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## JOURNAL OF SOCIAL SCIENCES - SRI LANKA

# A Quarterly Review

#### Editor-In-Chief

H.R. Anulawathie Menike (Ph.D)

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#### ARTICLES

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# REAPPRAISAL OF FOREIGN RELATIONS IN MEDIEVAL SRI LANKA WITH SPECIAL REFERENCE TO THE REIGN OF BHUVANEKABAHU I (1272-1284 A.D.)

#### J.M Sudharmawathie<sup>1</sup>

#### ABSTRACT

The shifting of the administrative centre of the Island, consequent to the disintegration of Polonnaruva, towards the strategic points of the south-west (modern North-western Province), a salient feature of Sri Lankan medieval history is a detail of much spoken and therefore requires no elucidation. It has also been discussed that such giving away to new capitals was a necessity arose in that period of Sri Lanka history in order to counter the threats unleashed by foreign invaders of diverse which were detrimental to national security and existence of Buddhist relics. Amongst the chieftains and rulers who embarked on building up of such strongholds King Bhuvanekabahu I (c. 1272-1284 A.D.) who erected Yapahuva fortress city, which is second to Sigiri only, is of particular importance, in so far as his foreign policy is concerned which with all probability can be reckoned as a strategy he followed to consolidate his position and to develop the nation as a whole. The objective of this paper is to discuss the nature of foreign relations of Lanka during the Yapahuwa Period. Both Primary and Secondary Sources were used to gather relevant facts and information to achieve the assigned objective. In interpreting data, both literary and archaeological sources were used. There are clear evidences about Sri Lanka's foreign relations with South India, China and Egypt at the time. The nature of these relations was varied and these took the shape of political, trade and religious. In fact the South Indian invasions at the time in concern were the continuation of previous such invasions to the island. However, whilst these invasions, as architectural remains establish there have been cordial relations too with foreign countries such as China and Egypt during this period. Bhuvanekabahu I is considered as a king who made a great effort to develop foreign trade. This fact is very clear from his policy of continuing the trade activities with China, which was initiated during the Anuradhapura Period. Lanka became a part of the international trade activities carried out through the Indian Ocean. These trade relations had affected positively to Lankan economy.

Key Words: Foreign Relations, Yapahuwa Kingdom, Bhuvanekabahu I, Egypt, China

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#### INTRODUCTION

Anuradhapura, the first established ancient kingdom of Sri Lanka, continued to flourish for such duration as of about 14 centuries. Primarily because of internal disputes and civil wars and foreign invasions it showed a character of decline in spirit as the capital towards the last two centuries preceding to the tenth century A.D., and finally collapsed, in particular, with the act of Colas that abandoning it practically while choosing Polonnaruva as their center of administration. King Vijayabhahu I (c. 1055 -1110 A.D.) who, regained Rajarata from them though repaired to Anuradhapura to perform his consecration ceremony opted to continue Polonnaruva as his capital city, too. (Cv., LVI, 44- LX: 91). In the end kingdom was captured by ruthless Magha in 1215 who came from Kalinga in India A.D. (Cv., LXXXI: 58-69) forcing Sinhalese to flee from that part of the country.

The centuries (13-15) that followed the withdrawal from traditional heartland of the Sinhalese civilization marked the fragmentation of the kingdom. Of this were the characters of moving the kingdom from the dry Zone to the South-West and the quick emergence of a number of short lived capitals sometimes overlapping each other starting from Dambadeniya until Sri Jayawardhanapura Kotte had been built and of which Parakramabahu VI brought the country under one umbrella in the 15<sup>th</sup> century. During the Dambadeniya period Vijayabuhu III, Parakramabahu II, Vijayabuhu IV and Bhuvanekabahu I ruled in succession one after the other. (Mv. LXXXI: 10; Mv. LXXXII, 1, 2; Mv. XC, 1.2; Mv. XC, 29, 30).

King *Bhuvanekabahu I* remained in *Dambadeniya* for a short period and shifted his kingdom to *Yapahuwa* (Cv., Xc: 34-35). *Yapahuwa* is situated at the divisional secretarial region of *Maho* in the *Kurunegala* District in the North-Western of Sri Lanka. *Yapahuwa* is located in an isolated incline of

about 300 feet on a level ground above the sea level. Yapahuwa had been a historical destination even before it became a kingdom. Within the entire hilly area of *Yapahuwa*, numerous factors related to the pre-historical era have been found (Yapauwa, 2011: 3-6). It had been a Buddhist religious site in the 3<sup>rd</sup> century B.C (Devendra, 1951: 2). As Rajarata was an administrative center of Maga, regional administrative centers emerged beyond Rajarata suburbs. A General (Senpati) named 'Suba' retained Yapahuwa rock citadel as his administrative center of this region. This description about Yapahuwa appears in culavamsa for the first time (Cv., LXXXI: 3-5). After the coronation of king *Parakramabuhu II* (1236-1270) A.D) in Dambadeniya, Yapahuwa became a security center. During this period Yapahuwa became a place of importance due to art and craft that were prevalent at that time. The contribution by professional artistes has been mentioned in the magazine named "Yapahuwa Vistharaya" (Modder, 1893: 104). This description explains the nature of sophisticated art work during the Yapahuwa period. During the period of king Parakramabahu II, his younger son Prince Bhuvanekabahu was the person who responsible in providing security to Yapahuwa (Cv., LXXXVIII: 24-26). During this period the invader Chandrabunu arrived form South-East Asia and invaded Sri Lanka twice with the help of large troops of soldiers. When they arrived for the second time, they camped out at *Yapahuwa* and challenged the king to give up his claim for the throne (Cv., LXXXIII: 36-40; LXXXVIII: 62-66). King Parakramabuhu II was successful in chasing out Chandrabunu and his troops on both these occasions (Cv, LXXXIII: 41-47; LXXXVIII: 67-76). After these inventions, Yuwaraja (legatee) Prince Vijayabahu strengthened Yapahuwa further and stationed Prince Bhuvanekabahu I at Yapahuwa (Cv., LXXXVIII: 77-80). Prince Bhuvanekabahu I became the king after king Vijayabahu IV (1270-1272 A.D) (Cv., XC: 1-33). After he became the king he lived in *Dambadeniya* for a short time and later lived in

Yapahuwa (Cv., XC: 34-35). King Bhuvanekabahu I (1272-1284 A.D) reigned in Yapahuwa for about ten years making Yapahuwa the capital city of his kingdom.

During this period Sri Lanka has maintained relations with foreign countries influencing them in political, economic, religious and cultural arenas. Certain such relationships have been in practice during the previous kingships and these relations continued throughout. The objective of this research is to ascertain the manner of such relationships, and investigate how such relationships were maintained and the nature of the same.

#### Location of Sri Lanka and the diffusion of its maritime trade routes

Sri Lanka is an island situated in the Indian Ocean. Its extent is about 25,481 square miles. This island is separated from India by a narrow oceanic channel of about 20 miles called *Palk Strait*.

Sri Lanka plays a very important role as a mediator in international trade because it is situated in the east and west maritime trade route in the Indian Ocean. Sri Lanka provides shelter when voyaging from Europe in the West and to China in the East. There are numerous bays and points of anchorage providing adequate facilities for ships around Sri Lanka.

Sri Lanka also has become an important foreign trade center because it is a point of exchange and collection of goods for export and import. There had been two main sea routes. One was to the west through the west coast of India or Sri Lanka passing Alexandria and Eden. The other was to the Red sea via Persian Bay (Siriweera, 1971: 151). Also, the wind system of the Indian Ocean was such that vessels sailing from the West had necessarily to cast anchor on either west coast of India or Sri Lanka (Kiribamune, 2000: 435).

The nature of sea travels form the West is such and will consider about the same form the East. These routes are demarcated along the sea coast of Sri Lanka, above and below. Chines monk Fa-hien *Thero* had board a ship form Indian East coast and travelled to China which voyage explains the nature of his performances centralized by Sri Lanka (Gunawardhana, 2003: 22). East and South-East Asian coastal sea routes of Indian Ocean can be classified in to five geographical regions namely, Northern region, South coast of Vietnam, Maritime region of Java, Malacca strait, Philippine, Northern Borneo and Bengal region (Kekulawala, 2008: 43). These sea routes stretch up to the east through the above region which is centralized by Sri Lanka.

Apart from the above there was another sea route from the eastern islands of Africa to China through Maldives Islands and Sri Lanka passing the South-East Asian regions (Tempo, 2003: 77). The description cited in the Travels of Marco Polo is important in identifying this route. Marco Polo who traveled from China to Persian Gulf in a Chines ship is a useful authority on maritime trade in the Indian Ocean towards the end of the 13<sup>th</sup> century. On his journey he had halted at Sri Lanka for a short story and started again (Aldo Ricci, 1994: 319-323). It could be seen that Sri Lanka had been regarded as a very important point in maritime travels from the ancient times.

#### **Sri Lanka-Chinese Relations**

The relationships between Sri Lanka and China had been in practice from far ancient periods. Mostly, the relationships retained due to connections of Buddhist religion and trade from very earlier times. These relationships run back to the periods of 1<sup>st</sup> century A. D. (Siriweera, 2004: 225).

Missionary journeys have taken place from time to time between the 1<sup>st</sup> century A.D to 8<sup>th</sup> century A.D between Sri Lanka and China (Ranawella, 1984: 289). But these missionary journeys had been suspended between 9<sup>th</sup>

century and mid-13<sup>th</sup> century. During this period one single missionary journey had taken place (Siriweera, 2009: 311). During the Moghul regime with the Chinese dynastic called Yuan, it means from the mid-13<sup>th</sup> century A.D. missions between China and Sri Lanka had resumed (Siriweera, 2004: 227-230).

Among the religious relationships, the most important event was the arrival of Chinese Buddhist monk-Fa-Hien in the 5<sup>th</sup> century A. D. He had stayed at Abayagiri Viharaya, Anuradhapura and taken some of the Buddhist books to China on his return.

Reliable sources from both countries prove that the relationships had been continuing for a long time (Gunawardhana, 1978:147-152). Similarly, the same fact is evident from archaeological factors of this country. Various types of Chinese clay pots and Chinese coins too had been found in various places of Sri Lanka.

The main items imported from China to Sri Lanka were silk textiles and clay pots. The earliest wares from Mantai are products of the Tang Dynasty (610-907). Chinese clay pots have been found in various places of Sri Lanka from time to time. One such special place is Yapahuwa. Three bowls were discovered from Yapahuwa, two wares and one celadon ware are products of the 13<sup>th</sup> century period and probably the wares of the last phase of the Southern Sung period (Prematilake, 1990: 228, 229). One of such pots is being exhibited at the Archaeological Museum in Yapahuwa.

