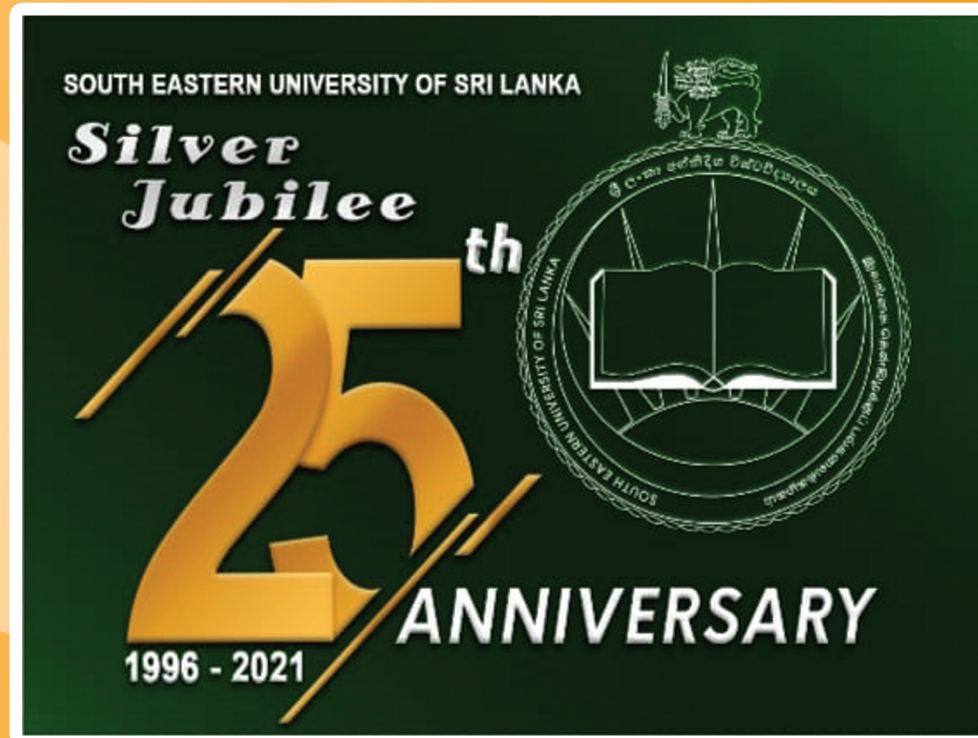
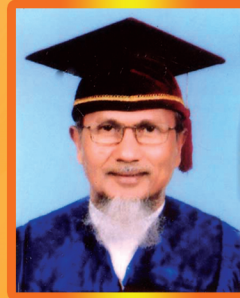


K.M.M.Faleel Haque  
10.06.1956 - 23.06.2013



Dr. S.M.Ahmed Lebbe  
26.02.1962 - 02.05.2019

ISBN : 978-624-5736-23-2



Design & Prited By:  
BEST - Maruthamuai. Mob.: 0774560279

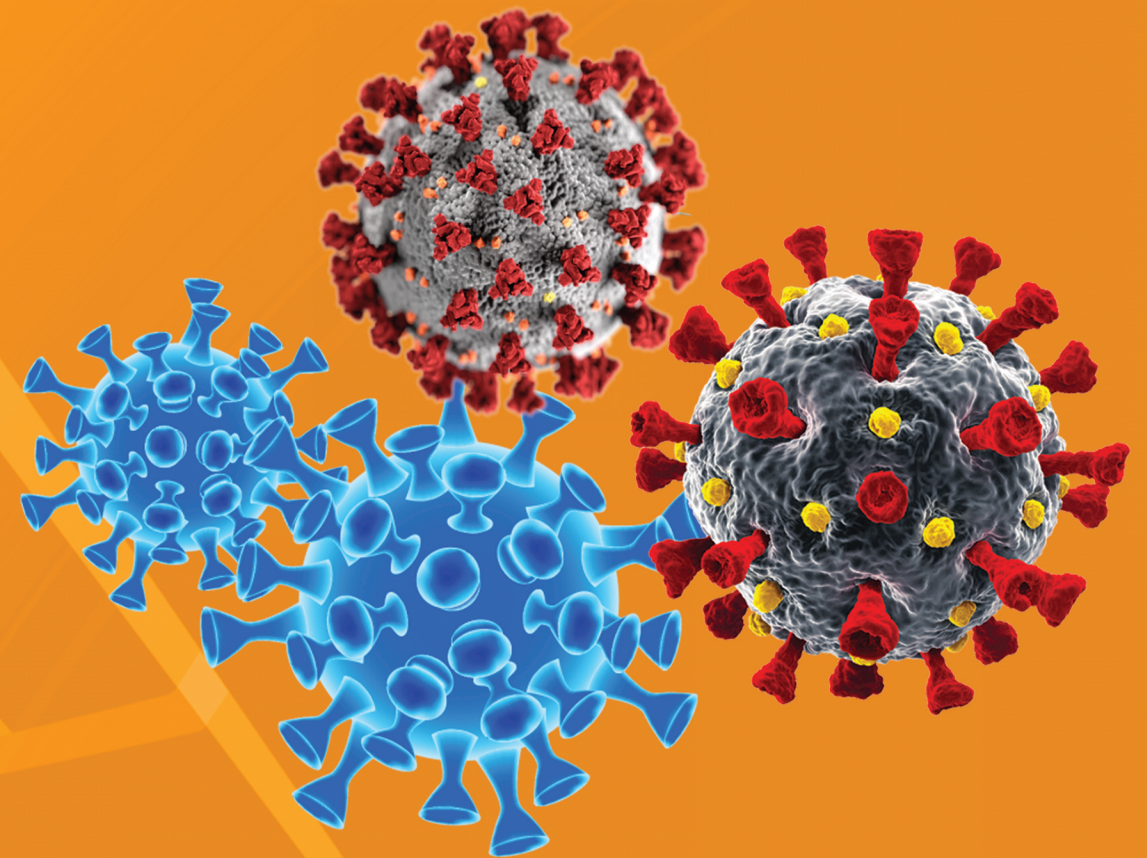
ISBN : 978-624-5736 22-5



COVID-19 PANDEMIC AND SOCIO ECONOMIC ISSUES : AN EXPERIENCE OF SRI LANKA

Department of Economics and Statistics  
Faculty of Arts and Culture  
SEUSTL - Oluvil - 2021

# COVID-19 PANDEMIC AND SOCIO ECONOMIC ISSUES : AN EXPERIENCE OF SRI LANKA



Department of Economics and Statistics  
Faculty of Arts and Culture  
South Eastern University of Sri Lanka  
Oluvil  
2021

# **COVID - 19 PANDEMIC AND SOCIO ECONOMIC ISSUES : AN EXPERIENCE OF SRI LANKA**

**Department of Economics and Statistics  
Faculty of Arts and Culture  
South Eastern University of Sri Lanka  
Olivil - 2021**

Title : COVID - 19 PANDEMIC AND SOCIO ECONOMIC ISSUES: AN EXPERIENCE OF SRI LANKA

Published by: Department of Economics and Statistics  
Faculty of Arts and Culture  
South Eastern University of Sri Lanka  
University Park  
Olivil #32360  
seuiars2020@gmail.com

Pages: 163

Cover page and

Layout: BEST Graphic Design & Printing - Maruthamunai.

ISBN: 978-624-5736-23-2

ISBN: 978-624-5736-22-5 (E-Copy)

**@ South Eastern University of Sri Lanka 2021**

*This work is subject to copyright. All the rights are reserved by the publisher. Nothing in this work may be reproduced in any form, any part or as a whole, without express a written permission from the publisher.*

**Disclaimer**

*The views expressed remain the responsibility of the named authors and do not necessarily reflect those of publisher.*

---

## **EDITORIAL BOARD**

---

### **CHIEF EDITOR**

Dr. AAM. Nufile

### **EDITORS**

Ms. KF. Rinosha

Mrs. UL. Milhana

Mrs. MNF. Washima

Mrs. AF.Thahara

Mr. S. Santhirakumar

Mrs. MNF. Nishla Manazir

Ms. M.U.F. Rifka

**Dedicated To:**

*K.M.M.Faleel Haque  
Ex. Dean, FAC, SEUSL*

*Dr. S.M.Ahmed Lebbe  
Ex. Head, Department of Economics and Statistics*

---

## PREFACE

---

This book covers of papers by expert academics, scholars, and practitioners from Sri Lanka on the current topics like COVID-19 pandemic. The experience from both socio-economic and cultural values indicates the importance of global dimension of Social Sciences and Humanities through research and innovation. There appears to be ever-increasing status of revolution leading to nonstop progress of societies and humanities. Meanwhile, COVID-19 creates reduced production, increased cost of living, death, and fewer opportunities for consumption of the countries. Thus, these chapters of volume intend to bring together the interrelated topics related to the impacts and determinants of Corona virus across the various geographic region of Sri Lanka. This volume relates to the different topics associated with the field of COVID-19 pandemic in Sri Lanka.

In the first chapter, W.P.T. Dilrukshi, S. K. Illangarathne, and W. M. P. G. K. T. Wanasinge examine new online user service initiatives of public libraries during the Covid-19 shutdown period in Sri Lanka. This study revealed that public libraries faced a number of challenges in providing services to their users. This paper suggests that encouragement and support for the public libraries are boost by funding and increase productivity and satisfy users through digital platform.

The Second chapter by J. Sujeeva presents the impact of Covid-19 on local economy of Arugam Bay with a special focus on surf tourism. This chapter is aimed at examining socio economic impact of the pandemic during the first two quarters of 2020. The covid-19 pandemic has completely disrupted surf tourism and related tourism sectors of the value chain in Arugambay, Sri Lanka. Based on this study, the researcher develops two policies such as support firm level initiatives to overcome the challenges of Covid-19 and improve institutional support system at district, provincial, and national level.

Third chapter by J. S. F. Sajla offers the changes in the behavior and attitudes of household members due to Covid-19 lockdown based on Hathbothiya- Dehiwela, Sri Lanka. Objective of this study is to find

out the challenges of Covid-19 on human behavior and their attitudes among Sri Lankan community. This chapter estimates the changes of household member's behavior and life style during the pandemic period. And also the way of living has changed histrionically due to the Corona disease in the research area.

In the chapter 4, A. M. M. Hazib, I. Saujan, A. N. M. Nawas, and M. J. F. Safna analyze the online teaching during the period of restrictions due to Covid-19 pandemic at Sammanthurai, Sri Lanka. Due to the result of pandemic, the teachers are suddenly faced with the challenge of how to continue their students' physical or face to face learning. They claim that the experts have established an e-learning approach to the safe and comfort of both parties and online learning platform recognized by the Sri Lankan government. In this qualitative study, 250 primary data are used and it is found that the teachers face immense difficulties in classroom time and teaching skills to the learners. This chapter, therefore, suggested a set-up of new classroom with internet and modern facilities to defend from the similar pandemic in the future.

