those events. As per the perspectives of interviewees policy decisions on prevailing LA act must be taken and it requires extensive review with different stakeholders involved in LA as well as from the PAPs. Thus, it can be accomplished on a long-term basis. Ultimately, to reduce the barriers to implementing the LA process solutions must be categorised on a time basis and implemented through an action plan is vital.

5. CONCLUSIONS

LA is one of the main causative factors for delaying infrastructure projects there is no exception for Sri Lanka. Through the interviews, unnecessary time extension, lack of coordination, improper progress meetings, Lack of training, Insufficient physical and human resources are the main barriers in the LA process. Those issues can be substituted with possible solutions such as providing facilities to relevant institutions involved in the LA process and providing training programme. This study contributes to the theory by comparing the LA process in different countries by underlining its similarities and dissimilarities. Consequently, this study contributes to the industry of the current LA process in Sri Lanka and proposes suggestions on a time basis. In fact, the above solutions need to be implemented in an action plan.

6. **REFERENCES**

- Aditya, A.K., Douglass, D.A. & Bhattacharya, M. Urban infrastructure development works in India: Delay and difficulties in implementation with reference to a water supply project. *Journal of the Institution of Engineers (India): Series A*, 98(3), 349-354. https://doi.org/10.1007/s40030-017-0214-2.
- Adu-Gyamfi, A. (2012). An overview of compulsory land acquisition in Ghana: Examining its applicability and effects. *Environmental Management and Sustainable Development*, 1(2), 187-203. http://dx.doi.org/10.5296/emsd.v1i2.2519.

- Alfakhri, A., Ismail, A., Khoiry, M. A., Arhad, I., & Irtema, H. I. M. (2017). A conceptual model of delay factors affecting road construction projects in Libya. *Journal of Engineering Science and Technology*, 12(12), 3286-3298. Retrieved from https://jestec.taylors.edu.my/Vol%2012%20issue%2012%20December%202017/12_12_12.pdf
- Alias, A., Yanning, P., & Hanif, N. R. (2011). Land acquisition problems in China adopting land acquisition act 1960 of Malaysia as an alternative procedure. *Journal of Design and Built Environment*, 8(1), 1-22. Retrieved from https://ejournal.um.edu.my/index.php/jdbe/article/view/5309
- Belej, M., & Walacik, M. (2008). Land acquisition for public purpose in Poland on example of public roads construction. FIG Working Week 2008. Retrieved from ts04b_03_belej_walacik_ppt_2849.pdf (fig.net)
- Boro, V. (2022). Policies Land Expropriation System and The Compensation Rule in Japan Country. *Acitya Wisesa* (*Journal of Multidisciplinary Research*), 1(3). 17-27. Retrieved from https://journal.jfpublisher.com/index.php/jmr/article/view/125/125
- Cook, J., Huizenga, C., Petts, R., Visser, C., & Yiu, A. (2017). *The contribution of rural transport to achieve the sustainable development goals*. Research for Community Access Partnership. Retrieved from

http://research4cap.org/_layouts/15/start.aspx#//SitePages/Rural%20access%20library.asp