Chinese coins also have been found in various places of Sri Lanka. From certain excavations carried out in Yapahuwa has also found Chines coins. Ten Chinese coins were found from the excavations carried out near the Southern entrance in 1911-1912 A. D. These coins are supposed to belong to the Emperors of the Sung and Southern Sung dynasties, which falls within the period 976-1225 A. D. Similarly, a stock of Chinese coins was

found near the Eastern entrance from an excavation carried out in the year 1945. This collection which numbers 1352 coins is the largest ever found in the Island. A classification had been made by erudite regarding these coins. Accordingly, coins between 10<sup>th</sup> century and 12<sup>th</sup> century A. D. belong to Sung or Northern Sung Dynasty. Those periods are Chih Tao ( 995-998 A.D), Chin Yo (1034-1038 A.D), Hsini (1068-1086 A.D), Shao Sheng (1094-1098 A.D), Shung Ning (1102-1107 A.D), Cheng Ho (1111- 1180 A.D). The coins of 12<sup>th</sup> to 13<sup>th</sup> centuries A.D. belong to the Southern Sung Dynasty. This period is Chien Yen (1127-1131), Ch'ien Tao (1165-1174) Chia T'ai (1201-1205) (Codrington, 1924: 167-168). During this period the trade relationships between China and Sri Lanka were in a highly developed status.

In addition to the above, another aspect of China-Sri Lanka relationships can be found as follows: A new impetus under the Mongols who used the Chinese dynastic name Yu'an could be seen. During the reign of Kublai Khan (1260-1294) five missions to Sri Lanka have taken place. In 1284 A.D. Kublai Khan sent a mission asking for the Sacred Tooth Relic, Bowl and Hair Relics (Nicholas and Paranavithana, 1961: 330). But there is no proof from the sources of Sri Lanka that these sacred Relics were received by him. But Marco Polo says that the Great Khan heard of certain relics in Sri Lanka and sent an ambassador to obtain them in 1284. The ambassadors succeeded in obtaining two of the grinder teeth, some of the hair relics, and a dish of green porphyry, which were received with great veneration in China. He himself described them as the relics of Adam, but says to be the people believed them to be the relic of Sakyamuni (Gunasinghe, 1987: 75). According to him, this mission was successful. But during the said period, these relics were in Pandya region according to sources of Sri Lanka (Cv., XC: 51-54).

The Chinese records, on the other hand, mention an emissary, Uigur-i-heimi-shih, who was sent to Seng-Kia-li (Sri Lanka) in 1282 A. D. in order to obtain the Buddha's Alms - Bowl and body relics and was unsuccessful. In 1287 A. D. the same envoy was sent to Ma'bar to get the relics but the mission failed again (Herath, 1994: 109, 110). Although their effort was not successful, it shows their devotion towards Buddhism.

#### Sri Lankan relationships with Egypt

King *Bhuvanekabahu I* had maintained trade relationships with Egypt. In the year 1283 A. D., an envoy with the leadership of Al- Haj-Abu Uthman had been sent to the Mamluk court of Egypt. An extract of the letter sent to Egypt appears below:

"Ceylon is Egypt and Egypt is Ceylon. I desire that an Egyptian ambassador accompany mine on his return and that another be sent to reside in the town of Aden. I possess a prodigious quantity of pearls and precious stones of every kind. I have vessels, elephants, muslin and other stuffs, brazi wood, cinnamon and other objects of commerce which are brought to you by the banian merchants. My kingdom produces these, the wood of which is fit for marking spears. If the Sultan asks me for twenty vessels yearly, I shall be in a position to supply them. Further, the merchants of his dominions can with all freedom come to trade in my kingdom. I have received an ambassador of the prince of Yemen, who has come on behalf of his master to make me proposals of alliance. But I have sent him away through my affection for the Sultan. I possess twenty seven castles of which the treasuries are filled with precious stones of all kinds. The pearl fisheries are part of my dominions and all that is taken there belongs to me", "A Sinhalese Embassy to Egypt" (Codrington, JRAS (CB), 1919, Vol. XXVIII, No.72, 83-84).

These links with Egypt are confirmed by a number of Muslim coins of the 13<sup>th</sup> century found between Colombo and the hill country. Among them, the greater number belongs to Sultan Qulaun of Egypt, (Codrington, 1924: 158), the king to whom *Bhuvanekabahu I* sent his envoys. In this connection one could point to a recent finding of four Sri Lankan coins that last of which belong to *Bhuvanekabahu I* at Mogadishu in Kenya (Kiribamune, 1986: 105).

King *Bhuvanekabahu I* may have taken action to build up trade relationships with the west with the intention of getting higher stakes for the countries products. It could be identified as a trial of involving in the contemporary changing styles of international trade.

By the 10<sup>th</sup> century A. D. the trend of the background of world politics was subjected to a change. Many countries had to face Islamic mastery by this time. Although Sri Lanka did not face this challenge, there was a change in the political environment of Sri Lanka in this time. The civilization of Rajarata started declining. It was a result of weak control of the kings together with South Indian invasions. This situation started to shift the kingdom to South-West from Rajarata.

Sri Lankans developed a close trade relationships with Muslim traders who had a monopoly of trade in the Indian Ocean. It becomes clear from the records available about Muslim traders and pilgrims who came to Sri Lanka during the period of 10<sup>th</sup> to 16<sup>th</sup> century A. D. (Dewaraja, 2000: 475-487).

The states which dominated under the Island flag become independent by the 10<sup>th</sup> century A.D. After the 10<sup>th</sup> century Bagdad started declining and Egypt and Persia separated from each other and wanted to be independent states. Sri Lanka appears to have made an effort to start direct trade relationships with Egypt which had a prosperous trade links in Bagdad (U.C.H.C., 1972: 668).

#### Relationships of Sri Lanka with India

Sri Lanka and India being very close neighbor countries had stately and non-stately connections as well as multiple relationships from the past. Intervention of Pandyans, a South Indian kingdom, during the Yapahuwa period is one proof for such connections. Mahawamsa states about these relationships as follows: "In 1284 A. D, after the death of king Bhuvanekabahu I of Yapahuwa, a General (a chief of a force) named Arya Chakkavarti was sent to Sri Lanka by the Pandya ruler, laid waste the kingdom and seized the Tooth Relic and all other costly treasures. He returned to the Pandya Kingdom with the sacred Tooth Relic and handed it over to the Pandyan ruler Kulasekara who according to the Culavamsa, was the son for the Lotus blossom of the stem of the great kings of the Pandus' (Cv., XC: 44-47). These relic were brought back to Sri Lanka by king Parakramabahu III. Culavamsa mentions about it as follow: "Tooth Relic which was taken to the Pandus kingdom, that relic of the prince of the wise our highest protecting deity, worthy of veneration by our race, how shall I bring it from there, And as the ruler saw no there means than friendly negotiations, he set forth in the Company of several able warriors, betook himself to the Pandya kingdom and sought out the ruler of the Pandus. By daily conversation he inclined him favorably, received from the hands of the king the Tooth Relic retuned to the island" (Cv., XC: 48-56).

Migration relationships between the two countries could be observed from the very beginning of Dambadeniya kingdom. This situation may have been there during the Yapahuwa period too (Liyanagamage, 2001:15-51). In fact, Pandyan invasions had a great influence over the decline of Yapahuwa kingdom.

#### **Religious Relationships**

Hindu religion has spread in Sri Lanka as a result of the relationships maintained with India from ancient times. Sufficient proof is available to confirm that Brahamins origins, who were officiated Hindu Religious rites and rituals, lived here from the Anuradhapura period. Hindu divine narratives and beliefs may have spread in to Sri Lankan societies as a result of such influence. There are a few Hindu *kovils* even at present in Sri Lanka which belongs to the earliest period. These ancient *kovils* had been constructed closer to the harbors where Indian traders arrived. Thiruketheeshwaram and Koneshwaram kovils near Mahatitta and Gokarana harbors are two such *kovils*. These *kovils* were constructed mainly for the religious performances of Indian traders.

Hindu religion had a special status under the cola regime after the decline of Anuradhapura kingdom. Ruins of Hindu kovils and statues which were found by excavations in Polonnaruwa are such constructions and a number of statues of Hindu Gods and Goddess are now placed at the Museum in Polonnaruwa for exhibition.

During Dambadeniya era at the beginning of the medieval period it could be seen that even the Buddhist administrators have had a tendency of following Hindu beliefs. "Kandamuru Sarthe" confirms that during the period of king Parakkramabahu II, Hindu religious rites were performed within the Royal palace (Jayatilaka, 1958: 63-66).

Hindu statues namely a *kali* statue and a *Vishnu* statue had been found from the premises belongs to the Yapahuwa kingdom. As such it could be believed that Hindu religious rites may have been performed during the Yapahuwa period, too.

It could also be seen that the building enclosing terrace of the Bodhi Tree resembles the architectural style of a Hindu temple. It consisted of a garbha

gruha (innermost sanctum) antarala (vestibule) and an ardhamandapa. Hindu religious influence has become a constant religious belief in Sri Lankan society. Devotion or veneration to Gods has been an assorted practice with Hindus and Buddhists. As a result, certain Buddhist Gods have become Hindu Gods with the passage of time the present society exhibits a tendency of venerating these Gods by Hindu and Buddhist devotees by the present day society.

#### Trade Relationship

Apart from the religious relationships, trade links also had a great effect on the connection of Sri Lanka with South India. Sri Lankans carried out the trade in South India too.

Proof of this can be seen in the presence of the members of the Sri Lanka Trading Corporation Tennilankai Valanjirai in the countries of the colas and the pandys, during the 12<sup>th</sup> and 13<sup>th</sup> centuries. This is evident from the pandyan inscriptions (Liyanagamage, 2001: 53). South Indian traders too actively participated in Sri Lankan trade. Ainnurruva (Nanadesi), Anjuvannam and Manigramam were the trading community in Sri Lanka. Among these Anjuvannam is the powerful guilt in the sea trade in mediaeval period (Subbrarayalu, 2012: 177-185).

Political rivalry and military confrontation however do not seem to have interrupted the cultural and commercial relations between Sri Lanka and South India.

#### Art and Architecture

Foreign relations mainly with South India had influenced the Sri Lanka arts and architecture too. Hence, the attention will be paid towards arts and architectural creations of Yapahuwa where the stair case and the porch are constructed. It is constructed as an entrance to the building supposed to be

the Temple of the Tooth. There is no other place where such creations could be seen in Sri Lanka.

Different types of unique architectural designs could be seen scattered in various places. Almost all the architectural constructions of Yapahuwa are stone and rock creations. The stair case has been constructed on a sharp slope with 122 steps. There are various carvings on either side of the stair case including figures, dwarfs, dancers, gajasinghe, korawakgala, niches, images of lions and gate keepers etc. There are a number of pillars in the entresol at the end of the stair case. These creations are constructed very beautifully and attractively.

The door frame and the two windows are also magnificent creations. There are some more live creations here around the pediment of the entresol there are figures depicting dancing postures of male and females. These creations could be seen around the pediment of the building. Beily who made a comment about these creations describes as follows:

"The figures are excellent and in great to variety of attitude. They represent nautch girls, not oppressed with clothing who is dancing with Great Spirit to the energetic music of tom- tom beaters and flageolet players whose whole souls of their works. The intense gravity of their faces is admirable, while the whole scene is so well, 'told' that you can almost fancy you can see their music, and hear the castanets in the' girls' hands. The overhanging molding has protected these figures from the weather, and the details are perfect. The ornaments of the female figures and the expression of their faces are as though the sculptor had but just completed his work" (ASCAR, 1910-1911: 72). By this description Beily has attributed a aliveness to the sculptures.

The scholars who had paid attention towards these creations have commented that they are of the origin of Draveidian's traditions (Mudiyanse, 93-95; Bell, 1904: 33-35, 62-65; Basnayaka, 2002:188; Nicholes and Paranavitana, 1961: 338).