The fifth chapter denoted by A. R. F. Shafana and A. F. Musfira analyses students' opinion on the use of virtual learning environment based on South Eastern University of Sri Lanka. They emphasize that during the post- corona situation, virtual learning environment (VLE) and a web-based application have emerged as important tools in the higher education system of Sri Lanka. This chapter has measured the opinions of students under several viewpoints in incorporating the VLE into their face to face mode of study. It is found in the study that the students are in positive attitudes in the use of VLE to undertake their studies than traditional mode of teaching-learning process. And they suggest that vital measures are to be taken in order to expand the active participation of VLE mode.

In the 6th chapter, M. B. F. Jemziya and P. Sivarajah examine the public awareness on the facts of cancer in Eastern Province, Sri Lanka. The results show in the context of adult population of ordinary public employed throughout the survey. Based on the output, Batticaloa people heard about cancer somehow higher than other two districts like Ampara and Trincomalee in Sri Lanka. Further, they find out that common cancer and breast cancer are mostly identified by the defendants. They suggest, finally, the public of all three districts have

to be driven towards overcoming the cancer incidences in future and suitable way of measures and awareness.

In 7<sup>th</sup> chapter, S. J. Dinesh Koduthor examines social representation in Tamil cinema-life of fisher folk and challenges by using primary and secondary data with comparative and content analysis. Major aspect of this study is to analyze about how fisher folk are portrayed and to identify the language variation of fisherman and district features of fisher folk as illustrated in Tamil film. Results show the life of fisher folk and specify the way to find out the resolutions for their challenges.

The 8<sup>th</sup> chapter by V. Vasantha and A. A. Jeyapiratheeba examines impact of the corruption on Gross Domestic Production (GDP) of Sri Lanka by using an econometric analysis. They used cross sectional data with Augmented Dickey Fuller test for the key purposes of identifying the effect of the corruption on GDP (at constant prices) of Sri Lanka. The findings are reflecting that the corruption index, total capital formation, and the size of the population are positively significant with 10 and 1 percentage level. Hence, they pointed that the policy makers should give importance to the GDP related decision or policy making through size of population, corruption, and total capital formation.

The 9<sup>th</sup> chapter of this book has been merged by P. V. M. Karunaratne and J. K. Kulasekara. They reflect on the 'denim and youth': Sri Lankan youth's preference for denim garments. This study is connecting the link between consumers and designers who create designs by using denim fabric. Therefore, the objectives of this study pursue to examine the innovative development of denim in the local market, and explore the consumer awareness of new development in the fabric. This study tells that consumer awareness about the innovations of denim garments has a strong impact on their buying performance. Further, they explained the several product dominated factors identified, which affected the consumer decision of purchasing denim garments.

The 10<sup>th</sup> chapter by N. Subraj explains that the Hindu religion affirm the gender equality based on Thirunavukkarasar's songs. The purpose of the study is to identify how Thirunavukkarasar's song differs from Jainism. The researcher has sympathized that Janis's song does not give importance to women. They strongly said that those who are born as women don't have spiritual freedom. However, Thirunavukkarasar



totally rejected this type of thought and he encouraged women and further he emphasized gender-balance in his songs. According to the findings, Thirunavukkarasar has used the devotion and gender-equality as weapon versus Jainism.

The 11<sup>th</sup> chapter is underwritten by M. Riswan and R. K. Bushra Beegom. Participatory approach for community development-conceptual analysis is used in this paper. This paper discussed on the concept of civic involvement and its significance for the community development. For this, they have used secondary data and aimed to focus on empowering local and marginalized community. The researchers found that local and marginalized people were getting more benefits from the development project other than the wealthier. The paper suggested higher involvement of local community in all type of development programs implemented by government or non-government agents, to achieve real goals of the schemes.

In the 12<sup>th</sup> chapter by M. T. Rifka Farwin and Lumna Noohu expounded under the theme of role of local government in solid waste management based on Yatiyanthoda, Sri Lanka. The main objective of this study is to analyze the problems and challenges faced by the Yatiyanthoda local government in the implementation of proper solid waste management (SWM). For this, they used both primary and secondary data. The results show that due to the socio-economic and environment conditions, the implemented SWM has not successfully benefited to the society. Finally, the researchers give a policy recommendation as an efficient and effective manner in the field of green environment at Maththamagoda zone in Sri Lanka.

We are thankful to the authors for making their studies available for this edited volume. We honestly hope that the studies comprised in this book will motivate academic debates and lead to further analytical advances in the domains of innovation and socio-economic issues.

**Editors.**

23.10.2021

---

## ACKNOWLEDGEMENT

---

This book presents the selected topics as the best papers in the 9th South Eastern University International Arts Research Symposium -2020 (SEUIARS-2020). It provides an outstanding forum to bring researchers from different disciplines, and industries to a common platform to disseminate their findings. Exchange knowledge, create constructive dialogue, and build partnerships on a wide variety of topics to support sustainable development in our society and country.

We wish to express our profound gratitude and appreciation to the Vice-Chancellor of the South Eastern University of Sri Lanka for his support. We take this opportunity to thank the Dean Faculty of Arts and Culture for his motivation. We also thank all Faculty Board members to approve this publication. A special thanks go to the authors of the chapter of this book who have always been with us and do the correction on time.

We also immensely grateful to the editorial board, the panel of reviewers, members of the organizing committee chairpersons of the sessions, the contributors and members of the various sub-committees as well as everyone who helped to select the best papers in SEUIARS2020. Finally, We want to acknowledge all the people who helped directly and indirectly to print this book.

**Editors.**

23.10.2021



---

# CONTENTS

---

<b>EDITORIAL BOARD</b>	ii
<b>PREFACE</b>	iii
<b>ACKNOWLEDGEMENT</b>	vii
<b>CONTENTS</b>	viii
<b>CHAPTER 01</b>	1
New online user service initiatives of Public Libraries during the long term shutdown periods due to the unexpected circumstances: a case study in Sri Lanka during the COVID – 19 pandemic	
<b>CHAPTER 02</b>	11
COVID-19 Impact on the Local Economy of Arugam Bay with a Special focus on Surf Tourism	
<b>CHAPTER 03</b>	30
Behaviour and Attitudes Changes of House Hold Members Due To Covid-19 Lockdown: Research Based on Hathbothiya Grama Niladari, Dehiwela Divisional Secretariat	
<b>CHAPTER 04</b>	48
Online Teaching during Covid-19 Pandemic Restrictions: A Study Based on Selected School’s Teachers in Sammanthrai	
<b>CHAPTER 05</b>	61
Students’ Perception of Virtual Learning Environment: A Case Study on South Eastern University of Sri Lanka based on TAM.	
<b>CHAPTER 06</b>	71
The public awareness on the facts of cancer in Eastern province, Sri Lanka	
<b>CHAPTER 07</b>	81
Social representation in Tamil Cinema: Life of fisher folk and challenges.	
<b>CHAPTER 08</b>	91
The Impact of Corruption on Sri Lanka’s Gross Domestic Product: An Economic Analysis	

<b>CHAPTER 09</b>	108
Denim and youth: understanding Sri Lankan youth preference for denim garments	
<b>CHAPTER10</b>	127
இந்துமதம் வலியுறுத்தும் பால்சமத்துவம் : திருநாவுக்கரசர் திருப்பதிகங்களை மையப்படுத்திய ஆய்வு	
<b>CHAPTER 11</b>	136
Participatory Approach for Community Development: Conceptual Analysis	
<b>CHAPTER 12</b>	147
Role of Local Government in Solid Waste Management: Special Reference In Yatiyanthota Pradesiya Sabha	

## CHAPTER 01

### **New online user service initiatives of Public Libraries during the long term shutdown periods due to the unexpected circumstances: a case study in Sri Lanka during the COVID – 19 pandemic**

**Dilrukshi, W.P.T.**

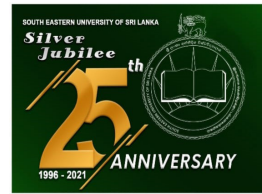
Faculty of Agriculture  
Rajarata University of Sri Lanka.  
thanudilrukshi@yahoo.com

**Illangarathne, S. K.**

Faculty of Technology  
Rajarata University of Sri Lanka.  
skillangarathne@gmail.com

**Wanasinghe, W.M.P.G.K.T.**

Faculty of Medicine and Allied Sciences  
Rajarata University of Sri Lanka.  
medrajaratalib@yahoo.com



#### **Abstract**

*A public library is a center of learning that is open to all, rich and poor, young and old, with no restrictions, or to any particular class. This study evaluates new online services implemented by public libraries during the COVID 19 pandemic period in Sri Lanka. The objective of this study was to explore the capabilities of public libraries in Sri Lanka to meet the needs of users through online services during the lockdown period in the country and explore the social media applications that public libraries can use to communicate among users. An online questionnaire was used as the tool in this study to collect preliminary data. The study found that the majority of public libraries use Facebook, WhatsApp, Viber, and IMO to disseminate knowledge for users during the COVID 19 pandemic period. And also study revealed that public librarians face a number of challenges in providing services to their clients because Public Library sector has no policy or funds regarding online service providers for users on such situations. Public Library has a serious impact on every community in Sri Lankan society even user community also discourages to use online services. This paper proposes to local government authorities and management level decision makers to encourage and support for public libraries be encouraged and supported by funding and the relevant legal authority to increase the effectiveness of use, increase productivity and satisfy users, and move their services to a digital platform.*

**Key Words** - Public Library, Online User Service, COVID-19

### **1.1. Introduction**

Public Libraries play a vital and central role worldwide among the various communities that come from the infants' age levels up to the elders' age levels. IFLA (2001) defines a public library as "an organization established, supported and funded by the community, either through local, regional or national government or through some other form of community organization". Write (1985) highlighted that the Famous American Librarian & Information Scientist J H Shera define public libraries as "peoples' Universities". So, it can still justify that public libraries are the prominent information collecting, organizing, retrieving, and distribution agency among similar organizations.

COVID - 19 affects the day-to-day affairs of every person in a society that we have never experienced before. It greatly affects the library system when providing services to the user community. Closing libraries have a profound effect on communities, even if it is the only way to keep people safe. On the other hand, the closure of public libraries has a profound effect on communities. This is because it provides resources and services in a variety of media to meet the needs of the public, individuals, and groups for personal development, including education, information, and entertainment. Rest. However, it is very important to maintain this service during these interim crisis periods.