- Dadhich, A., & Kar, S. (2017). *Risk management in highway projects*. [Unpublished master's theses]. Jaypee University of Information Technology.
- Deep, S., Banerjee, S., Dixit, S., & Vatin, N. I. (2022). Critical factors influencing the performance of highway projects: An empirical evaluation. *Buildings*, 12(6), 849. https://doi.org/10.3390/buildings12060849.
- Elawi, G. S. A., Algahtany, M., & Kashiwagi, D. (2016). Owners' perspective of factors contributing to project delay: Case studies of road and bridge projects in Saudi Arabia. *Procedia Engineering*, 145, 1402-1409. doi: 10.1016/j.proeng.2016.04.176.
- El-Sayegh, S. M., & Mansour, M. H. (2015). Risk assessment and allocation in highway construction projects in the UAE. *Journal of management in Engineering*, 31(6), 04015004. https://doi.org/10.1061/(ASCE)ME.1943-5479.0000365.
- Fay, M., Andres, L. A., Fox, C., Narloch, U., & Slawson, M. (2017). Rethinking infrastructure in Latin America and the Caribbean: Spending better to achieve more. World Bank Publications. http://dx.doi.org/10.1596/978-1-4648-1101-2.
- Gardezi, S. S. S., Manarvi, I. A., & Gardezi, S. J. S. (2014). Time extension factors in construction industry of Pakistan. *Procedia Engineering*, 77, 196-204. https://doi.org/10.1016/j.proeng.2014.07.022.
- Ghimire, S., Tuladhar, A., & Sharma, S. R. (2017). Governance in land acquisition and compensation for infrastructure development. *American Journal of Civil Engineering*, 5(3), 169-178. https://doi.org/10.11648/j.ajce.20170503.17.
- Huggins, E., Roach, K., & Jessemy, G. (2013). Land acquisition in the context of institutional problems in the legal and administrative framework in Trinidad and Tobago. Ministry of Food Production, Land and Marine Affairs Land Management Division, Trinidad and Tobago. Retrieved from https://sta.uwi.edu/conferences/11/landtenure/documents/EsricHugginskRoachGJessemyLandac quisitionprocess.pdf
- Kumar, R. (2014) *Research methodology: A step-by-step guide for beginners*. (4th ed.). SAGE Publications Ltd., London.
- Kumar, S. (2018). Dominant factors behind delay in commissioning of infrastructure projects and the extent of delay along with cost overrun: An analysis of infrastructure projects commissioned during last five years. *International Journal for Research in Applied Science & Engineering Technology* (*IJRASET*), 6(11), 79-92. Retrieved from https://www.ijraset.com/fileserve.php?FID=19033
- Lay, J., & Nolte, K. (2018). Determinants of foreign land acquisitions in low-and middle-income countries. Journal of Economic Geography, 18(1), 59-86. https://doi.org/10.1093/jeg/lbx011.
- Nguyen, P. T., Likhitruangsilp, V., & Onishi, M. (2020). Success factors for public-private partnership infrastructure projects in Vietnam. *International Journal on Advanced Science, Engineering and Information Technology*, 10(2), 858-865. Retrieved from https://mpra.ub.unimuenchen.de/id/eprint/103508.

- Olanrele, O. O., Alias, A., Said, R., & Bello, N. A. (2017). Towards global uniformity and sustainable compensation valuation for compulsory land acquisition. *Journal of Design and Built Environment*, (Special Issue: Livable Built Environment), 17, 27-37. http://dx.doi.org/10.22452/jdbe.sp2017no1.3.
- Polkinghorne, D. E. (2005). Language and meaning: Data collection in qualitative research. *Journal of counseling psychology*, 52(2), 137-145. https://psycnet.apa.org/doi/10.1037/0022-0167.52.2.137.
- Raghuram, G., & Sunny, S. (2015). Right to fair compensation and transparency in land acquisition, rehabilitation and resettlement ordinance 2014: A process perspective. IIMA Working Papers WP2015-07-03, Indian Institute of Management Ahmedabad, Research and Publication Department. Retrieved from <u>https://www.im4change.org/siteadmin/tinymce/uploaded/IIMA.pdf</u>.
- Rao, J., Tiwari, P., & Hutchison, N. (2018). No way to say "no" stakeholder analysis for compulsory purchase for public infrastructure project in Australia. *Property Management*, 36(1), 37-66. https://doi.org/10.1108/PM-09-2016-0050.
- Silva, D. L. M. (2016). Are they set to lose out in others' gains? an analysis of livelihood security in acquisition of lands in Sri Lanka. *Proceedings of 9th International Research Conference of KDU* (pp. 57-61). General Sir John Kotelawala Defence University, Sri Lanka. Retrieved from http://ir.kdu.ac.lk/handle/345/1213.
- Topolewski, S., Górnikiewicz, M., & Stawarz, P. (2020). *The literature review and the "desk research" methods in studies conducted in social sciences with particular emphasis on security, political, and international relations studies*. Literature review & desk research report Retrieved from https://ec.europa.eu/programmes/erasmus-plus/project-result-content/811e6ec5-
- Wahi, N. (2017, February 27). Land acquisition in India: A review of supreme court cases from 1950 to 2016. *SSRN Electronic Journal*. http://dx.doi.org/10.2139/ssrn.3915345.
- Wijekoon, S.B., Attanayake, A. M., (2012, December) Study on the cost overruns in road construction projects in Sri Lanka. Proceedings of the 2nd International Conference on Sustainable Built Environment, Kandy, Sri Lanka, pp. 111–121.
- Yasuhiro, Y. (2015). Land acquisition & compensation for public use in Japan. General Incorporated Foundation Japan Organization for Land Acquisition and Compensation. Retrieved from https://www.hosyoukikou.jp/business/pdf/201502Jica1.pdf.