There is a special opinion about the staircase. The staircase has certain features which appear to be due to influence of Cambodian architecture (Nicholes and Paranavatana, 1961: 338). It was first commented by Victor Goloubew. But he did not believe this resemblance was due to conduct between Sri Lanka and Cambodia (Sirisena, 1978:140).

In the field of architecture some of the monuments dating from the thirteenth century on words, bear the unmistakable Dravidian influence as is evident at Yapahuwa, and notably in Lankathilaka and the Gadaladeniya temples of the fourteenth century. Gadaladeniya and Lankathilaka temples as revealed by the epigraphs as these sites, were designed by Sthapatirayara and Ganesvaracarya respectively, who were families of South Indian origin (Mudiyanse, 137-139,145-149,153-160).

#### CONCLUSION

Yapahuwa era could be identified as an extra ordinary period in the Sri Lanka history. There had been various assistances and support from the above mentioned countries during this period in respect of political, religious and cultural advancement which have had a great influence on our civilization. In terms of the location of Sri Lanka, it appears that it is not an isolated country. It could be mentioned that king *Bhuvanekabahu I* had been a king who was actively engaged in maintaining foreign relationships.

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## DUTY TOWARDS ENVIRONMENTAL PROTECTION: COMPANIES' ROLE UNDER THE COMPANIES ACT NO 07 OF 2007

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#### **ABSTRACT**

The Brundtland Commission's report defined sustainable development as "development which meets the needs of current generations without compromising the ability of future generations to meet their own needs". In this context, it is problematic whether companies conduct their corporate activities in line with doctrine of sustainable development. The proposed study expects to find out whether the Companies Act No 07 of 2007 imposes any duty towards environmental protection on Sri Lankan Companies. The study will evaluate the scope and the extent of these duties (if there are any) and whether the statutory duties imposed are adequate to protect environment. Overall approach to this study is qualitative. Further, relevant statutory provisions are analyzed using the critical analysis method and the comparative analysis method. Critical analysis method was employed to analyze the relevant statutory provisions and the comparative analysis method is employed to examine similarities and differences between the Companies Acts of Sri Lanka and the United Kingdom. Qualitative data for the research was gathered through primary sources and secondary sources. Primary sources include the relevant statutes i.e. Companies Act No. 7 of 2007 of Sri Lanka and the Companies Act of 2006 of the United Kingdom and case law and the secondary sources include books with critical analysis, journals, theses and electronic resources. The basic limitation of this method is that it does not satisfactorily focus on the actual implementation of the existing legal framework. It is submitted that Companies Act No 07 of 2007 does not expressly impose a duty on Sri Lankan companies towards environmental protection. Hence the existing statutory provisions are inadequate and the Companies Act should be amended to include express provisions to guarantee environmental protection.

Key Words: Companies Act, Environmental Protection, Sustainable Development, Companies Role

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#### INTRODUCTION

"When all the trees have been cut down, when all the animals have been hunted, when all the waters are polluted, when all the air is unsafe to breathe, only then will you discover you cannot eat money"

Chief Seattle

Until the latter part of the 20th Century, 'development' was looked at and measured only from an economic perspective. However with the economic oriented development resulting in many problems such as environmental pollution, environmental degradation, poverty, social injustice and marginalization, world realized that this conventional thinking should be set aside. Gradually, people aimed for a kind of development which is socially inclusive and environmentally sustainable. The concept that the environment and the development should be managed in a mutually beneficial way rather than as separate issues first gained international recognition majorly in 1972 at the UN Conference on the Human Environment held in Stockholm, A decade and half later, in 1987 the United Nations World Commission on Environment and Development in a report called Our Common Future (Brundtland Report) provided the most recognized definition to the sustainable development as "development which meets the needs of current generations without compromising the ability of future generations to meet their own needs".

Companies as business entities directly contribute to the national development. Traditionally, companies are established with the sole aim of providing profits for the shareholders on their investments and Company law aims to ensure accountability of managers to shareholders. However, with the emerging trend of promoting sustainable development it is clear that this traditional role of Company Law should be widened to ensure much

more than making of profits for shareholders. Sustainable development represents corporate social responsibility on a corporate level.

#### **United Kingdom**

Unlike Sri Lankan Act, the Companies Act of 2006 of the United Kingdom (UKCA) has given consideration to environmental impact of the companies operation to some extent. The Act has expressly incorporated the duty to consider this impact on the directors.

- S. 174 of the UKCA refer to directors' duty of good faith. S.174 of the Act specifies that directors should exercise good faith acting in a manner which according to his idea is most likely to promote the success of the company while specifying six factors to be given consideration when acting. The section states as follows;
- "A director of a company must act in the way he considers, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole, and in doing so have regard (amongst other matters) to—
- (a) the likely consequences of any decision in the long term,
- (b) the interests of the company's employees,
- (c) the need to foster the company's business relationships with suppliers, customers and others,
- (d) the impact of the company's operations on the community and the environment,
- (e) the desirability of the company maintaining a reputation for high standards of business conduct, and
- (f) the need to act fairly as between members of the company.

- (2) Where or to the extent that the purposes of the company consist of or include purposes other than the benefit of its members, subsection (1) has effect as if the reference to promoting the success of the company for the benefit of its members were to achieving those purposes.
- (3) The duty imposed by this section has effect subject to any enactment or rule of law requiring directors, in certain circumstances, to consider or act in the interests of creditors of the company".

This section expressly makes directors duty bound to consider and care for the environment when they take business decisions and guide the operations of the company. This can be seen as a progressive step taken towards assuming companies' role in the modern world to protect environment. In addition to this express obligation, the specification that directors while promoting the success of the company for the benefit of its members as a whole, should give regard to 'the likely consequences of any decision in the long term', suggests that companies should be sustainable in its existence. This requirement will make it an obligation for a company not to harm the environment and the community for the sake of its short term economic development goals.

Nevertheless, it is noteworthy that, in considering environmental matters, directors will have to articulate a business case, viz. that such considerations would promote the success of the company for the benefit of its members as a whole, whether in the short-term or long-term.

Further, the S. 415 of the UKCA requires directors to prepare a director's report for each financial year of the company and as specified by S.417 (1), unless the small companies' regime, the directors' report must contain a business review. As per, S. 417 (5) (b) (i), in the case of a quoted company, this business review must, to the extent necessary for an understanding of the development, performance or position of the company's business,

include, inter alia, environmental matters (including the impact of the company's business on the environment). However, the S. S. 417 (6) states that when a company qualifies as medium-sized in relation to a financial year directors report does not have to include non-financial information such as environmental matters and employee matters.

#### Sri Lanka

S. 187 of the Sri Lankan act is similar to the S. 174 of the UKCA since it requires directors to act in good faith. However, unlike the s. 174 of the UKCA, Sri Lankan act does not make it a duty for the directors to care for the environment or aim for sustainable development and it merely states that 'A person exercising powers or performing duties as a director of a company shall act in good faith, and subject to subsection (2), in what that person believes to be in the interests of the company.'

The duty of the director to act in the interest of the company can be interpreted to include environmental aspects. Traditionally this duty was given a conservative interpretation; director's duty is to raise profits for benefit of shareholders. However, now most of the jurisdictions have given a progressive interpretation to the duty of the director to act in the best interest of the company. For example, Supreme Court of Canada, in *Peoples Department Stores Inc. (Trustee of) v. Wise* (2004) held that "We accept as an accurate statement of law that in determining whether they are acting with a view to the best interests of the corporation it may be legitimate, given all the circumstances of a given case, for the board of directors to consider, inter alia, the interests of shareholders, employees, suppliers, creditors, consumers, governments and the environment". However, in Sri Lanka the directors' duty to act in good faith and in the interest of the company has not yet been expressly extended to include environmental concerns through a progressive judgment.

Further, the Companies Act in Sri Lanka does not contain provisions to disclose environmental impacts of companies through annual reporting. The Act imposes a duty on the companies to prepare financial statements (Section 150-153). According to section 150 (2) if the company failed to do so, every director of the company who is in default shall be guilty of an offence. Section 151 specifies the contents and form of financial statements. These sections, however, do not specifically mention that the environmental aspects shall be taken into account when making financial accounts of the company. They do not impose a duty or a requirement on the directors to take such factors into account with respect to annual reporting or as a general duty of the directors as well.

The Accounting standards introduced by the Charted Institute of Accountants in Sri Lanka under the provisions of Sri Lanka Accounting and Auditing Standards Act No.15 of 1995 impliedly facilitate for environmental reporting and disclosure to a certain extent (LKAS 1, LKAS 8, LKAS 16). However, the application of these standards is confined only to a certain set of companies specified in the schedule to the act referred to as 'Specified Business Enterprises'.

The Code of Best Practice on Corporate Governance which is a joint initiative between the Securities & Exchange Commission and the Institute of Chartered Accountants of Sri Lanka provides a considerably strong framework for environmental accountability. According to clause D.1.4. of the Code, annual reports of the Listed Companies should contain "Management Discussion & Analysis", discussing social and environmental protection activities carried out by the Company. Moreover, it provides for sustainability reporting and states that Environmental Governance of an organization should adopt an integrated approach that takes into consideration the direct and indirect economic, social, health and

environmental implications of their decisions and activities, including pollution prevention, sustainable resource use, climate change, protection of environment, bio-diversity and restoration of national resources. The code insists that the products of the listed companies shall be environmentally friendly. However the Code of Best Practice on Corporate Governance is not a legislation and it shall be mandatorily complied with only by the listed companies. For non-listed companies there is no such mandatory requirement to comply with the code.

#### **Moving Forward**

It is evident by the above discussion that UKCA of 2006 is many steps ahead of the SLCA of 2007 in promoting responsibility of companies to protect environment. However, it should be stated that the laws enshrined in the UKCA are not adequate in the current context to achieve the aim of sustainable development to a satisfactory level.

Following the example given by English Company Law, Sri Lankan Act can impose an obligation on the directors to consider environmental impact of business operations and also the long term impact of the business decisions when they act in good faith in the interest of the company. However, the issue to be analysed in this context is whether law should permit directors to take environmental concerns in to account even when they do not relate to the promotion of success of interest of the company, or in other words when such considerations gives no benefit to the company by increasing shareholder returns. In fact it can be argued that directors should be able to consider environmental sustainability side by side with interest of the company (Johnston, 2014).

With regard to companies' responsibility towards protecting the environment, the concept of Corporate Social Responsibility (CSR) plays a significant role. CSR can be defined as the responsibility of enterprises for

their impacts on society. This concept is widely known as the "corporate citizenship" and it is an aspect of the corporate sustainability phenomenon (Marrewijk, 2003). CSR can demand bearing of short term expenses which will not result in instantaneous financial gains to the business, but rather will encourage positive transformation in societal and environmental aspects. According to CSR, the companies while advancing the profits of its shareholders are obliged be accountable to the society and the environment and act ethically. In the decision making process, companies should consider the societal, economic and environmental impacts of such decisions. Actions taken by the corporate citizens related to the preservation of the environment could be said to operate as the most important and common function associated with the CSR concept.