This paper analytically evaluates the new online services implemented by the public libraries during COVID 19 period in Sri Lanka.

### **1.2. Literature review**

It is evident that ICT has created a division in the modern society: information poor and information rich. The countries that had the ability to utilize ICT for information resource development have generated information-rich societies while those countries which were weak in utilization of ICT have created information-poor societies. As information is directly related to knowledge and skills which influence socio-economic development, one could hypothesize the relationship between information and development. This has speculated the assumption that information-rich countries have developed economies and information while poor countries have less developed economies (Yapa, 2003. d'Elia et.al.(2002) investigated the impact of the internet on public library use in the USA and found that the internet has a positive impact to discourage the attraction to the library services by its users. However the authors projected users' attraction could be enhanced when overlooking the market consumer method. Aab (2005) discusses

the value of public libraries overthrow the methodological discussion and empirical study applying the contingent valuation method and noted that the value of the public library services are normatively increasing when they use various information delivery methods over technology usage than their conventional information retrieval methods.

Public libraries are the most trusted information agents among the communities because they mandatory link the users with their collections over the various aspects and try their best to perform the users 'any kind of information need and overlook the lot of burning issues. Bridge over the digital information services is identified as most effective as other delivery method Bishop et. al.,(1999).Hafezi & Khedmatgozar (2016) investigated the new method of E –learning in digital libraries as a systematic review and found it has more utility power when the users are away from the libraries.

Sri Lanka, as a developing country successfully applied Modern information and communication technology trends to the higher education system, also the library sector of the country has implemented digital-based services through the library systems. During the last two decades, the traditional environment of the public library has rapidly transformed into a 'virtual' environment due to the introduction of digitalized services in libraries, Which saves the time of the patron and as well as library staffs. It also reduces manpower and omits human errors also. Maybe some public libraries depend 100% on the physical collection of information and no electronic resources and digital-based services through social media. Proving internet access has had an enormous impact on public libraries, and libraries have played a key role in narrowing digital divides. It is important for librarians to maintain and improve their provision of public internet access, and to convince their communities and policymakers of the importance of this role.

However, it is just as important for libraries to think beyond the provision of access if they are to continue to play this role. Access alone is not enough to resolve digital inequities and the value of access to internet terminals, relative to other offerings such as wireless access and internet training service, may become less clear if mobile computing and universal broadband provision continue to increase (Kinney, 2010).

Analyzing the capability of the local authorities and positive thinking aspects of the public libraries ,it can assume that public libraries could



pay more attention than other libraries about their users 'needs during some long –term locking downs by the varies kind os situations.

### **1.3. Research problem**

Sri Lanka has more than 1500 public libraries in different categories and only few users of large scale libraries which located around Western province and Southern are utilized both conventional and modern facilities. However, in several other governments of the Asian countries, pay a huge attention to improve the both traditional and modern services of their public libraries by introducing the various user services such as kindle reading, open reading, Internet café and etc., as they are daily utilized by the various communities who come from small age groups up to old age groups(Illagarathne, Dilrukshi & Kumburage 2019).Information Communication Technology is considered as a useful commodity to guide the life of everyone. Information technology is now connected to library and information center services, which have changed from traditional to electronic-based services. During the COVID-19 crisis, the Government of Sri Lanka encourages all sectors to work with new information technology through home use. But public libraries in Sri Lanka are not ready to forgive online service s for their community in such kind of situation.

### **1.4. Objectives**

1. To identify the new online service implementations or existing services expansions by the responded public libraries during the long-term shutting down period of the country.
2. To identify the newest & very innovative information delivery services initiate by the public librarians using their own domains.
3. To clarify the difficulties they mainly faced during the implementation of online services to their remote users.
4. To explore the capabilities of the public libraries in Sri Lanka to address the user requirement through online services during the lockdown situation of the country
5. To examine the awareness of social media applications that public libraries can use to communicate among users.

### **1.5. Methodology**

The survey research method was adopted for this study. The online survey research design was implemented to collect data. A quantitative approach was selected for this study to measure the depth of newly started online information services over the social media by the public

libraries in Sri Lanka during the COVID-19 pandemic to facilitate their users who locked down at homes. The total population of the Public Libraries in Sri Lanka was indicated as 1176 at the National Library website. ([http://www.natlib.lk/pdf/StatLib2018 .pdf](http://www.natlib.lk/pdf/StatLib2018.pdf)). To find out the social media proactive public libraries among the above population, it conducted the keyword search on one of the famous social media platforms called Facebook (FB) (at [www.facebook.com](http://www.facebook.com)) and found 42 Public Libraries available with their own fans pages to share information with their users. Therefore 42 Public Libraries which had FB pages were selected as the Sample. An online responsible self-administered questionnaire was used to collect primary data and socialized the questionnaire link via Facebook & Messenger. Among the above 42 libraries, 13 libraries were responded (Response rate = 31%). The primary data were tabulated using the Google Form and presented graphically using the charts.

## 1.6. Result and discussion

### 1.6.1 Demographic Analysis

When analyzing the gender base responses it shows that majority of responses were female (85%) and 23% were belonged to the age limit 26-30 and 36-40.70% of respondents from the sample were working as the Librarian. Most of the observed libraries (54%) were over than grade 11 public library category (Please see table 1.1)

Table 1.1: Demographic Analysis

<b>Gender</b>	Male =15%	Female= 85%			
<b>Age (Years)</b>	26-30 = 23%	36-40 = 23%	41-45 =15%	46-50 = 31%	51-55 = 8%
<b>Designation</b>	Librarians = 70%		Non – Librarians = 30%		
<b>Library Type</b>	Supra=8%	Grade 1=31%	Grade 2= 54%	Grade 3= 8%	

Source: survey data 2020

### 1.6.2. Online media usage before the COVID – 19 Pandemic

Figure 1.6.1 shows that online tools and social media usage by public libraries during the post-pandemic time.it clearly shows that 76.9% of libraries had used the Facebook fan page to share the information service with their users. Further to that 61.5% of libraries from the total responses libraries used email services to provide information to their users. 38.5% out of the responded libraries had used library website to share knowledge to their users. Most of the responded libraries were used WhatsApp ,IMO or Viber services(30.8%).You tube channels(15.4%)

and ask the librarian service (23.1%) to provide the non-conventional information services to their users over those online media before the COVID -19 pandemic.

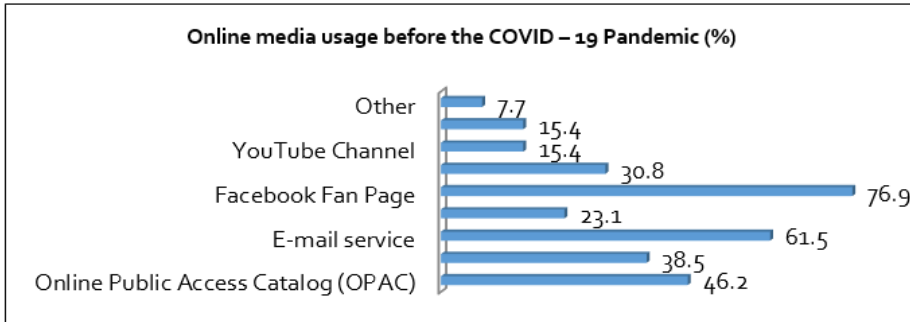


Figure 1.1: Online media usage before the COVID – 19 Pandemic

**1.6.3 Online media usage after the COVID – 19 Pandemic**

Our major objective was to identify the new online service implementations or existing services expansions by the responded public libraries during the long-term shutting down period of the country. However result shows very less new implementations during the considered period. AS shown as the figure 1.6.2 implementing new Facebook pan pages was very high (38.5%) than implementing other online services. The reason was majority of the librarian has smart phones and easily can create Facebook pan pages over them. It is provide that when see the result of enhancement of Whatsapp, viber and IMO service. Any how it shows that selected public library staff had try their best to offer any kinds of online services than stay homes without forgetting their users.

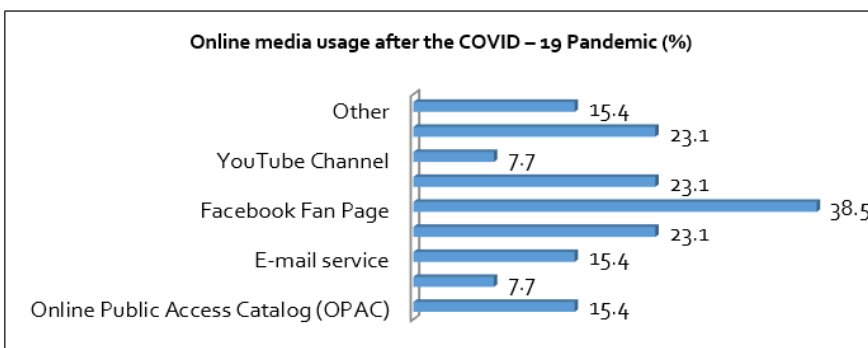


Figure 1.2: Online media usage after the COVID – 19 Pandemic

#### 1.6.4. New online services initiated to the Users

Our one of other objectives of the study was to identify the newest and very innovative information delivery services initiate by the public librarians using their own domain. The result shows .there few innovative services has been able to initiate them during the lockdown period. According to the result shows in the figure 1.6.3 had started to provide updated COVID-19 pandemic details for their user communities (80%). Nevertheless, public librarian could able to introduce new services such as online story telling hours (30%), online discussions (20%),and information delivery service (20%) as online service for their user community. Also the result indicate that same librarians had organized online art competitions, online book review/professional discussion, and other favorable information delivery service for their user communities to minimize the stress when they lock down to their homes.

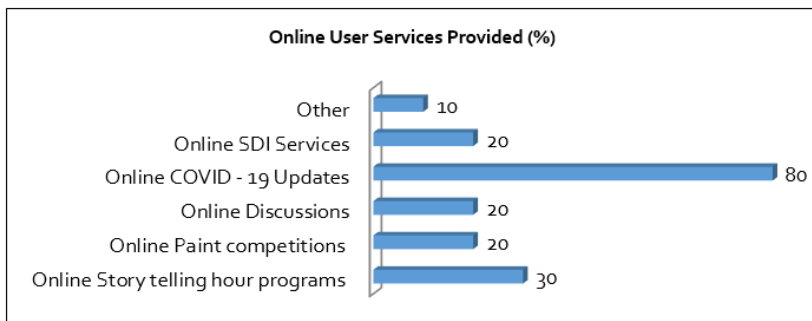


Figure 1.3: New online services initiated to the Users

#### 1.6.5. Difficulties faced when providing User Services Online

One our objective was to clarify the difficulties faced during the implementation of online services to their remote users. The major difficulty was lack of instrument availability at the librarian's homes. The following figure shows 50% of respondents have experienced difficulties in proving their home services and the user is discourage form providing these services.20% show that they do not have permission of their institution.10% said knowledge about using new technology services was not enough. The remaining 40%b cited other difficulties in providing online services to the Sri Lankan user community. Anyway the government of Sri Lanka encourages the education sector during this interim crisis period and it is important to continue this service. Although, results shows the public libraries had met many problems for providing online service efficiently to their user community to fulfill those requirements.

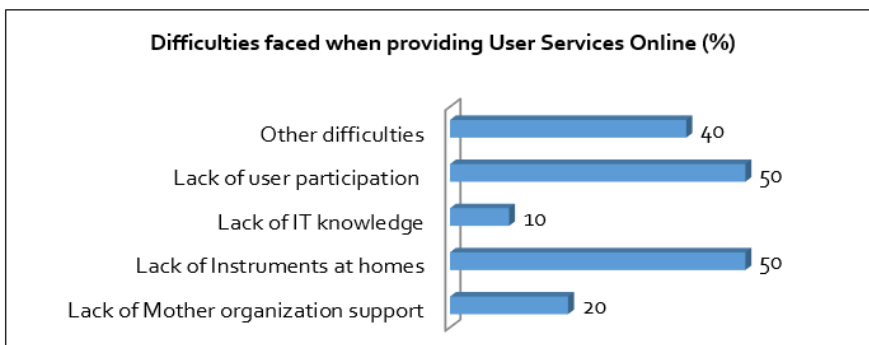


Figure 1.4: Difficulties faced when providing User Services Online

Some librarians had given Feedback been very important to face this kind of lockdowns in future as well. Those feedback were:

1. Appropriate methods should be introduced and directed by the parent institutions to facilitate the notification of the needs of the users.
2. There should be a national policy to provide remote and digital library services in the event of a lockdown period
3. Updating the public library environment with new technologies.
4. Conducting user awareness workshops on innovative electronic methods to provide essential information services to readers on request.
5. Conducting more workshop and training opportunities for library staff regarding new information technology

### **1.7 Conclusion and Recommendation**

Information technology is being considered as a useful commodity for the routing life of everyone. Now information technology has been involved in library and information center services that have changed from traditional to electronic bases servicers. The majority of Public libraries used Facebook, WhatsApp, Viber, IMO as online for dissemination information for user requirement. Public Access Catalogue is also used by the public libraries. Most of the libraries used the technical services for updated information on COVID 19 for their user community. Besides, they have used online storybook reading and SDI services as information. The online art competition and book review dissection also conducted for the users. This study revealed that public Liberians have faced a lot of challenges when providing services for their clients. There is no policy

for the public library sectors regarding new online services such kind of situations. Another hand, the User community is discouraging of online services. Although we are living in the digital era infrastructure facilities are not sufficient for the public library sector in Sri Lanka.

The public library has a unique responsibility for providing library services during the lockdown period. Also, Lockdown public libraries have a serious impact on every community of the society in Sri Lanka. Users may be given awareness on digital platform reading .so that the reading may increase the effectiveness of time resources. Any type of library in the present world should prepare to offer their services online to face such a situation in response to the ongoing concerns about COVID – 19. The management level staff of the libraries therefore should encourage and support librarians by providing funds, and other relevant support to move their libraries towards a digital environment due to the use of the online services for reading may increase the effectiveness of time resources. It should be a common policy for the public library sector in Sri Lanka to forgive the better service for the user community.

## References

- Aaba,S.(2005).The value of public libraries : A methodological discussion and empirical study applying the contingent valuation method. (PhD thesis, University of Oslo)DUO Research archive <http://urn.nb.no/URN:NBNino-27843>
- Alipaur-Hofezi,M.,& Khedmatgozar,H.R.(2016),e-learning in digital libraries: a systematic review.Interlending & Document Supply ,44(3),108-114, Doi:10.1108/ ilds-01-2016-0001
- Bishop, A.P, Tidline, T.J.,Shoemaker.S,& Salela,P.(1999). Public Libraries and Networked Information Services in Low-Income Communities. Library & Information Science Research.21 (3).361-390, doi: 10.1016/S0740-8188(99)0017-1
- D’Elia,G.Jorgensen,C.,Woelfel,J.,& Rodger,E.J,(2002).The impact of the internet on public library use: An analysis of the current consumer market for library and internet services.Journal of the American Society for information science and technology,53(10),802-820. <http://doi.org.10.1002/asi.10102>
- IFLA publication Series. (2001). The Public Library Service: the IFLA/ UNESCO Guidelines for Development. Retrieved from <http://www.ifla.org/publications/ifla-publications-series-97>
- Illangarathne, S.K., Dilrukshi,W.P.T & Kumburage, N.S.P. (2019). Current Status of the Security at the Public Libraries in North Central

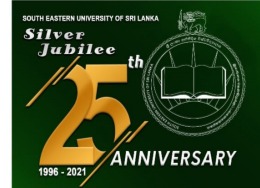
- Province of Sri Lanka: A case study. 3rd National Library Research Symposium 2019 ,Colombo,NLS-11.Retreued from <http://www.researchgate.net/publication/336890464>
- Kinney,B.(2010) The internet, Public Libra,and the Digital Divide. Public Library Quarterly, 29(10). <http://doi.org/10.1080/01616841003779718>
- Write, C, H. (1985). Shera as a Bridge between Librarianship and Information Science, The Journal of Library History (1974-1987). Retrieved from:<http://www.jstor.org/stable/25541594>
- Yapa, N.U. (2003). Utilization of ICT for LIS with Special Reference to Sri Lanka. In First international CALIBER—2003. Ahmedabad: Ahmedabad Information and Library Network Center.

## CHAPTER 02

### COVID-19 Impact on the Local Economy of Arugam Bay with a Special focus on Surf Tourism

Sujeeva, J.

Faculty of Graduate Studies  
University of Sri Jayewardenepura  
sujeevajayathas@yahoo.com



#### Abstract

*Arugam Bay (AB) is a world-famous Surf tourism destination attracting guests from various parts of the world and providing a livelihood for fishing communities characterized by low income, unemployment, underemployment, and inequity. The COVID-19 pandemic has completely disrupted surf tourism value chain in AB and this study is aimed at examining the socio-economic impact of the pandemic during the first two quarters of 2020 based on firm-level micro data. The economic losses of the pandemic in terms of business hours, bookings, employment, income, and investment are very high e.g., booking cancellations were 96% and 36% in foreign and local markets. The findings on efficiency and effectiveness of institutional support system point to serious weaknesses: a) over 80% of respondents did not receive any cash grants or deferment of EPF/ETF payments, and b) a significant proportion of respondents did not receive working capital at 4% interest (78%), tax concessions (69%) and assistance in market development (64%). On the positive side, over 67% of respondents received assistance on labor relations (e.g., termination, salary negotiation, etc.) and improving health standards. Firm-level responses to the crisis revealed reduced prices, discounts, and preparation for COVID-19 threats as most successful recovery strategies of COVID-19. Based on the findings, we have two major recommendations for policymakers: a) support firm level initiatives to overcome the challenges of COVID-19, and b) improve the institutional support system at the national, provincial, and district level.*

**Key words:** Surf tourism, COVID-19 impact, institutional support, recovery measures.



## **2.1. Introduction**

A sizeable amount of research investigating the impact of COVID 19 on travel and tourism has begun to emerge. However, examining the economic impacts on local surf tourism in a remote destination, how such industry has responded, and status of state responses to the situation at those remote tourist destinations are also important to have better understanding the issues of local economy at the community level. Research reported here aims to contribute to this research agenda by examining the economic impact of COVID 19 on the local economy of surf tourism at remote destination- Arugam Bay.

Arugam Bay is renowned as one of world's best ten surf points (Lonely Planet, 2010); It is on the east coast of the Sri Lanka and is made up of several right-hand points for surfing that only work from April to November. The population of the village comprises by religion is Islam 78.14%, Hindu 18.82%, Buddhist 2.09% and others 0.95% (Pottuvil Resource Profile – 2010). The total land area of the Division is 269 square kilometers with a length of 21 kilometers and a width of 6-15 kilometers. The Tourism is the third block of the local economy, out of six main building blocks of the local economy of AB comprises agriculture, livestock rearing, coastal and inland fisheries, micro and small industries, tourism, and trade (Raisal and Gunapalan, 2014). AB hosted most of the international surfing competitions in Sri Lanka since 2004 and also notably hosted two Pro Surf League competitions as part of the World Surf League in 2011 and in 2019. The impact of COVID 19 on surf tourism in AB could be viewed as a direct financial loss for local community as it is the major source of local employment. The crisis had a devastating effect on the businesses, employment and a community in its vicinity (Shrivastava and Mitroff, 1987). This can cause an economic downturn to surf tourism AB that is nearly as harmful to a destination's tourism sustainability (Robinson and Javie, 2008).

The paper is structured as follows. Section 2 provides a brief review of literature on COVID-19 impact on tourism in Sri Lanka. Section 3 presents the data and methodology adopted in this study. In Section 4, we discuss the impact of COVID-19 on the local economy of AB. Section 5 is dedicated to discuss the status of business recovery and business sector perceptions on institutional support system, followed by policy implications in Section 6. Finally, Section 7 presents the conclusions.

## **2.2. Literature review**

The economic impact of COVID-19 on the national economy including the tourism sector has been examined by various organizations and the findings point to devastating implications on the national economy. Almost all these studies recognize tourism as one of the hard-hit sectors by the pandemic especially in the context of Sri Lanka confronted with acute economic problems including low growth, weak foreign reserves, high cost of debt servicing, high unemployment and massive budget deficits. Many of the COVID-19 impact studies are based on macro level data or small samples drawn from the business sector or from the household sector. The major limitation of these studies with respect to tourism industry is its limited relevance to location and destination specific issues in tourism. This requires more micro-level surveys capturing destination and product specific issues relating to tourism industry. This study is aimed at fulfilling this information gap through a location specific survey of surf tourism in AB. As far as we are aware, this is the first study which provides destination specific assessment of the COVID-19 on tourism in Sri Lanka. Even at global level existing body of knowledge is mostly based on macro level data and small sample surveys covering the entire economy or major sector the economy.