According to Silber horn and Warren (2007) the concept of CSR progressed as a reaction to the interactions between organizational values and external influences. While some businesses voluntarily practice corporate philanthropy and chose to contribute to the social and environmental demands, the other business enterprises are forced to comply with the concept of CSR, as a result of social, governmental, political, and judicial pressure (Lambooy, 2014). In present, laws have been enacted to encourage the social responsibility of companies. For instance, S. 135 of the Indian Companies Act of 2013 specifies that all companies having net worth of rupees five hundred crore or more, or turnover of rupees one thousand crore or more or a net profit of rupees five crore or more during any financial year shall establish a CSR Committee of the Board consisting of three or more directors, out of which at least one director shall be an independent director, while providing guidelines for companies to follow when they proceed with the CSR activities. FMorover, the S. 135 imposes an reporting obligation on the board of the company. Accordingly, the board is required to approve the CSR policy for the company after taking into account the recommendations

made by the CSR committee and disclose its contents in their report and also publish the details on the company's official website, if any, in such manner as may be prescribed. If the company fails to spend the prescribed amount, the board, in its report, shall specify the reasons. Further, the Act encourages companies to dedicate at least 2% of their average net profit in the previous three years on CSR activities. Among objectives such as protection of human rights and labour rights, sustainable development and protection of environment are two major objectives these kind laws intend to achieve.

Further, the most justifiable approach towards sustainability is binding the company to bear the costs of their activities without leaving the affected members of the public to bear such cost. This approach is promoted by the Polluter Pays principle in Environmental Law which states that whoever is responsible for damage to the environment should bear the costs associated with it. Polluter pays principle not only advances fairness and justice, but also enhances economic efficiency. In Sri Lankan context, Polluter Pays principle was upheld in the landmark judicial decision *Bulankulama vs Secretary, Ministry of Industrial Development* (2000). In this case Justice Amerasinghe stated in clear terms that the cost of environmental damage should be borne by the party that causes such harm, rather than being allowed to fall on the general community to be paid through reduced environmental quality or increased taxation in order to mitigate the environmentally degrading effects of a project.

In economics, an externality refers to a result of a business operation that affects unrelated third parties. As stated by Buchanan & Stubblebine (1962), an externality connotes the cost or benefit that affects a party who did not choose to incur that cost or benefit. These externalities can either be positive or negative. While research and development conducted by a company is an example to a positive externality, air pollution, noise pollution or water

pollution that results from the industrial activities provides an example to a negative externality. Negative externalities are also known as externals cost or external diseconomy. If companies merely focus on generating profits while neglecting negative externalities, it will lead to inefficient markets. Therefore, it is important for governments to intervene to curb these externalities and Company Law to make regulations to internalize the externalities so that negative externalities such as environmental pollution will affect not only the third parties but mainly the parties who choose to incur such costs and benefits. As Justice Amerasinghe held in Bulankulama Case (2000) today environmental protection, in the light of the generally recognised Polluter Pays principle, can no longer be permitted to be externalized by economists merely because they find it too insignificant or too difficult to include it as a cost associated with human activity.

#### CONCLUSION

The idea that companies should be required by law to take responsibility for environmental costs and be committed for environmental protection goes against the conventions perception of the role of the Company Law. The Anglo American view that company law should focus only on the agency relationship between the directors and shareholders (and creditors) narrows the role of the Company Law. However, the modern Company Law should not remain restricted by this traditional perception and rather it should promote sustainable companies which assume responsibility for environmental protection alongside their profit generation goals.

Sri Lankan judiciary playing an active role, in some instances has given effect to the Polluter Pays principle in cases relating to environmental pollution and thereby has attempted to bind the companies to some extent. However, the Polluter Pays principle addresses only post-pollution situations and it provides the remedy only after the damage has been done.

However, 'prevention is better than cure' and specifically in case of environment cures can be difficult, expensive and sometimes just too late since in most cases the damage is irreparable. Therefore, it is always prudent to prevent the environmental damage than to fix it after it has been done. Companies should be obliged to follow a precautionary approach and comply with concepts such as CSR.

However, as evident by the above discussion, Company Law in Sri Lanka is steps behind many other jurisdictions, in its commitment to protect environment. Sri Lankan Companies Act does not enclose the progressive concepts such as CSR. In the modern context where environmental degradation and ecological imbalances have become one of the major problems or the most important problem that should be addressed by developed as well as developing countries, it is high time for Sri Lankan Companies Act to embrace this new concept and push the corporate community to perform their roles as responsible corporate citizens towards the environment and the society in the eyes of their customers. Further, Sri Lanka should take legislative steps to introduce requirements such as submission of a business review in to Company Law, with the legal obligation to report non-financial disclosures including environmental impacts of company's operations and such steps will establish the corporate responsibility to protect the environment for the sake of present and future generations.

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# LANDSCAPE AS A TOOL FOR HUMAN REHABILITATION WITH REFERENCE TO DRUG ADDICTS

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#### ABSTRACT

Drug addiction and rehabilitation of addicts have become growing problems in Sri Lanka and worldwide. Rehabilitation, being the process of facilitating a person to return to his or her original state itself is a healing process that cater for people who need special treatment. Throughout the history there is a lot of evidence on the usage of landscapes for healing processes mostly in Asian, Greek and Roman cultures. Relatively a very few studies have been carried out on human rehabilitation by addressing spatial qualities in a Landscape Architectural perspective. Developed countries give much prominence to incorporating landscape with rehabilitation centers to enhance the therapeutic process of detainees. In view of this it is attempted to seek the possibility of landscape Architecture to be an effective tool for the rehabilitation of drug addicts in Sri Lankan context. The current study explores the diverse psychophysiological parameters of drug addicts, theories and up-to-date practices of rehabilitation process, the concept of therapeutic landscapes and conducive therapeutic spatial qualities leading to the corresponding spatial cognition facilitating process of drug addict rehabilitation. Rehabilitation centers incorporating landscape will be studied seeking the impact on the effectiveness of the above therapeutic rehabilitation process. The objective of this study will be to recognize the corresponding outdoor spatial properties in assisting the addicts to return back to a normal healthy life under the notion of therapeutic landscape. A mixed method combined with questionnaire surveys and interviews was implemented in order to study the selected rehabilitation centers of drug addicts; "Seth Sewana" Thalangama (SST) which is not incorporating landscape and "Nawa Diganthaya" Nittambuwa (NDN) which incorporates landscape. A total of 51 drug addicts participated in the study, 69 % of detainees in Thalangama and 91% of in Nittambuwa were admitted to each center by their own decision. Most of those inhabitants showed a positive response towards the landscape in both centers. Landscape encouraged social relationships.

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In Nittambuwa 60% of them prefer to spend time as a group, but in Thalangama it is only 56%. Their most preferable places were highly related to the Gesler's (1992) therapeutic landscape factors. (91% in NDN and 81% SST) Interviews clearly show landscape is a proper aspect of salvation from the social isolation caused by drug addiction. Also a proper landscape provides the environment for proper counseling. The study it shows the supportiveness of the landscape to the human rehabilitation process in several ways.

Key Words: Drug Addiction, Human Rehabilitation, Cognitive Rehabilitation, Spatial Cognition, Therapeutic Landscapes

#### INTRODUCTION

From the start of the human race people have had a strong relationship with nature and they have different perceptions about their environment. Before the built environment took place in the human civilization people attained their needs by using the outdoor environment.

The natural environment plays a key role in maintaining a healthy mind and body. Spaces evoke different types of emotions in humans. A high level of functionality in humans cannot be maintained by staying indoors. Because of that we can identify the importance of the outdoor spaces/Landscape to the human needs. In almost every aspect of human life, there is an involvement with nature that must be maintained.

Rehabilitation is part of the healing process. At present there is a considerable need for rehabilitation centers especially in Sri Lanka, where most people are unaware of the benefits of it. According to the WHO (World Health Organization) Rehabilitation of people is a process aimed at enabling them to reach and maintain their optimal physical, sensory, intellectual, psychological and social functional levels.

Drug addiction is a brain disease because the abuse of drugs leads to changes in the structure and function of the brain. These changes in the brain can lead to harmful behaviors. Drug usage increasingly seen in the younger generation. Drug addicts can be identified as one of the important categories to rehabilitate.

Human rehabilitation is specialized healthcare dedicated to improving, maintaining or restoring physical and psychological strength, cognition and mobility with maximized results. The final accomplishment is to restore the highest level of functionality.

Currently there are several rehabilitation centers around Sri Lanka that being maintained by state or non-government organizations most of which are limited to four walls. In most of the developed countries there are rehabilitation centers that incorporate the surrounding landscape to achieve the optimum level of the rehabilitation. They use landscape as a sensitive space to stimulate detainee's senses to increase the sensitivity and knowledge about the space.

Through history, the connection between nature and healing was gradually superseded by increasingly technical approaches and the idea that access to nature could assist in healing lost much of its significance (Cooper-Marcus and Barnes, 1999; Ulrich, 2002 cited in Velarde, M. 2007, 200).

It is proven that landscape has played a significant role in the rehabilitation processes throughout the history.

The primary concern was the current Sri Lankan rehabilitation centers and their processes. There are no processes that utilize the natural landscape to improve the state of the mind of the detainees. These are some of the questions that need to be raised about the Sri Lankan rehab centers at present:

• Are Sri Lankan rehabilitation centers achieving the optimum level of rehabilitation?

• Is there a shortage of comfortable outdoor spaces that affect the final outcome?

The focus of this study was to find the answers for these with regard to detainees who are addicted to drugs. "Can landscape architecture be used effectively as a tool for the human rehabilitation in the Sri Lanka?

There are relatively few studies carried out about rehabilitation centers in an architectural point of view in terms of spatial quality. This study is done in hopes of giving proper guidance in incorporating landscape in the centers by utilizing outdoor spaces. This study will also be a guide for other categories of detainees by creating therapeutic landscapes, healing gardens and outdoor spaces for hospitals and other recuperation centers.

The aim of the study is to act as a base point for future studies in Sri Lanka in terms of landscape architecture for human rehabilitation for detainees addicted to drugs.

# **Spatial Cognition**

Through experiences people develop their knowledge about the space even from the childhood. This mental development is generated through interaction between the individuals and their environment. According to the Image and Environment book by the Downs, R., and Stea, D. e. spatial cognition is discussed with reference to Piaget and Warner's structural development point of view. Spatial cognition refers to the knowledge about space which people develop empirically and through sensation. Early researches defined it as "Environmental Cognition". When we define the name spatial cognition it is the knowledge and internal representation of the structural entities and relations of space.

Pattern Scale
Distance

Cognition

Connection

Separation

Shape

Figure 1: Factors of spatial cognition

Source: Compiled by author

## **Cognition of Therapeutic Landscapes**

Through-out history the concept of therapeutic landscapes has been applied in various ways. Due to the strong relationship between humans and nature, people believed about supernatural healing powers. In parallel with those beliefs other religious beliefs also spoke of the healing powers of the outdoor environment.

For hundreds of years people have visited places such as shrines, spas and aesthetically pleasing natural landscapes in hopes that the inherent powers of such places would provide a cure for their ailments (Khachatourians 2003 01)

The early mid 90's saw the beginning of a new chapter that researchers called Health – Geography. According to the Khachatourians (2003) the development of health geography was tied to cultural transformations. The analysis of the relationship between recuperation and space is a fairly new area of study. Throughout the development of Health – Geography identification of the sub-theme of landscape became a turning point and it gradually became an important factor in health geography. Landscape, as a

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metaphorical construct, combined the social, spiritual and natural aspect for the recuperation process.