## **2.3. Data and methodology**

The main data set for the study is generated through a field survey carried out from 10th to 15th August 2020, using a sample of business establishments (n=45) representing key segments in tourism value chain in AB. The surf tourism of AB was stratified into four broad business categories: 1. Accommodation (ACC), 2. Food and beverage (F&B), 3. Entertainment related (EN) and 4. Surfing (Surf). Tourism accommodations included hotels, motels, bed and breakfast, campgrounds, and holiday rental units. The food and beverage (F&B) sector included restaurants, bars and public houses; while the entertainment related sector included recreation businesses, sightseeing businesses, tour operations, culture and the arts, and souvenir retail shopping (Hystad and Keller's, 2006). Surf tourism covered Surf schools and association that provide surfing lessons and training. It is a stratified purposive sample with a full coverage of surf tourism sector (n=10) and partial coverage of three other segments of

1 For a brief review of these studies see Chandrasiri et al. (2020) and references cited therein.

2 The only exception is the study on "Impacts of the COVID-19 pandemic on small and medium-sized enterprises (SME) in Sri Lanka" covering 413 SMEs.

3 Less than 10 employees.

4 10 to 50 employees.

the tourism value chain: entertainment (n=10), food and beverages (n=10) and accommodation (n=15). Of the sample firms, about 83 percent had been catering to the foreign markets while the remaining had been serving the domestic market (17%). In terms of size, micro and small scale enterprises account for 82 and 18 percent of sample units. Total direct employment of the sample firms in 2019 was over 300 and majority of them were in the accommodation sector followed by entertainment (25%), F&B (20%) and surfing (12%). About 57 percent of the employees were males and females and disabled persons accounted for 39 and 17 percent of employment of the sample firms respectively. A Structured questionnaire was administered among sample firms through face to face interviews with a special focus on employment, links with the value chain, impact of the pandemic, coping strategies, institutional efficiency in the delivery of relief measures and expected support from the government. The data were analyzed through descriptive statistics. Secondary data used in this study included a review of government and organization reports examining COVID 19 impacts and the status of the recovery measured offered until August 2020 in Sri Lanka and underline the areas of potential opportunities for AB surf tourism recovery and resilience.

#### **2.4. Impact of Covid-19 on the local economy of Arugam Bay**

In addition to the impact on public health, COVID-19 has had a major impact on the economy of local community of AB whom depends on surf tourism. The survey data on economic perspectives were organized thematically and the data were analyzed through descriptive statistics. The results are discussed in the next section of the paper.

##### **2.4.1. Sample Description**

About 93 percent of business establishments in the sample belong to the formal sector having registered with Pradeshiya Sabha (PS) and very few registered with Sri Lanka Tourism Development Authority (SLTDA). According to the respondents, business registration is vitally important within this context as it is a prerequisite to opening a bank account, being eligible for formal assistance and even applying for government recovery assistance. However, most of the businesses in AB are not having registration under tourism identity, since it is a long procedure and requires lots of documents to complete the process. In terms of scale, 82 percent of the sample belongs to micro enterprises

with employment level of 1 to 10 persons.<sup>5</sup> By type of business sector, the share of micro enterprises in the sample varies from 70 percent in accommodation to 90 percent in F&B and Surf tourism sub-sectors. This means surf tourism in AB is dominated by micro level enterprises and hence more vulnerable to external shocks like COVID 19.

The total employment of the sample units before COVID 19 crisis was around 494 jobs both in direct (61%) and indirect (39%) terms. By sector, accommodation is the major contributor, with 129 direct jobs of which 24.8% are females. Entertainment sector is the second highest contributor to employment with 20 percent female share. Though food and beverage found to be third contributor, its female share is only 8.1 percent. Surfing accounted for 27 jobs in which share 16.2 percent were females. The overall female share of direct job in the sample is 19.2 percent. Despite the long history of AB as a tourist destination dating back to the 1960s, majority of sample units in sample account for about 1-5 years of business experience. This has been attributed to high mortality of micro enterprises due to natural disasters (e.g tsunami) and business fluctuations (Robinson and Jarvie, 2008).<sup>6</sup> In terms of investment, Even though, surf tourism in AB is dominated by micro level enterprises, the cost of investment for nearly 45 percent of business enterprises are over Rs 5 million and this ratio is over 70 percent in accommodation sector. In the surfing sub-sector, the cost of investment is in the range of Rs. 1 to 5 Mns for about 70 percent of business establishments.

#### **2.4.2. Arugam Bay surf Tourism Value chain**

Tourism in AB is dominated by surf tourism, on an account of a few quality breaks in the area. The visitors are also attracted by the local beaches, lagoons, historic temples and the adjacent Kumana National Park. The business entities have been established such a way to cater the surf tourist with the season starting from May to November in a year. In the tourism value chain, all players need to work together in adding value for delivering product and services to tourists (Rahmati et.al 2019). As argued by Yilmaz and Bititci (2006) in facilitating a distinct travel experience to visitors, tourism service providers need to collaborate, coordinate, and integrate into creating the best tourism products and services.<sup>7</sup> This aspect was examined considering six sub-sectors in the

---

<sup>5</sup> Based on the definition given by the Ministry of Industry and Commerce (MIC), National Policy Framework for Small Medium Enterprise (SME) Development (undated).

Re-quoted from FaZeeha (2014).

<sup>6</sup> Re-quoted from FaZeeha (2014).

<sup>7</sup> Re-quoted from Rahmati et.al (2019).

value chain: surf tourism, accommodation, F&B, entertainment, travel and fishing sub-sectors. Of these six sub-sectors, accommodation is the only sector which maintains strong links with the tourism value chain. This is followed by the entertainment sector which is closely linked with travel (80%), transport (80%) and surfing (50%) sub-sectors. Similarly, surf tourism is closely linked with three sub-sectors in the value chain: entertainment (70%), travel (50%) and accommodation (40%). However, fishing sector seems to be weakly connected with the tourism value chain in AB suggesting an important opportunity to add value to tourism products and services through an integrated approach on tourism development. Similarly, weak links with food and beverage sub-sector reveals absence of collaboration, coordination, and integration with other businesses in creating the best tourism products and services in Arugam Bay.

#### **2.4.3. The Impact of COVID-19 on Surf Tourism**

The impact of COVID-19 on surf tourism in AB can be witnessed from the lockdown of the economy, area specific curfew, labor mobility restrictions, travel bans, airline suspensions, and most importantly slowdown of the national economy. This section of the analysis presents the impacts of COVID 19 on surf tourism measured in terms of six criteria: business operations, cancellation of bookings, loss of employment, loss of revenue, cash flow problems and loss of investment.

##### ***Business Operations***

Tourism market in AB is dominated by foreign guests. Across sub-sectors, foreign market share varies from 78 percent in accommodation to 91 percent in surf tourism (Figure 2.1). However, there is no accurate data on the composition of foreign market in AB by country of origin. Robinson and Jarvie (2008) reported that the majority of foreign guests are from Australia and England, while a short seasonal market represented by the Israel. However, Pathirana and Samarathunga (2018) states that Netherland is the key source market for tourists in AB (20%) followed by France and Germany (15%) equally while Australia and Switzerland contribute 13 and 10 percent respectively. The balance 27 percent of the total foreign arrivals are from Russia, USA, England, Belgium and Spain.

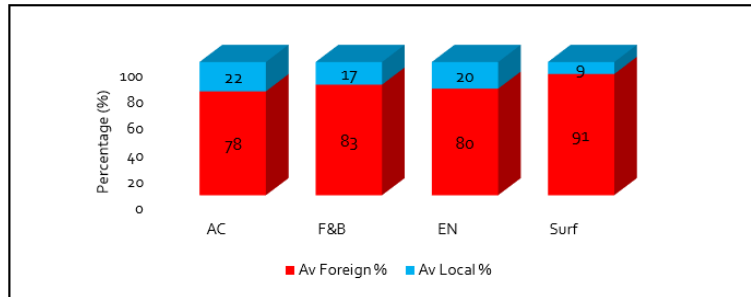


Figure 2.1: Market share in Arugam Bay by Sector; Source: Field survey

The spread of the COVID-19 virus has proven to be rapid and difficult to control, so the means to control government of Sri Lanka executed lock down from March 20th, 2020 and slowly lifted the lockdown by May 11th, 2020. Tourism is the sector that provides service to visitor at the point of production and cannot be managed virtually. Businesses were asked how they operated during the lock down period and aftermath and the evidence show that while most firms had to close a good part of their business operations in the 1<sup>st</sup> quarter, many of them were able to recover in the 2<sup>nd</sup> quarter even in a limited way (Figure 2.2). In terms of gender and scale however, the negative impact seems to very severe on female-owned and micro establishments

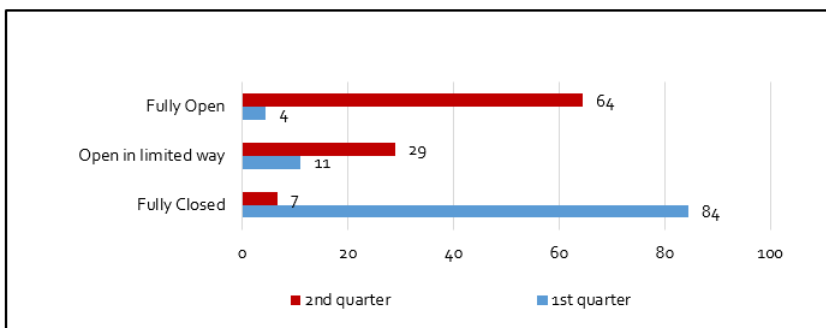


Figure 2.2: Status of Business during COVID -19 period by quarter (%); Source: Field survey

By sub-sectors, 2 percent of respondents were fully open way in the accommodation sector during the 1<sup>st</sup> quarter and another 11 percent were open in limited way. Interestingly, in the 2<sup>nd</sup> quarter, 27 percent were fully opened in accommodation while another 7 percent were open

in limited way. Moreover, none of the accommodation respondents were fully closed in the 2<sup>nd</sup> quarter (Table 2.1). During the field survey it was observed presence of few foreign visitors and limited local visitors at the destination and the respondent firms revealed that during weekend covering following holidays, local visitors' tent to occupy the flavors of AB surf tourism. Though, 2% of entertainment related business also fully opened and 20% fully closed in the 1<sup>st</sup> quarter, in the 2<sup>nd</sup> quarter 16% are fully opened, 4 % were open in limited way and only 2% still fully closed. However, food & beverage and surfing business of 20% each were completely shut down during the 1<sup>st</sup> quarter whereas in 2<sup>nd</sup> quarter fully opened 16 and 7 percent. In contrast, surfing sector 7% are fully opened while 11% still open in limited way and 4% still fully closed. The tourism operational recovery totally depends on the number of visitors to the destination and respondents expressed their fear that they lost operation during 2019 and 2020 exactly during the season.

In order to further examine the status of business closures due to COVID-19, the businesses were asked to indicate the percentage decrease in business operation hours per day in relation to 2019. The responses revealed that there is a significant drop in the operation hours in the 1<sup>st</sup> quarter of 2020. For example, in the 1<sup>st</sup> quarter there was 100 percent drop in business hours in surf and F&B sectors while it was 90 and 80 percent in entertainment and accommodation sectors. Same evidence was observed in terms of scale across all four sectors in the 1<sup>st</sup> quarter of 2020 (Table II). In the second quarter, however, with employed recovery strategy and hope for the foreign visitors stuck on the island and the local visitors, varying nature of operational hours per day can be observed. For example, about 13% of the business enterprises reported a 100% decrease in operational hours per day in the 2<sup>nd</sup> quarter as against 7% expressed that they are fully back in business hours. However, 36% responded they are practicing 60% decrease in operation hours per day. The evidence on loss of business hours by sector and by showed that in the quarter two micro enterprise surfing is continued 100% reduction in operation hours per day and it's obvious as noted by Kumara et.al (2018) in their study that lack of participation for surfing by Sri Lankans and there are factors for lack of participation with special reference to AB. The accommodations have recovered in the operational hours and 2% of each food and beverage and entertainment related are in 100% reduction in operational hours.

Table 2.1: Status of Business Operation in percentage by Sub-sector

Type of Business operation	1st Quarter				2nd Quarter			
	Fully Closed	Open in limited way	Fully Open	Total	Fully Closed	Open in limited way	Fully Open	Total
ACC	60	33	7	100		20	80	100
F&B	100			100		30	70	100
EN	90		10	100	10	20	70	100
Surf	100			100	20	50	30	100
<b>Total</b>	84	11	4	100	7	29	64	100

Source: Field survey

Table 2.2: Decrease in Business Hours per Day by Sector and Scale - %

Type of Business operation	1st Quarter				2nd Quarter			
	Fully Closed	Open in limited way	Fully Open	Total	Fully Closed	Open in limited way	Fully Open	Total
ACC	60	33	7	100		20	80	100
F&B	100			100		30	70	100
EN	90		10	100	10	20	70	100
Surf	100			100	20	50	30	100
<b>Total</b>	84	11	4	100	7	29	64	100

Source: Field survey

### **Booking and Cancellations**

The respondents were also asked to indicate booking cancellation due to COVID -19 using a percentage scale in order to evaluate the response from both foreign and local visitors on their trip planning to surf destination. About 96 percent of firms reported 100 percent cancellation of bookings by foreign guests and due to COVID-19. Among local guests, 100 percent cancellations were reported by 26 percent of respondent firms. Similar pattern of booking cancellations can be observed by sector and by scale operation as well (Table 2.3). Hajibaba, Boztug, & Dolnicar (2016) cited the study done by Valencia and Crouch (2008) confirm the same pattern that visitor cancel trip to their planned destination if crisis occurred in that destination. They (2016) concluded that most tourist cancel their trip when faced with a terrorist attack or an earthquake, however cancelations can be prevented depending on the kind of crisis. Mostly the booking occurs through the online tour booking sites



and through the online platform they received the cancellation note. Respondents expressed that, whether the booking occurs or cancelled, they must pay for the online platform, in order to be in the link. In this scenario, further to the economic crisis they face to run the business, as a recovery strategy to reopen the business, they are forced to pay the online platform to market their existence.

Table 2.3: 100 percent Booking Cancellations by Sector and Scale - %

Market segment and scale of operation		ACC	F&B	EN	Surf
<b>Foreign</b>	Small Enterprise	19			4
	Micro Enterprise	30		19	26
<b>Local</b>	Small Enterprise				
	Micro Enterprise	36			

Source: Field survey

### **Employment**

The World Tourism Organization recently noted, global tourism has been hit hard, with millions of jobs at risk in one of the most labor-intensive sectors of the economy. According to labour market survey conducted by Department of Labour, Sri Lanka (Wimalaweera,2020) on private sector employment accounted that accommodation and food services activities only measured 19,730 of employees (81.11%) are not in the job by May 2020.

The survey also canvassed the subjective estimates of job losses by responding firms. The job losses in terms of direct and indirect employment were 23 and 4 percent in the 1st quarter of 2020 respectively. During the 2nd quarter, job losses increased up to 48 and 31 percent for direct and indirect employment. Across sub-sectors, the job losses vary quite significantly, and worst affected sectors were accommodation, F&B and entertainment (Table 2.4). It is also important to note the job losses were much higher in the 2ed quarter indicating devastating impact of the pandemic in the medium term. By occupation category, highest job losses were reported among low-skilled workers (76%) followed by managerial (10%) and supervisory level (7%) workers. By gender and scale, the severity of job losses is alarmingly high among females working in micro level enterprises (Figure 2.3). As noted, earlier AB is a low-income area and loss of employment for female workers is

a major issue as it would lead to a range of socio-economic problems in terms of poverty, inequity, food security, health security, social distress, children’s health, wellbeing and learning outcomes etc.

Table 2.4: Job losses by Sub-sector and Quarter - %

Sub Sector	Direct		Indirect	
	2020 Q1	2020 Q2	2020 Q1	2020 Q2
<b>ACC</b>	-39	-50	-5	-46
<b>F&amp;B</b>	-16	-47	-29	-100
<b>EN</b>	-12	-61	0	-20
<b>Surfing</b>	-5	-11	-1	-8
<b>Total</b>	-23	-48	-4	-31

Source: Field survey

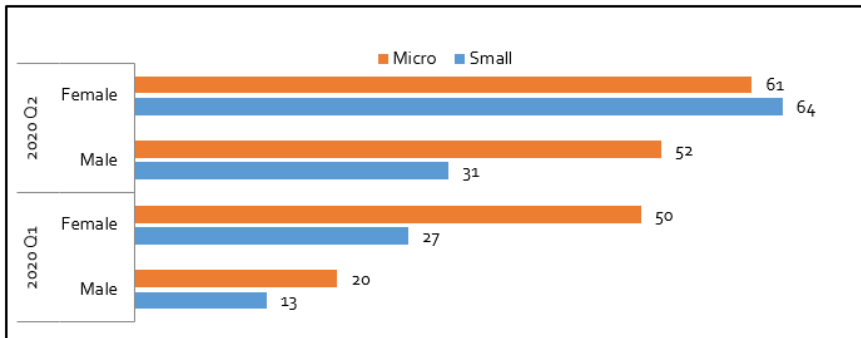


Figure 2.3 : Job losses by Gender and Scale (%)

### **Revenue and Cash flow**

To measure the magnitude of the impact, respondents were asked to state the percentage (%) revenue loss in relation to 2019. As showed in the table 2.5, 89% of respondent said that they lost 80-100% loss in quarter one and 47% responded the same in the quarter two. A small percentage of respondents agreed that they lost 10 -19% of revenue in both quarters. The difference between the two ranges is high in terms of economic recovery and the devastating impact on families whose livelihoods depend on tourism.

Table 2.5: The Percentage Loss of Revenue by Sector

Sectors	2020 Q1			2020 Q2			
	80 - 100%	60- 79%	10 - 19%	80 - 100%	60- 79%	40- 59 %	10 - 19%
<b>ACC</b>	31	2		11	20	2	
<b>F&amp;B</b>	18	4		9	11		2
<b>EN</b>	20		2	11	4	4	2
<b>Surf</b>	20	2		16	4	2	

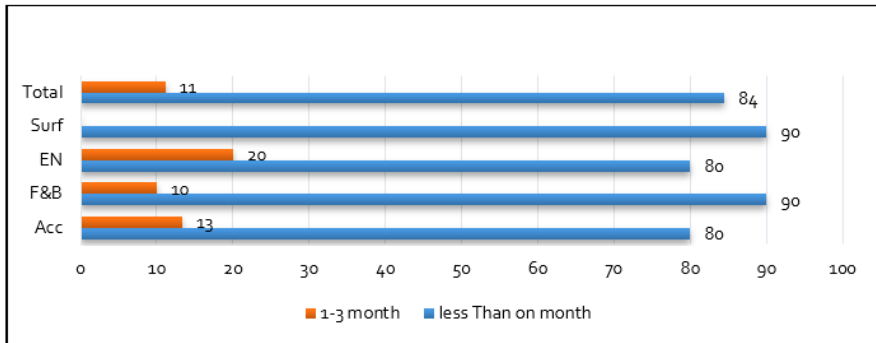
Source : Field survey

More than 38% of small and 49% micro enterprises across the establishment are experiencing or expecting a reduction in revenues through 2020 by looking at the quarter two. In some cases, the reductions in revenues are very high. Businesses anticipate losing more and more of their revenues and the situation is not expected to improve, according to the entrepreneurs surveyed in this study, since the season is going to pass in November and at this point of writing air travel is not opened to tourist. Even if air travels open, considering COVID 19 business are not ready to adhere to the health standards and tourism authority demands in welcoming the foreign visitors. The prospects alarms respective government stakeholders in minimize the risk of poverty.

The respondents were further questioned about the adequacy of cash flow and the responses are discussed below. The results shed light on both the financial fragility of small and micro businesses, and the significant impact COVID-19 had on these businesses. The chart demonstrates that across the establishments 84% of the businesses have cash flow to manage less than one month and 11% of them can manage 1-3 months (Figure 2.4). Food and beverage and surfing are most (90%) affected in term of cash flow. It is also evidenced that micro enterprises are affected hardly that 89% expressed that they have cash flow to manage less than one month. The result demonstrates the economic crisis of SMEs and the challenges we could face. Given majority of the establishment's workforce exists in small to micro scale enterprises, there is a dependency relied heavily upon daily inventory. A lockdown of this magnitude has placed heavy pressure on the cash flow and continued travel restrictions on inbound foreign tourists have further deteriorated the condition at AB surf tourism and threatened their existence. It's observed that many businesses will move from a well-managed or in some cases from a tightly managed cash flow cycle

in a pre-COVID-19 environment to an almost broken cash flow cycle in a COVID-19 environment. The Government has already announced a loan package from the banks. However, all businesses may not receive support as the banks will also have their risk management processes in place to mitigate losses due to defaults.

Figure 2.4 : Adequacy of cash flow in Total and by Sector - %



Source: Field survey

### **Investment**

Investments from the public and private sector are vital for the general economic growth as well as the sectoral growth of the tourism sector. The investments in AB mostly micro level private sector according to the business inventory 2018 (unpublish). These investments are vital for the growth of surf tourism AB. However, the field data demonstrate that 58% of the businesses have lost 91-100 percent of planned investment while for another 36 % of respondent firms, the loss of investment was 81 to 90%. That in overall 94% of small and micro business are facing sever loss in their business, further to last year losses. These Small and Micro enterprises require urgent assistance for their revival as many businesses otherwise unemployment rate may increase significantly.