One of the areas of research that has developed within this sub-theme of landscape is the study of 'Therapeutic landscapes' introduced by the Gesler 1992 (Khachatourians 2003 02). In Geslers original concept of therapeutic landscape include the long standing reputation for healing or the restoration of health, largely based on spirituality and miraculous healing.

According to Gesler (1993) the objective of a therapeutic landscape is to achieve 'Mental, Physical and Spiritual' healing. To accomplish this Gesler divided therapeutic landscape into two main categories.

- Inner/meaning Including natural setting, built environment, sense of place, symbolic landscapes and everyday activities
- Outer/societal context Including beliefs and philosophies, social relations or inequalities and territoriality

The effectiveness of a therapeutic landscape depends on a human's perception about it. Perception about a landscape differs according to the culture, age and sex of a human

According to Geslers' Therapeutic Landscape concept and Piagets' Spatial Cognition theory, a therapeutic landscape is a fundamentally proper cognitive space where the sense of place is tremendously high. It is a place where a humans' senses deliver its finest outcome. It is a space that increase the relationship between humans and humans with nature. For detainees who suffer from physical, chronic, special psychological illnesses or addictions, therapeutic landscapes are effective in the maintenance of their health.

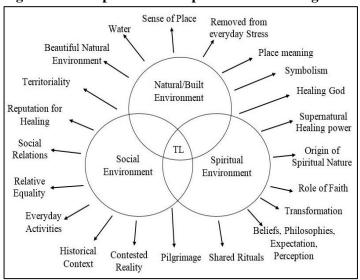


Figure 2: Therapeutic landscape factors according to Gesler (1992)

Source: Khachatourians 2003, 42

## **Drug Addiction**

Drugs are substances that are not nutrients as they are essentially poisons. The consequence of drugs depend on its amount. People may take drugs because they want to change something in their lives or because they believe drugs are a solution for their problems or losses. But eventually it becomes a greater problem for them.

In Sri Lanka: Drug addiction was not a major public health or social problem in Sri Lanka until the early 1980s. Drug addiction is a major problem with increased crime, diseases and poverty among addicts leading to social and family disruption. (PV De Silva, P Fonseka, 2008).

According to the Handbook of Drug Abuse Information in Sri Lanka by the National Dangerous Drugs Control Board: "The total number of drug related arrests was 67025 in 2014. When comparing with the year 2013 the drug related arrests has increased by 1.5% in the year 2014."

Continuous drug addiction leads to various social implications of drug addicts due to changes in their personality and behavior.

- Social isolation
- Negative social identity

Drugs have the ability to directly or indirectly affect the central nervous system and causes psychological damages such as

- Depression
- Phobia
- Loss of self respect
- Anger

## **Rehabilitation of Drug Addicts**

In Sri Lanka, the term rehabilitation center and the methodical way of rehabilitation started in the colonial period. Before that there were cultural practices of rehabilitation that included the natural and spiritual environment.

The success of a rehabilitation process towards drug addicts is 30% in the world. Sri Lanka maintains successfulness around 25% - 27%. Most of the time rehabilitation helps as a recuperation method for a short period of time.

There are also several activities that help to upsurge their personality and self-confidence. Also these activities help to increase their knowledge about current society problems.

- Individual, group and family counselling
- Educational programs
- Group discussions
- Religious and spiritual programs (Sil program)

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- Musical, Sport and other recreational programs
- Health check and other medical programs
- Outside tours

These each and every one of these activities help to withdraw the detainee's attention towards drugs. During discussions with the chief counsellors of 'Seth Sewana' and 'Nawa Diganthaya' both mentioned the importance of the outdoor environment for their counselling methods and activities.

#### **METHODOLOGY**

The case study was carried out in rehabilitation centers for drug addicts that are situated in Thalangama (Seth Sewana) and Nittambuwa (Nawa Diganthaya). A convenient sample was selected which consisted of all the drug addicts admitted to the rehabilitation centers.

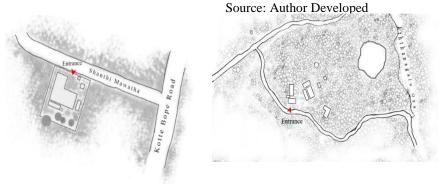
Within the case study data is mainly collected from the detainee's thoughts about the landscape of the rehabilitation center referring to the Perception, Thinking, Imagining, and Remembering quality of their cognitive system. Crosscheck the detainees perception about landscape can match with the Gesler's therapeutic landscape factors.

Use mainly a questionnaire to gain information from detainees including personal observations. In the questionnaire open, closed and semi-closed questions were used. The questionnaire that was used to collect information of drug addicts mainly consists of three parts. The first part of the questionnaire contained questions related to demographic data including sex, age, religion, educational status, area of residence and occupation. The second part is about the addiction, reason for starting drugs, reason for rehabilitation and any past experience with other centers. Third part is about their perception, imagining & thoughts about the outdoor spaces and

therapeutic landscape factors. Let the inhabitants answer with their own words through the sociological method in order to improve the study with a deep understanding of a person's knowledge and suggestions.

Other than that use personal informal interviews with detainees to learn about their personal ideas and experiences about the outdoor environment of the center. Also interview the staff of the rehabilitation center especially chief counselors and assistant counselors to gain their perception and experience about the outdoor environment and how it aids in the rehabilitation process according to their observations.

Figure 3: Location of the "Seth Figure 4: Location of the "Nawa Sewana" rehabilitation center Diganthaya" rehabilitation



Source: Author Developed

## RESULTS AND ANALYSIS

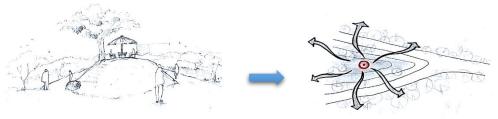
As mentioned above, in Sri Lanka individual and group counseling are the main rehabilitation methods. According to international standards on counseling, these are as follows:

- Proper lighting condition
- Secure the privacy
- Freedom

The outdoor environment can considered as the best space to fulfill these requirements.. The detainees feel at ease with nature around them and helps them express their feelings better to the counselors.

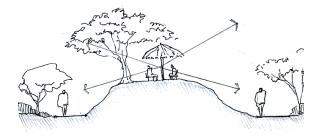
The most important thing is the privacy of the detainees. Privacy and confidentiality are basic rights in the present society. Respecting individual's personal information is an essential factor in counseling. Outdoor environment can be considered as an intimate yet open area that also provides the patient with adequate privacy.

Figure 5: Visual links of an outdoor counseling hut



Source: Author Developed

Figure 6: Sketch of a legible counseling hut



Source: Author Developed

According to Ian Bentley's 'Responsive Environment' outdoor environments are legible and permeable. Because of that the detainees and counsellors can clearly see their surrounding when they have discussions. This level of permeability allows the patient open up to the counselor as the patient would be able to see clearly if anybody is approaching them.

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If the counseling space is located on a higher level the personal space of a detainee is protected. Because of that it creates more visual links from the patient to their surroundings. This method practically used within the 'Nawa Diganthaya' Nittambuwa. (NDN) and according to the Mr. Sunil Dissanayake those are the most favorite counseling places of detainees. Also counselors prefer this method because they can easily build a deep connection with the detainees



Figure 7 - Counseling hut of the NDN

Source: Author Developed

For easy reference the following abbreviations are used identify both the centers.

- 1. "Seth Sewana" Thalangama (SST)
- 2. "Nawa Diganthaya" Nittambuwa (NDN)

## Reason for Rehabilitation

Human rehabilitation can be consider as an internal fight between someone's mind and their behavior. In the Sri Lankan rehabilitation process, changing the detainees' behavior is the main target. Without the right mentality their behavior cannot be changed. Because of that their reason for rehabilitation is also identified as an important factor.

During the interviews between the detainees who came on their own will and those who had to participate due to the court order, shows a significant difference. The addicts who came on their own decision show a keen interest to become a better person. But others mostly want to spend their time. In SST 69% of detainees came to the center due to their own decision. In SST detainees as well as counsellors reminded the lack of outdoor environment didn't help to change the behavior.

In NDN 91% of detainees came to the center on their own decision. During the interviews most of detainees as well as counsellors in NDN mentioned the importance of the present environment to help the detainees in the rehabilitation process.

Table 1: Reason for rehabilitation \* prefer to spend the time in SST

% of Total		prefer to sp	prefer to spend the time	
		inside the outside the		
		building	building	
reason for	Their own	18.8%	50.0%	68.8%
rehabilitation	decision			
	From court	12.5%	18.8%	31.3%
Total		31.3%	68.8%	100.0%

Source: SPSS Output

Table 2 - Reason for rehabilitation \* prefer to spend the time in NDN

% of Total		prefer to sp	pend the time	Total
		inside the	outside the	
		building	building	
reason for	Their own	5.7%	85.7%	91.4%
rehabilitation	decision			
	From court	5.7%	2.9%	8.6%
Total		11.4%	88.6%	100.0
				%

Source: SPSS Output

In SST a total of 69% prefer the outdoor environment than indoor. Considering the graph below we can clearly identify that most of the detainees came on their own free will. In NDN 89% of the detainees prefer the outdoor environment. Most of them are came to the center by their own decision. When considering the results of the interview at NDN most of detainees prefer the spatial characteristics of the outdoor environment. Even without a proper outdoor environment in SST most detainees show their desire to be in the outdoor environment.

## Most Preferable Place in the Center

When considering about the detainees most preferable space within the outdoor environment within the rehabilitation center premises, both centers contains with similar and also different landscape elements. By considering the Gesler's (1992) 'Therapeutic landscape factors' we can identify the most suitable landscape elements and received the detainees reviews on those.

In SST 50% of detainees clearly said that they prefer the Shrine room that in situated near center building. When considering the landscape area of the SST, this Shrine room is the most dominant man made element. According to the cognitive theory the place that the detainees remembered the most is due to a result of the cognitive process. The space that they gain more knowledge become the place that they remembered and desire.

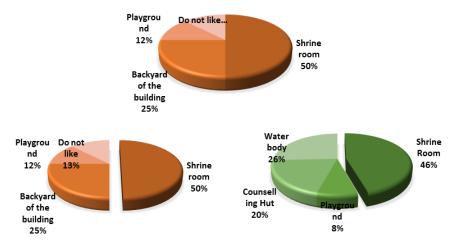


Figure 8: Detainees preferable space within the SST and NDN

Source: Compiled by author using SPSS and MS Excel

In NDN 46% of detainees like the Shrine room. When considering the whole landscape in NDN, the shrine room is one of the most dominant landscape elements within the center. But in NDN there are also other dominant landscape elements such as playground, water body (Aththanagalu oya) and counseling hut. Because of that the percentage of detainees preferring each element is different.

In both centers more than 70% of detainees as the shrine room helps them relax their mind. Also according to the Gesler's (1992) 'Therapeutic landscape factors', the shrine room can be considered as an element of the spiritual and built environment. In difficult situations people turn to spiritual factors such as supernatural healing. Sri Lanka has extensive culturally and religious history in the supernatural. Because of that belief those factors are comparatively high in South Asian countries especially in Sri Lanka. Because of that creating spiritual spaces within rehabilitation centers in Sri Lanka are significantly important.

# Do You Change the Environment of the Center If You Got a Chance?

Detainees are the people who truly understand the environment at the centers. 81% of the detainees would change the environment of the centers if the chance was given and increase the space given for the natural environment.