### **2.5. Status of business recovery**

The survey elicited information from responding firms about the measures implemented at firm level to cope with the external shocks generated by the pandemic and the travel restriction measures implemented to contain its spread. Eight Seven options were given, and respondents were asked to assess success of each measure using standard 5-point scale: Very successful, partially successful, unsuccessful, too early to tell and not implemented. The options were: (a) Preparation

in relation to COVID 19, (b) Provided flexible cancellation; (c) Focus on domestic markets; (d) Increased on-line marketing; (e) Reduced prices and discounts; (f) employee up skilling to face the upcoming challenges; (g) workforce protection; and (h) Build social and psychological resilience among employees.

Table 2.6: Recovery Measures Implemented by the Firms between March and August 2020- %

<b>Recovery measures</b>	<b>Fully Successful</b>	<b>Partially Successful</b>	<b>Un-successful</b>	<b>Too early to tell</b>	<b>Not implemented</b>	<b>Not responded</b>	<b>All</b>
<b>Preparation in relation to COVID 19</b>	42	24	9	9	11	4	100
<b>Provided flexible cancellation</b>	29	18	13	13	16	11	100
<b>Reduced prices and discounts</b>	29	27	22	4	13	4	100
<b>Focus on domestic markets</b>	18	29	7	11	27	9	100
<b>Increased online marketing</b>	16	27	13	13	24	7	100
<b>Work force protection</b>	16	20	4	4	47	9	100
<b>Build social and psychological resilience among employees</b>	11	27	7	4	42	9	100
<b>Employee up skilling to face the upcoming business challenges</b>	01	18	7	7	42	16	100

Source: Field survey

It is interesting to note that 42 percent of respondents rated preparation in relation to COVID-19 as the most successful recovery measure implemented at firm level (Table 2.6). Across the four sub-sectors also it has been rated as the highest level relative to other options. This is followed by flexible cancellations and reduced prices and discounts. The lower success rate received by the focus on domestic markets is to be expected given the overall economic downturn at national level. Similarly, low success rate for increased online marketing is acceptable given the collapse of travel industry at global level and strict travel restrictions at the domestic end. However, some respondent that they do not want to implement price reduction and discount strategy for recovery since the quality of the service might change and it may affect them in a longer term. Some other respondents stated that they are still closed since the feel that adequate visitors not arrived at the destination and reopening may double the burden of the working capital since they

already lost revenue in the force lockdown 1st quarter. Worker protection and build social and psychological resilience among employees are the 3rd and 4th pillars of the recovery process (ILO, 2020). However, these two recovery measures record the lowest success rate suggesting the need for immediate government intervention to ensure recovery of business activities.

The survey also sought the perceptions of business owners about the policy measures that the government should implement to help support and revive surf tourism in AB. As can be seen in Table 2.7, responding firms across the sample identified institutional support related policies as the most important area that the government needs to address. This has been especially the case for the accommodation, F&B and surf tourism sub-sectors. Some of the major policy interventions that firms have suggested for the institutional support include support from SLTDA, capacity building of Arugam bay Tourism Association (ABTA), safety and security of girls and women of both locals and foreign visitors, set up a Tourist Information center, reduce red-tape etc. Responding firms have identified product development support and marketing & destination promotion as the 2ed and 3rd priority area for policy support, particularly measures such as improve access, product development, medical / hospital facilities to visitors, destination marketing at international level, visual promotion at the airport etc.

Table 2.7: Key Interventions that Firms want Government to Implement - %

Policy area	ACC	F&B	EN	Surf	All
<b>Institutional</b>	14	10	7	10	40
<b>Monetary &amp; Fiscal</b>	4	2	1	3	11
<b>Marketing &amp; Promotion</b>	7	3	3	7	20
<b>Product Development</b>	8	7	4	5	24
<b>Tourism Sector Development</b>	2	2	2	2	7
<b>Total</b>	34	24	16	26	100

Source: Field survey

## 2.6. Policy Implications

In our survey, we find that due to the COVID-19 outbreak and lockdowns, entire tourism industry in Arugam Bay has been severely affected. Consequently, these businesses are facing a variety of issues such as complete closure of business operations (84% in 2020 Q1), loss

of business hours (93% in 2020 Q1), booking cancellations (96% & 36% by foreign and local customers respectively, loss of direct employment (23% and 48% in 2020 Q1 & Q2 respectively), loss of revenue (93% and 47% in 2020 Q1 & Q2 respectively), inadequacy of cash flow (less than one month- 84.%) and loss of investment (91-100% for about 58% of firms). Therefore, it is extremely necessary to mitigate not only the ongoing crisis but also the long-term effects caused by the pandemic.

The findings on recovery strategies implemented at firm level point to success in three measures: preparation in relation to COVID 19, flexible cancellation and focus on domestic market. However, worker protection, build social and psychological resilience among employees and employee up-skilling to face the upcoming business challenges were found to be successful initiative at firm level. The evidence on the efficiency of institutional support system revealed major institutional failures at national, provincial and district level. As a result, the highest number of interventions expected from the government is in the area of institutional support. Responding firms have also identified product development support and marketing & destination promotion as two other important areas of support for to revive surf tourism in AB. Based on the findings of the study, different policy recommendations were proposed to ease the burden on surf tourism in AB. These include institutional support from central, provincial and district administrative authorities, product development, destination marketing and monetary and fiscal policy support.

## **2.7. Recommendations**

### **Immediate**

The success of Surf Tourism Arugam Bay response to COVID 19 is in large part, due to their shift towards local tourism market. However, the financial support is vital for rapid establishment of these small and micro business sectors in attracting more local tourists. Though the government has offered relief measures to such businesses, trickle down those to these businesses found to be difficult. There are bottle necks of procedures that hinder in the path and businesses expect flexibility in those areas.

The registration with the government tourism body is frequently highlighted by the respondents except entertainment related businesses. This is unique issue particularly to the accommodation businesses that reside along the seaside. In post COVID 19 tourism Sri Lanka, business

realizes this is important in receiving tourist, particularly foreign tourists. It is obligatory to government tourism body to support these small and micro businesses in sustaining the overall tourism sector.

### **Longer term**

In post-COVID 19 tourism, there will be demand for improved and/or new skilled services. The employers may look for multi skilled people in their hire in such situation. Failing to meet the future challenges, may be lost fortune to AB surf tourism. Therefore, supporting existing business in upskilling the employees is important. In addition, the potential youth both women and men should be supported in developing multi skilled in responding to upcoming demands.

Surf tourism of AB adopted common immediate market strategies, however, the it required high intense media destination marketing both at national and international in order develop whole year tourism. Many responses pointed the importance of visual attraction at airport arrival terminals, SLTDA media coverage, and special surf tourism campaign at international etc.

Establishing a tourist information center is vital. Absent of information center restrict the business connection to the destination and suppresses the marketing avenues that could welcome more tourists.

Travel infrastructure development is another area to be investigated when moving into post COVID tourism development. The destination should be easily reachable and cost effective with the new norms of travel conditions. There is a potential opportunity extending Colombo – Hambantota highway towards Pottuvil and increasing number of cost-effective air travel. Government should invest in potential surf tourism destination AB, which has a potential repaying capacity for the economy of Sri Lanka.

### **2.8. Conclusions**

This study was conducted to examine the impact of COVID-19 outbreak on Surf tourism in Arugam Bay in order to assist policymakers and key stakeholders in streamlining the strategies and interventions to ease the burden of the current crisis on these businesses. Our findings underline several issues faced by business owners in AB. To the best of our knowledge, this research provides first systematically collected micro level information about the impact of COVID-19 outbreak on



tourism in Sri Lanka and is among only a few studies at global level. The findings of the proposed study would be especially useful for policy makers, administrators, practicing managers, the donor community and others wanting to assist location specific tourism destinations affected by COVID-19 crisis as a way to achieve Sustainable Development Goals of leaving no one behind, inclusive growth and gender equality in the post-COVID-19 environment.

## References

- ADB Briefs. (2020(b)). Updated Assessment of the Potential Economic Impact of COVID-19. Manila. <https://www.adb.org/publications/updated-assessment-economic-impact-covid-19>. [Verified 15th November 2020]
- Central Bank of Sri Lanka . (2020b). Implements new credit schemes to support the revival of the economy. <https://www.cbsl.gov.lk/en/news/cbsl-implements-new-credit-schemes-to-support-the-revival-of-the-economy> [Verified 15th November 2020].
- Chandrasiri, S., Gunatilaka, R., Wijesekera, S. Kumara, D., Gunasekera, A., & C, P. (2020). An Initial Assessment of the Impact of Covid-19 on Members of the Employers' Federation of Ceylon. Colombo.
- Hajibaba, H., Boztug, Y., & Dolnicar, S. (2016). Preventing tourists from cancelling in times of crises. *Annals of Tourism Research*, 48-62.
- IFC. (2020). Gendered Impacts of COVID-19 on Small and Medium-Sized Enterprises in Sri Lanka. Washington, DC.
- ILO. (2020). COVID-19 and employment in the tourism sector: Impact and response in Asia and the Pacific. Retrieved from [https://www.ilo.org/wcmsp5/groups/public/---asia/---ro\\_bangkok/documents/briefingnote/wcms\\_742664.pdf](https://www.ilo.org/wcmsp5/groups/public/---asia/---ro_bangkok/documents/briefingnote/wcms_742664.pdf) [Verified 15th November 2020]
- ILO. (2020). ILO Monitor: COVID-19 and the world of work. Fourth edition Updated estimates and analysis. Geneva. Retrieved from [https://www.ilo.org/wcmsp5/groups/public/---dgreports/dcomm/documents/briefingnote/wcms\\_745963.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/dcomm/documents/briefingnote/wcms_745963.pdf) [Verified 15th November 2020]
- Kumara, W., Silva, M., & Madusanka, R. (2018). The lack of participation for surfing by Sri Lankans: With Special References to Arugambey & Kabalana Surfing Areas. *IOSR Journal of Sports and Physical Education*, 01-07.
- Pathirana, H. P., & Samarathunga, W. H. (2018). Developing a demographic profile of adventure Tourists visiting Arugambay, Sri Lanka. *SEUSL Journal of Marketing*.
- Pottuvil Resource Profile. (2010). Divisional Secretariat, Pottuvil.