In NDN there are 49% of detainees that, if given the chance would change the landscape even though it's large enough. Most of them suggested to increase the area of the playground. According to the previous comparisons most of the detainees wanted a landscape that they could do their activities, but this comparison shows that even though they have 18 acres of outdoor space, they still wanted to develop the landscape to enhance the recreational spaces such as playground

## **CONCLUSION**

Research was focused on two rehabilitation centers in Sri Lanka. "Seth Sewana" rehabilitation center in Thalangama (SST) and "Nawa Diganthaya" rehabilitation center in Nittambuwa (NND). Within the main analysis more than 85% of detainees in NDN and more than 65% of detainees in SST (even without a proper outdoor space) prefer the outdoor environment. According to their cognition they have different perception about the outdoor environment.

Analysis of their perception about the landscape clearly shows that the landscape of the center relates with the concept stated in Gesler's (1992) 'Factors of therapeutic landscape'. In both centers more than 45% of detainee's prefer the shrine room which shows the impact of the spiritual environment in the rehabilitation process.

Other than the shrine room detainees of both centers have strong attachment with the playground. That is because detainees use recreational activities to

help them forget their previous behaviors. Landscape can be considered as a factor that supports recreational activities in a more practical manner.

In the whole analysis between the two centers, it shows that the detainees prefer the outdoor environment rather than being indoor all the time. According to the detainees' answers, the environment at NDN is more preferable. More than 80% of detainees are highly satisfied by the outdoor environment at NDN.

But even with the 18 acre of landscape majority of detainees request for a change of the landscape. This shows that the area of the landscape does not matter, it is the quality, the therapeutic factors of it and how it aids the detainees to improve themselves.

The detainees who came on their own provide more positive answers towards landscape and the effectiveness of the landscape towards their rehabilitation process in all the answers they have given. Because of that self-confidence and self- awareness can be identified as one of the most vital factors that affect the process.

Detainees who entered the center on their own can be considered as the detainees who gain most from the outdoor environment in their rehabilitation process. If there is a proper landscape design the detainees who have come due to court order will be motivated through the landscape, and gain the benefits the other detainees also experience.

Gesler's (1992) presents his concept of therapeutic landscape for the recuperation process. Throughout the analysis it shows that therapeutic landscape factors can effectively be used in the rehabilitation process especially in Sri Lanka. Because of that landscape can be considered as one of the major tools for rehabilitation that will affect directly.

Indirectly, landscape supports to create proper spaces for counseling, meditation and other recreational activities. Also it helps the detainees to create relationship with living and non-living environmental factors.

People become addicted to drugs due to different reasons. These people need physical, psychological and social rehabilitation from these centers before they can enter society again. But the reality is that by three months after leaving the rehabilitation centers these detainees unfortunately tend to go back to their old habits brought on by their home environment.

Therefore, although the changing the landscape of the center would always support the change of the drug addict's behavior, to release a fully recovered person to society they will have to change the landscape of detainees' society and where they live. Otherwise when the detainees leave the centers with goals their society prevents them from achieving these goals.

A good environment can change everything. These people need more and more attention with caring and sharing. Their families and their friends have a responsibility to support them.

Data collection in this study was mainly done by using a questionnaire following the qualitative method. But to get a more personal view of the detainees, the more effective way was to have informal personal interviews. Having informal interviews with the detainees as well as the staff members of the center provided honest answers and their own personal opinions and experiences.

Due to the time limitation this study was mainly conducted within the two centers. But the study can be extended to other rehabilitation centers which will further prove that the outdoor environment can be a big influence in aiding the rehabilitation process of drug addicts. Therefore I hope, in the future, people would consider landscape architecture at rehabilitation centers

as well as in places where people recover such as hospitals and Ayurvedic centers

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# READING HABITS AMONG SCHOOL STUDENTS: STUDY BASED ON SCHOOL IN DEHIOVITA EDUCATIONAL ZONE

## D.G.R.L Gunarathne<sup>1</sup>

#### ABSTRACT

Today readers are tomorrow leaders. People tend to read become knowledgeable persons. If child and elder people have good and correct reading habits, it is a good opportunity to make an intelligent society. The school students can obtain good quality education from successful reading. The main objective of this study is to explore and identify the reading habits of school students. The other objectives are to study the factors for upgrading their reading habits, the internet use for effective reading and to study what are the information some schools need. They compel for reading place and time spend for reading. The survey research method was used for this study. There are nearly 10,000 schools in Sri Lanka. The Kegalle district in Dehiovita region has 279 schools. The population of this study is A/L art subject doing students in schools. The sample was 137 students in three schools. Rathnavali Maha Vidylaya Mattamagoda, Sri Sena Maha Vidyalaya Imbulana, Dehiovita National school Dehiovita. The above school students used as the sample for the study. A questionnaire was administered to obtain primary data among the sample. Interviews were also done for collecting data. Reading habits are well planned and deliberate pattern of study which has attained a form of consistency on the part of students toward understanding academic subjects and passing at examinations. Reading habits determine the academic achievements of students to a great extent. Both reading and academic achievements are interrelated and dependent on each other. Students often come from different environments and localities with different levels of academic achievement. Therefore, they differ in the pattern of reading habits. Reading is an art of interpreting printed and written words and it is a basic instrument of education. Reading is considered to be crucial for people from all cross sections of life for successfully coping with the complexities and challenges of the 21st century.

Key Words: Reading Habits, School Students, Education

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### INTRODUCTION

Reading is an art of interpreting printed and written words and it is a basic instrument of education. Reading is considered to be crucial for people from all cross sections of life for successfully coping with the complexities and challenges of the 21st century. In recent times, the emergence of digital technologies and various modes of social interaction. Reading is considered necessary for the overall improvement of a human being. A large amount of reading is necessary for the purpose of education. The reading is essential opportunity of successful learning and reading is interconnected with the total educational development and educational achievement need of successful reading (palani, 2012). The students should know what they are reading" how, why, for better reading. Every student is reading well, they can get many things to make their study period. So successful reading is a important opportunity for successful learning. Reading is interconnected with the whole educational development and educational success is related to successful reading. A good reading habit is an important tool for the development of personalities and mental capacities. Reading is the passion of the greatest personalities of all times and since ages which helped to pass on knowledge through generations.

# **Objective of the Study**

- The main objective of this study is to explore and identify the reading habits of school students.
- To study factors for upgrading their reading
- To study the types of materials using for reading by students
- To know the student spent time for reading
- To study purpose of reading

- To preferred student favorite place for reading
- To know what are the favorite material for reading

## **METHODOLOGY**

The survey research method was used for this study. There are nearly 10,000 schools in Sri Lanka. The Kegalle district Dehiovita region has 279 schools. The population of this study is A/L arts students in schools. The study was limited to finding the reading habits of these under schools. Totally 140 questionnaires were distributed among these school students. Out of which 137 filled up questionnaires were received back. In this sample has fifty three male students and eighty four female students. The sample is in three schools. Rathnavalee Maha Vidyalaya Mattamagoda, Sri Sena Maha Vidyalaya Imbulana, Dehiovita National school Dehiovita. The above school students were used as the sample for the study. A questionnaire was administered to obtain primary data among the sample. Interviews were also done for collecting data. Data Analysis was done using spss, graph and table.

## LITERATURE REVIEW

Anand S. Medar and Anand Y. Kenchakkanavar (2015) examined reading habits by the students of Karnatak Science Collage. The study adopted a survey based questionnaire method to use for data collection. Study found that a majority of the students visit library daily for reading. The largest number of respondents are interested in reading to pass the examination and to get a good job. Student's favorite reading place was central library and percentage was 86.17%. Finally, conclude library professionals should encourage the students to utilize the library sources.

Owsu, Micheal (2014) examined reading habits among students and effects on academic performance: a study of students of Koforidia Polyphonic. The study sought to assess the reading habits among students and their effects on their academic performance. Figures and tables were used to illustrate the results of findings. Questionnaire has distributed of 1052 and received back 1000. The study confirms that regarding habit has influence on academic performance and there is a relationship between reading habit and academic performance. The study recommended not to give handouts lecturers and they should have space to use the library.

Early, Jeffery (2011) leisure reading habits: Student's attitudes toward them in school reading compared to out of school reading. This study purposed to discover how student's attitudes toward them in school reading was compared to out of school reading. Data was collected for this from grade 10 to 12 using questionnaire and interviews. The study revealed that a variety of different factors contribute to the difference in reading outside of school compared to the reading that takes place in school.

Eamin Ali, A.K.M. et, al. (2013) reading habit of students in Social Sciences and Arts: a case study of Rajshani University. This paper tried to assess the reading habit of the students of a leading public university is Bangladesh and identified the trends in their reading habit. Based on the findings of a questionnaire based survey. The paper also attempts to put forward recommendation for improving the reading habit of young students in particular and the large cross sections of people general.

## DATA ANALYSIS

# **Reading Place**

**Table 1: Reading Place Rathnawali** 

	Frequency	Percent	Valid Percent	Cumulative
				Percent
Librar	10	28.57	28.57	28.57
y				
House	24	68.57	68.57	97.14
Bus	1	2.85	2.85	100.0
Total	35	100.0	100.0	

Source: SPSS Output

**Table 2: Reading Place Dehiowita** 

	Frequency	Percent	Valid	Cumulative
			Percent	Percent
Library	17	25.4	25.4	25.4
Class_Room	9	13.4	13.4	38.8
House	41	61.2	61.2	100.0
Total	67	100.0	100.0	

Source: SPSS Output

**Table 3: Reading Place Imbulana** 

	Frequency	Percent	Valid	Cumulative
			Percent	Percent
Library	9	25.71	25.71	25.71
Class_Room	1	2.85	2.85	28.56
House	25	71.42	71.42	100.0
Total	35	100.0	100.0	

Source: SPSS Output

Favorite place for reading totally: above tables shows 90 students (65.69%) were favorite for read at hose. Followed by library 36 (26.27%), bus 1 (0.72%) and class room 10 (7.29%)

# **Sources of Reading**

Table 4: Sources of Reading Rathnawali

	Frequency	Percent	Valid	Cumulative
			Percent	Percent
News_Paper	6	17.14	17.14	17.14
Journal	2	5.71	5.71	22.85
Novel	22	62.85	62.85	85.7
Text_Book	5	14.28	14.28	100.0
Total	35	100.0	100.0	

Source: SPSS Output

**Table 5: Sources of Reading Imbulana** 

	Frequency	Percent	Valid	Cumulative
			Percent	Percent
News_Paper	13	37.14	37.14	
				37.14
Journal	1	2.85	2.85	39.99
Novel	10	28.57	28.57	68.56
Text_Book	11	31.42	31.42	100.0
Total	35	100.0	100.0	

Source: SPSS Output

**Table 6: Sources of Reading Dehiowita** 

	Frequency	Percent	Valid	Cumulative
			Percent	Percent
News_Paper	17	25.37	25.37	25.37
Journal	4	5.97	5.97	31.34
Novel	31	46.26	46.26	77.6
Text_Book	16	23.88	23.88	100.0
Total	67	100.0	100.0	

Source: SPSS Output

Sources of reading totally: above tables appeared majority of students are reading novel 63 (45.98%). Followed by journal 7 (5.10%), newspaper 36 (26.27%), text book 32 (23.35%).

# Reading Hour for a Day

Table 7: Reading Hour for a Day Rathnawali

	Frequency	Percent	Valid	Cumulative
			Percent	Percent
1_hour	6	17.14	17.14	17.14
1-3_hour	16	45.71	45.71	62.85
3-5_hour	11	31.42	31.42	94.25
more_than _5	2	5.71	5.71	100.0
_hour				
Total	35	100.0	100.0	

Source: SPSS Output

Table 8: Reading Hour for a Day Imbulana

	Frequency	Percent	Valid	Cumulative
	1 requeriey	1 CICCIII		
			Percent	Percent
1_hour	21	60.0	60.0	60.0
1-3_hour	12	34.28	34.28	94.28
3-5_hour	1	2.85	2.85	
more_than_5_hou	1	2.85	2.85	
r				100.0
Total	35	100.0	100.0	

Source: SPSS Output

Table 9: Reading Hour for a Day Dehiowita

	Frequency	Percent	Valid	Cumulative
			Percent	Percent
1_hour	33	49.3	49.3	49.3
1-3_hour	12	17.9	17.9	67.2
3-5_hour	17	25.4	25.4	92.5
more_than_5_ho	5	7.5	7.5	100.0
ur				
Total	67	100.0	100.0	

Source: SPSS Output

Time spent for reading: the majority of students spent time one hour -60 (43.79%) for read per day. One to three hour 40 (29.19%), three to five hour 29 (21.16%), more than five hour 8 (5.83%).

**Favorite Time for Read** 

Table 10: Favorite Time for Read Rathnawali

-	Frequency	Percent	Valid Percent	Cumulative
				Percent
Morning	13	37.14	37.14	37.14
Afternoon	2	5.71	5.71	42.85
Evening	9	25.71	25.71	68.56
Night	11	31.42	31.42	100.0
Total	35	100.0	100.0	

Source: SPSS Output

**Table 11: Favorite Time for Read Dehiowita** 

	Frequency	Percent	Valid Percent	Cumulative
				Percent
Morning	17	25.4	25.4	25.4
Afternoon	12	17.9	17.9	43.3
Evening	28	41.8	41.8	85.1
Night	10	14.9	14.9	100.0
Total	67	100.0	100.0	

Source: SPSS Output

Table 12: Favorite Time for Read Imbulana

	Frequency	Percent	Valid Percent	Cumulative
				Percent
Morning	7	20.0	20.0	20.0
Afternoon	5	14.28	14.28	34.28
Evening	20	57.14	57.14	95.5
Night	3	8.57	8.57	100.0
Total	35	100.0	100.0	

Source: SPSS Output

Favorite time for read: the majority students like to reading at evening 57 (41.60%). At afternoon 19 (13.86%), at morning 37 (27.0%), at night 24 (17.51%).

## **Using Internet for Read**

**Table 13: Use Internet for Reading from Students** 

Gender	Use Internet	Not Use Internet
Male	40	13
Female	25	59

Source: SPSS Output

This table appeared use internet for reading from students. Male students use it 40 (29.19%), female 25 (18.24%). Totally 65 (47.44%) student use internet.

## DISCUSSION AND FINDINGS

- All amount of students visited library for reading differently
- The largest number of students like to read in the evening
- Home is the majority dominating place for reading by students. They used library material well at home.
- Reading materials, Should be constant companions to all students. Finding survey appeared only a small percentage of the students read for 5 or more hours a day. The majority of the students read only one hours.
- The number of students like to read fiction. Also text books read generally. But they do not prefer to read journals. Journal has the most updated information available but they do not like to read them.
- The World Wide Web has grown in popularity and use in recent years. The students of this survey use it and more male students than female students.
- As the findings of the survey show, the library continues to be the place where students go to seek information they need. If the library could be strengthened in terms of collections, man power, and state of the art technologies, more students will be attracted to it on a regular basis.

## Recommendation

- School students had not receive an advice about quality habits of reading. So the school librarian should inform them of that how to use library materials.
- School teachers give notes to them to pass examinations. But if students are motivated by teachers to search extra information. Then they have to use different material for reading.
- Library visit and reading habit are closely interlinked. At present, Internet is everywhere. If school libraries include the Internet, it will be a reason for students to go to the library.
- Reading campaigns should be undertaken at both government and non-government levels. They can plan a reading month or a reading week and more. Then students will prefer to read more.

## CONCLUSION

The reading skill is a very important tool for students. The reading is the most important process of acquiring information, knowledge experiences and learning. Reading habit is most important happenings in the development of learning. Not only that but learning led to an overall mental professional and human development. It is also helps them to become more complete in every aspect. Therefore, reading is crucial for every human being because of it benefits people not in one way but several ways. This with the decline of the reading habit among students, it is important to find new ways to instill love for reading in their hearts and improve their reading habit. Finally we also should prefer ourselves to support them to make their good habits for reading well. Then all countries will be develop from all aspects.

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# RURAL TO URBAN TEMPORARY LABOUR MIGRATION IN SRI LANKA: IS THERE A SIGNIFICANT ECONOMIC GAIN?

# Seetha P.B.Ranathunga<sup>1</sup>

### ABSTRACT

Migration research and policy studies have focused on internal and international migration separately over the last fifty years. Although international labour migration has gained more attention than rural-to-urban labour migration in the recent debate on migration and development, migration practices and remittances have been considered as significant livelihood development strategies for many poor groups in developing countries like Sri Lanka across the world. However, relatively Sri Lankan migration studies have paid less attention to quantifying the impact of remittance inflows through rural-to-urban temporary labour migration on the migrant-sending communities. This study comprised 377 rural-to-urban migrant workers from 20 selected urban factories located in Gampaha District in Sri Lanka in 2011 and employed regression analysis. The results confirm that the proportion of remittances received from rural-to-urban migrants' accounts for 21 per cent of the income of households in the place of origin, on average and individual migrants' income gain from migration varied between 4,000 and 9,000 rupees per month on average.

Key Words: Rural to urban labor migration, Economic gain, Sri Lanka, Felid Survey, Regression analysis.

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## INTRODUCTION

Although international labour migration has gained more attention than rural-to-urban labour migration in the recent debate on migration and development (Clemens, 2011), migration practices and remittances have been considered as significant livelihood development strategies for many poor groups in developing countries across the world (Deshingkar & Grimm, 2005). Moreover, in earlier decades, research on rural-to-urban labour migration in developing countries mainly focused on urban economies and thus paid less attention to its effects on rural communities (Oberai & Singh, 1980). In contrast, the impact of rural-to-urban migration on the sending communities has gained considerable attention in the recent decades (De Hass, 2006; Taylor & Martin, 2001). The migration process as a whole, either international or internal, releases significant labour market pressures due to the regional disparities in many developing nations like Sri Lanka.

Some studies on migration indicate that internal migration is more important than international migration (Deshingkar & Grimm, 2005; DeWind & Holdaway, 2008). For example, in countries like China, Vietnam and India, the number of internal migrants is higher than the number of international migrants. Further, these studies indicated that internal migration and remittances have significant effects on poverty reduction in developing countries. Unfortunately, Sri Lankan migration studies have paid insufficient attention to quantifying the impact of remittance inflows through rural-to-urban temporary labour migration on the migrant-sending communities.

The decision to participate in either international or internal migration is a decision that impacts the welfare of the household, the home community and in the end, the whole economy (Ratha, Mohapatra, & Scheja, 2011).

The welfare implications of international migration for the country of origin are more often positive and sizable. However, more research is required to judge whether the welfare implications of temporary rural-to-urban migration are positive and sizable in the context of rural development in particular for poverty reduction. Compared to international migration, it is still an immature literature which is too sparse to allow generalisation from the findings of rural-to-urban migration to community development or the poverty reduction. The present study is an attempt to obtain more empirical evidence, with respect to Sri Lanka, on this issue and thus contribute to the body of research on this topic.

Sri Lanka is a small island that was under foreign rule for over four centuries and regained independence in 1948. Prior to independence, the economy was dominated by the commercial plantation sector, including mainly tea, rubber and coconut. Although Sri Lanka has become increasingly industrialised since the 1950s, it adopted a liberal economic model instead of inward-looking economic policies in 1977 (Kelegama, 2007). These economic reforms have transformed the Sri Lankan economy from a colonial export-oriented structure to an export-led manufacturing one, resulting in the emergence of rural-to-urban migration within the country. With the establishment of the Export Processing Zones (EPZs) with highly labour-intensive factories, demand for both skilled and unskilled labour increased tremendously. Hence, there was a flood of migration from rural communities to the main cities. Since 1978, a majority of young single women have formed the backbone of an economic shift in Sri Lanka towards export-led industrialization. As most of the workers are migrants from rural villages, they contribute, through remittances, to developing the rural economy in Sri Lanka by supporting households in their areas of origin. EPZs have made a large contribution to poverty alleviation in Sri Lanka. High unemployment and youth unrest have compelled a majority of

young females to undertake the primary breadwinner role for their households. This demonstrates that rural-to-urban migration contributes significantly to rural communities and it is helpful to examine and quantify the direct impact of internal migration on migrant-sending communities.

In terms of international migration and remittances, Sri Lanka occupies a prominent place (Athukorala, 1990; Eelens & Speckmann, 1990; Shaw, 2010; Ukwatta, 2010). Show (2010) indicates that many studies have attempted to investigate housemaid migration to the Middle East from diverse perspectives including experience abroad, remittances and the impact of migration on the remaining members of the family. His study also contributes to the existing literature in the field. Kageyama (2008) argues that migration and remittances bring both positive and negative impacts to the home countries. She further emphasizes that remittances economically benefit migrant households, particularly the poorer ones, by increasing income in the short-run, while causing negative social effects through disruption in the migrants' families and also by creating a sense of relative deprivation in non-migrant families.

#### LITERATURE REVIEW

Migration is not a new phenomenon and it is the oldest action against poverty (Galbraith, 1979) as the most direct impact of migration is remittances. For many rural households in developing economies, remittances are a fundamental element of livelihood strategies (De la Briere, Sadoulet, De Janvry, & Lambert, 2002). Thereby, the role of remittances has been a decisive element in explaining household strategies regarding migration. The economic outcomes of remittances can be discussed as focusing mainly on consumption, investment, poverty and inequality. Expenditure is the primary indicator of household welfare. Remittances are taken as part of household income; they can also be directed towards

household investment. Then, investment can be identified as the household's future capacity for expenditure. Most studies on internal and international migration and remittances have concluded that remittances improve consumption rather than investment (Zosa & Orbeta Jr, 2009).

Zohry (2002) indicated that growing difficulties in finding productive employment in rural areas created a new type of human migration. Unmarried youths in rural areas, where the economic base is heavily depending on subsistence agriculture and where they are not treated well, face a different set of employment problems than young people face in urban environments, where the economic base is highly varied. She called this new type of migration "survival migration" (Zohry, 2002, 2009). Sri Lankan internal migration, which is the focus of this study, differs from classical migration theory, which indicates that rural-urban labour movements occur due to agrarian systems and agricultural seasonality. It shows similarities to Zohry's study (2009), which indicated that Egyptian internal migration is independent of agricultural seasonality as surplus labour can occur at any time. As in the Egyptian case, there is no survival option for Sri Lankan young rural labourers, especially female, other than migration locally or internationally. Due to the higher travel costs for international migration, the usual response is migration to cities within the home country. Nearly 80 per cent of the population in Sri Lanka belongs to the rural sector, where the source of income for the household is predominantly agriculture, and 83 per cent of the total poor belong to the rural sector in Sri Lanka (DCS, 2011). Thus, migration and remittances are the key areas of livelihood strategies for poor households and this allows diversification of the source of income of Sri Lankan households.

Although there has been a flood of migration from the rural sector to the urban sector since 1977 with the establishment of EPZs, there is a dearth of

research on rural-to-urban migration in general and of analysis of the poverty impact of rural-to-urban migration on rural communities in particular. Even the existing few studies on internal migration have focused on migration patterns, determinants and consequences of lifetime inter-district migration, along with demographic perspectives in Sri Lanka (Perera S, 2005 2008; Ukwatta, 2005). Ukwatta (2005) has further argued that internal female migration from agricultural areas is higher than male migration due to EPZs, while women's participation in agriculture has declined in the recent past. However, none of these studies emphasize the impact of internal migration and remittances on the sending communities.

There is a huge shortage of migration data, particularly on rural-to-urban migration, as a migration survey is not yet planned for Sri Lanka. The Population Census is the only reliable source of data on internal migration. Due to lack of data and statistics, there are few attempts to study internal migration and development in the country. The impact of migration and remittances on rural communities and how migration contributes to transform the rural sector in Sri Lanka needs to be examined from the micro perspective.

Although rural-to-urban migration has contributed immensely to household poverty reduction (Ranathunga & Gibson, 2014; Ranathunga & Gibson, 2015a) and income diversification strategies in rural communities in Sri Lanka, there have been no attempts in the literature to identify and quantify these impacts. According to available sources, the present study is the first one to examine the economic impact of rural-to-urban labour migration in Sri Lanka. Hence, the present study fills a literature gap concerning rural-to-urban migration in Sri Lanka with respect to the importance of the effects of internal migration on poverty reduction and rural development in the

country. Further, this study highlights the importance of detailed and systematic surveys of internal migration in Sri Lanka.

## **METHODOLOGY**

Data for this analysis were obtained from a survey conducted by the author between January and April 2011 in Sri Lanka. The survey comprised 377 rural-to-urban migrant workers who were selected non-randomly from 20 selected urban factories located in Gampaha District in Sri Lanka. The respondents were interviewed, using a structured questionnaire, on their migration and work history, demographic characteristics of the worker and their household members, place of origin, purpose of remittances and use of the remittances by household members.

The non-representative nature of the sample survey data is a problem in this survey. However this is a common problem in developing countries. In particular, in this survey it was difficult to obtain a representative sample from each factory due to the restrictions imposed by the factories. Further, workers get limited time for lunch breaks so that there was not sufficient time to talk to the respondents at lunch time. In addition, there were difficulties in selecting the sample in terms of matching the migrants with the pre-requisites of the survey, such as one year of experience in the factory, living temporarily outside of their place of origin and coming from farming backgrounds.

Two types of data are used to proxy for the income variable (dependent variable) due to the lack of continuous income data for migrant workers. The survey collected interval income data with the purpose of obtaining more reliable data. Thus, this analysis used midpoint average income data for one model and imputed income data generated by interval regression

estimates for the other model. First, the OLS regression model is used to obtain income gains as follows;

Where Yi denotes the urban rural income differences of the migrant workers, Xi denotes the covariates of education, work experience etc. βi is the coefficients of the covariates. Here, α is the parameter of interest, which this study considers for income gains from working in urban factories controlling the above covariates, following Tan and Gibson's work related to international migration and remittances (Tan, 2011; Tan & Gibson, 2010). εi is an error term. Three types of income differences were examined for the income gains of rural-to-urban migrant workers, considering the difference between current wages of the migrants and their rural income before migration. First, this study focused on the income differences between all the respondents. Next, the same was done with respect to the respondents who worked prior to migration and the thirdly respondents who shifted from rural farming jobs.

#### RESULTS AND DISCUSSION

The economic factors of rural-urban migration play a significant role in the process of economic development in many developing countries, transforming unskilled rural labour to skilled labour in the manufacturing sectors in urban cities. Lee (1966) explains that recognition of the importance of internal migration in the social and economic development of a country encourages productive and systematic research which will add data and detailed information on migration. Although migration and remittances have been identified as the main factors reducing poverty in Sri Lanka over the last few decades (Ranathunga & Gibson, 2015b), the economic impact of rural-to-urban migration and urban-to-rural remittance flows is not clear. Further, it is still unclear whether shifting agricultural labour from rural farm communities to urban manufacturing sectors is

actually rewarding. The survey information included individual information such as migration behaviour, work history, remittance patterns, future plans and family information, and was conducted at the place of origin. Descriptive statistics from the survey show that average age of the respondents was 26 years and 71.9 per cent were unmarried. More than 92 per cent of the respondents had completed ten years of schooling or more. More than 3/4 of the respondents were female. Sixty-two per cent of the respondents did not have employment before migration and 20 per cent were employed in farming activities.

# Comparative income gains through rural-to-urban migration in Sri Lanka

The expected income gain is the most important motivation for both internal and international migration (Ha, Yi, & Zhang, 2009). The present study examines how much income gain can be achieved through rural-to-urban migration in Sri Lanka.

Table 1: Monthly incomes in mean and median rupees

Income groups	Mean	Median	
Actual urban income for all respondents (n=377)		_	
Mid-point average income earned in factory job	15,298	12,500	
Imputed** income in factory work	15,180	14,101	
Actual rural income for all respondents who - worked before migration (n=143)			
Mid-point average income earned in first job in village	6,641	5,000	
Imputed income in first job in village	7,279	7,016	
Actual rural income for all respondents who were employed in farm work before migration (n=74)			
Mid-point average income earned in farm job	5,978	5,000	
Imputed income in farm job	7,439	7,303	

Source: Author's calculations using field survey data

<sup>\*\*</sup> Note: Income data has been collected in the form of intervals. Using left and right censored points of each interval, imputed values were calculated from STATA using INTREG

Table 1 specifies the mean and median monthly income gained by each of the groups of migrants. The average monthly income of all the respondents earned in urban factories was about 12,500 to 15,298 Sri Lankan rupees; more than twice what they earned in farming jobs or other jobs in the rural sector before migration. With respect to China, researchers have pointed out that migrants' urban income in China is more than three times higher than the rural farm income they earned before migration (Ha et al., 2009).

Further, the present analysis attempted to calculate the accumulated monthly income of three groups; (1) all respondents, (2) respondents who worked before migration and, (3) migrants who worked on farms before migration. The overall result shows (Table 2) that raw income from rural-to-urban migration varied between 3,672 and 12,978 rupees per month.

Table 2: Monthly income gains from rural-to-urban migration

Change in the level of	All	Workers	Farm workers
monthly income (Rupees)	respondents	employed	
-	_	before migration	
Change using midpoint			
average			
Without covariates	12,978	9,843 (604.29)	11,993
	(338.98)		(856.43)
Controlling for work	11,312	6,441 (1,265.35)	8,010
experience	(552.06)		(1,492.82)
Controlling for education	6,650	2,929 (4,146.56)	3,924
•	(1,903.78)		(5,007.63)
Controlling for education,	3,672	1,417 (4176.06)	827 (4489.53)
work experience, marital	(2020.85)		
status and gender			
Change in the log			
monthly income			
Without covariates	9.5 (0.02)	9.6 (0.03)	9.7 (0.04)
Controlling for work	9.4 (0.03)	9.4 (0.06)	9.5 (0.08)
experience			
Controlling for education	9.1 (0.09)	9.2 (0.16)	9.3 (0.19)
Controlling for education,	8.9 (0.09)	9 (0.14)	9.1 (0.18)
work experience, marital	0.7 (0.07)	7 (0.14)	7.1 (0.10)
status and gender			

<b>Using imputed Income</b>			
Without covariates	8,057	8,884 (219.94)	9,424
	(126.22)	-, ( ,	(313.76)
Controlling for work	6,319 (163.98)	6,851 (311.69)	7,656
experience			(483.17)
Controlling for education	3,235	2,029 (1220.23)	1,781
	(1362.75)		(1298.56)
Controlling for education,	1,474 (820.66)	308 (582.57)	1,083
work experience, marital			(599.58)
status and gender			
Change in the log monthly income			
Without covariates	8.95 (0.01)	9.04 (0.02)	9.1 (0.04)
without covariates	0.55 (0.01)	7.04 (0.02)	7.1 (0.0 <del>4</del> )
Controlling for work	8.7 (0.02)	8.82 (0.04)	8.9 (0.06)
experience	,	(111)	()
Controlling for education	8.3 (0.15)	8.29 (0.14)	8.28 (0.15)
-			
Controlling for education,	8.1 (0.09)	8.09 (0.07)	8.19 (0.07)
work experience, marital			
status and gender	276	1.40	72
No. of observations	376	142	73

Source: Author's calculations using field data

Note: Standard errors are in parentheses. Gender includes male =1, marital status includes single =1

Presumably, some of the characteristics introduced as controls, such as type of experience and education are highly rewarding in terms of urban income gain. In Table 1, the most varied average income can be seen in the farming workers group compared to the other two groups. Thus, it is clear that the control factors significantly influence rural farm workers' incomes in urban. However, according to Table 1, rural-to-urban migrant workers earn almost an additional Rs. 5,000 to Rs. 15,298 (nearly USD 45 to USD 140)<sup>1</sup> per month compared to their rural income before migration. The respondents who shifted from farm jobs to factories had the highest income gain from rural-to-urban labour migration in Sri Lanka. Their income gain varied between nearly 1000 rupees to 12 000 rupees (nearly 10 USD to 120 USD) per month. The log income estimates indicate that the earnings of rural farm

<sup>&</sup>lt;sup>1</sup> 1 USD was equal to Rs. 109 during the survey period of January to April, 2011.

workers through rural-to-urban migration are about 8.9 to 9.7 times higher than rural sector earnings (Table 2).

## CONCLUSION

This study investigated the process of rural-to-urban migration, remittances and their impact on poverty reduction in rural farm communities/sending communities using survey data gathered by the author from January to April 2011 in Gampaha District in Sri Lanka. The proportion of remittances received from rural-to-urban migrants' accounts for 21 per cent of the income of households in the place of origin, on average. Moreover, rural-to-urban migration contributes significantly to asset accumulation (including vehicles and land) in the communities of origin. Twenty-five per cent of the migrants have built new houses in their place of origin. Individual migrants' income gain from migration varied between 4,000 and 9,000 rupees per month on average. Migrants who shift from agricultural sector jobs to factory jobs are the highest income gainers in rural-to-urban migration. Individual income gain in the urban sector is rewarded by level of education and work experience compared to the rural sector earnings.

Based on the empirical literature and the findings of this study, it can be concluded that rural-to-urban temporary labour migration contributes significantly to poverty reduction by improving the well-being of rural farm communities. Although opportunities to enter the international migration process are limited due to unaffordability of the cost of migration, rural-to-urban migration is an alternative for any households with skilled or unskilled labour to make their way out of poverty. Hence, rural-to-urban migration is relatively more supportive in the long term as migrants can spend longer periods in their jobs than in international migration. Thus, rural-urban migration is a better solution to the problem of skilled labour leaving the country, which developing countries like Sri Lanka are facing

today. It also lessens the social consequences that migrant families face as, unlike international migrants, internal migrants can visit their families often.

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