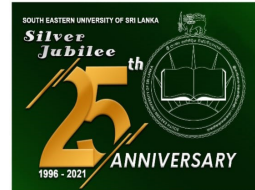
- Rahmiati, F., Ismail, Y., Amin, G., Simatupang, T., Larso, D., & Othman, N. (. (2019). Tourism Value Chain Activities Model for Competitive Advantage Measurement. In International Conference on Trade 2019 Atlantis Press. [https://doi.org/10, 43-47](https://doi.org/10.43-47).
- Robinson, L., & Jarvie, J. (2008). Post-disaster community tourism recovery: the tsunami and Arugam Bay, Sri Lanka. *Diasters*, 631-645.
- Samarathunga, W. (2020). Post-COVID19 Challenges and Way Forward for Sri Lanka Tourism. Article in SSRN Electronic Journal , 1-12. <https://doi.org/DOI: 10.13140/RG.2.2.32337.89443>.
- Valencia, J., & Crouch, G. I. (2008). Travel behaviour in troubled times: The role of consumer self-confidence. *Journal of Travel & Tourism Marketing*, 25-42.
- Yilmaz, Y., & Bititci, U. (2006). Performance measurement in the value chain: manufacturing v. tourism. *International Journal of Productivity and Performance Management*, 371-389.

## CHAPTER 03

### Behaviour and Attitudes Changes of House Hold Members Due To Covid-19 Lockdown: Research Based on Hathbothiya Grama Niladari, Dehiwela Divisional Secretariat

Fathima sajla jaufer sadiq

Department of sociology  
University of Colombo  
sajlasadiq18@gmail.com



#### ABSTRACT

*The world has changed dramatically over the three months of 2020 with COVID 19 outbreak by impacting almost every aspects of people's life. The COVID 19 represents Present study exploring how people behaviours and attitudes, Life style has changed in Daniela Municipal council area due to COVID 19. A Structured Questionnaire was constructed based on assessing the impacts and behavioural changes pertaining to COVID 19. Questioners were made through Online and I select 20 Samples under Random Sampling method. Sample selection was carried out with Dehiwela Municipal Council Membership List. Data were analysed by using Statistical package for Social Science (Spss) version 23.0 to identify the factors for Behaviour changes. Response will compare with Gender, age, and level of education to find the possible statistical correlation using Chi - Square test. Sample says, 75% of responders were identify as male and other 25% were females with age of 18-35. Majority are Private Employers with the changes in their monthly income, they enforced to work from their Residence. Nearly 80% of responders faced Behaviour changes in food Perception during the Lock down period. Majority of the responders were received Cash support which has given by Government due to lockdown expenditure. Behaviour and psychological status explain emotions have highly impact on household member's activity and they more engaged in Social media. Behaviour changes in food perception during the pandemic period. Behaviour and psychological status explain emotions have highly impact on household member's activity and they more engaged in social media. The paper estimate, household member's behaviour and life style has dramatically changed during the pandemic period.*

**Key Words** – Behavior, Lock Down, COVID 19

### **3.1. Introduction**

The world has changed dramatically over the three months of 2020 with the COVID-19 outbreak, impacting almost every aspect of our lives. These challenges clearly impact human behaviour and their attitudes. Global health experts and South Asian governments have expressed concern about the spread of COVID-19 and potential for more than 7.6 million deaths in Sri Lanka if no action were taken. Sri Lanka's health ministry reported its first COVID-19 cases on January 30, from China, who has medicated in Sri Lanka with return back normal. End of the numbers began to rise (Johns Hopkins coronavirus resource centre). Government policies including stopping flights, implementing National wide lockdown at the early stage of the pandemic. Due to this COVID-19 lockdown, people are urged to stay at home and only go out for buying foods and complete their needs.

Implementing personal hygiene and public health behaviours such as hand washing and social distancing are necessary to curb the spread of coronavirus, but it will be challenging to practice these in many cities and rural areas in developing settings (Dc hob 2020). Colombo, Puttalam, Gampaha, Kaluthara are identified as a high risk of adverse and health and economic effects of COVID-19 lockdown. "Sri Lanka Western Province, which includes the most popular cities of Colombo, Gampaha will be placed under curfew following a surge in the COVID-19 cases." (WHO 2020.10.29) Sri Lankans have changed their attitudes and practices with the effect of the new COVID-19 outbreak. Nearly 75% of households are ready to continue with the activities initiated during the post-COVID-19 period (WHO).

I explore number of behaviour, attitudes changes due to risk lockdown period. The like of panic buying, changing consumer patterns, working from home, engaged in cooking and babysitting without no maids coming, etc. large number of people are able to buy foods and goods with the high risk of pandemic and also many are engaged in different kind of leisure activities to spend their time. Employers who work in private and government they allow to do their work in home. In addition we can say internet has played a major role in human behaviour. These are impact and changes occurred due to COVID-19 pandemic.

Most of the people from high risk area they work in informal sector. without sustaining bans on large gatherings including specific cultural and faith practices such as mass prayer gathering, large weddings and these may create super speeding events that accelerate transmission (Congeal 2015).

### **3.2 Literature review**

Following the outbreak of COVID -19 pandemic, governments around the globe coerced their citizens to adhere to preventive health behaviours, aiming to reduce the effective reproduction numbers of the virus, driven by the game theoretic considerations and inspired by the work of US National Research council's committee on food Habits(1943) during the WWII, and the post – WWII Yale communication Research program, the present research shows how to achieve enhanced adherence to health regulations without coercion. (Royal society 2020)

This lockdown required New Zealanders to stay within household-level isolation "bubbles". People could only leave their homes if they needed groceries, medical supplies or treatment, and exercise within their immediate neighborhood, with a few exceptions for personal safety, blended families, single individual households, and "essential workers" such as healthcare and grocery workers (Bloomfield, 2020).

Following the onset of the pandemic, \*the majority of the participants reported that they received increased support from friends(64.6%) and increased support from family members(63.9%). the majority also experienced and increased shared feeling with family(57.8%). (Cdds, 2020)

Broader attitudes towards the nation and government were also considered. As suggested above, the sense of common fate instilled by national events such as the COVID-19 lockdown may increase focus on intragroup (vs. intergroup) considerations, including identification with, and positive feelings about, one's nation (Greenaway & Cruwys, 2019; Li & Brewer, 2004). For example, Americans responded to 9/11 with heightened feelings of patriotism and identification with fellow citizens (Skitka, 2005).

Post-pandemic / lockdown health, a clinically validated measure of mental distress (Kessler et al., 2010) was employed. Indices of rumination (adapted from Nolen-Hoeksema & Morrow, 1993), physical health (Ware & Sherbourne, 1992), self-perceived access to healthcare, and fatigue were also included. Longitudinal work conducted after 9/11 in the US found that the majority of people were resilient, but a sizeable minority went on to develop post-traumatic stress disorder (Bonanno et al., 2007).

### **3.3. Research design**

#### **3.3.1. Data analysis**

To perform the study, Data were Organized and analysed by using spss version 23.0. Social demographic and information were convert in to classifications. Measurement data were express as a mean slandered deviation. Variables and grade variables and corresponding composition ratio. The analysis of the relationship between gender, age, education level, occupation with food perception, psychological status, social media, spending leisure time initially used by codebook, frequency tables, correlation, crosstabs, chi- square test to explain the data in formal level.

#### **3.3.2. Sampling and sampling method.**

Research samples was collected under Random sampling method. I determine to use Simple Random sampling and I select 20 house hold members as a sample size From Hathbothiya Grama Niladari Divison According to Grama Niladari Membership list.

The Questioner was shared with Selected Household members through their Email and through the social platforms commonly used (Facebook, WhatsApp). Furthermore we chose (18-58) age responders as sample size. (This Age category have good advance knowledge in social platforms).

The Online survey distributed on between (May 15 – May 25), 2020.The responders belonged to different social categories, Such as Government Employers, private employers, self-employers, Home Makers).

#### **3.3.3. Research area**

To Explore the Study, I select Hathbothiya Grama Niladari division, which under in Dehiwela divisional sector, Colombo district as a Research area. The Data collection conducted by internet survey during the pandemic period. We collect participants' details under Grama Niladari list .Participant's personal information was kept confidential.

### **3.4. Research question**

The study investigate how house hold members occurred life style changes due to COVID 19 outbreak lock down.

### 3.5. Research objectives.

- Identifying the main issues during the COVID 19 lockdown
- Identifying Behaviour and attitudes changes in food perception.
- Identifying changes in monthly income
- Identifying the received supports. ( Government , private ,social activists)
- Identifying the psychological status of House hold members.
- Behaviour changes by social media during the lockdown period.

Demographic Table 01 indicates Most of responders have identify as (18-35) (36-58) Age limits. In addition 75% of responders were married, 25% of responders were unmarried. While we concern the occupation we could see large number of responders are working in private sector, Average number of responders were identify as government employers.

Furthermore, there is positive strong relationship has developed with gender and occupation. Large number of responders were males rather than females. When we consider the monthly income of the responders, we could see large number of responders are getting (more than 55000) for per month and 15% of responders reply they are getting (15000-25000),(25000-35000) per month. Only few have agreed their monthly income is less than 45000 thousand.

Most of workers are doing their work from home for usual hours. According our statistic 50% of workers are working from home more hours and 40% responders agreed there are went for work with pass. As we can determine there have changes in people's day to day behaviours and attitudes.

Table 3.1: social demographic features of responders

ID	Age	Gender	Marital status	Occupation
01	18-35	Male	Single	Self-employer
02	18-35	Female	Married	Government Employer
03	36-68	Male	Married	Government Employer
04	18-35	Female	Married	Self-employer
05	18-35	Male	Single	Private employer
06	18-35	Male	Married	Private employer
07	18-35	Male	Married	Private employer
08	18-35	Female	Married	Private employer
09	36-58	Male	Married	Private employer
10	36-58	Female	Married	Private employer

Source: Author 2020

### **3.6.2 Emerging issues due to covid -19 lock down**

The COVID 19 outbreak affects all segments of the population and is particular determinate of numbers of social groups in most valuable situations, the COVID 19 pandemic has risen many social, economic, psychological issues in our society. We can illustrate number of issues that prevalent in our country

1. Social issues- crime, domestic violence, environment pollution
2. Economic issues- financial markets
3. Psychological issues - depression, social isolation, loneliness, a naixey

According to our statistic we can determine 25% of male and females are highly affected by social issues and also we could see females more involved in psychological issues rather than male. (50%). wast of the majority male have face economic issues rather than females. As a conclusion we can say most of house hold members have faced economic issues, psychological issues in during the lockdown period. Social, economic, psychological issues have create major impacts on pupils and their life style.

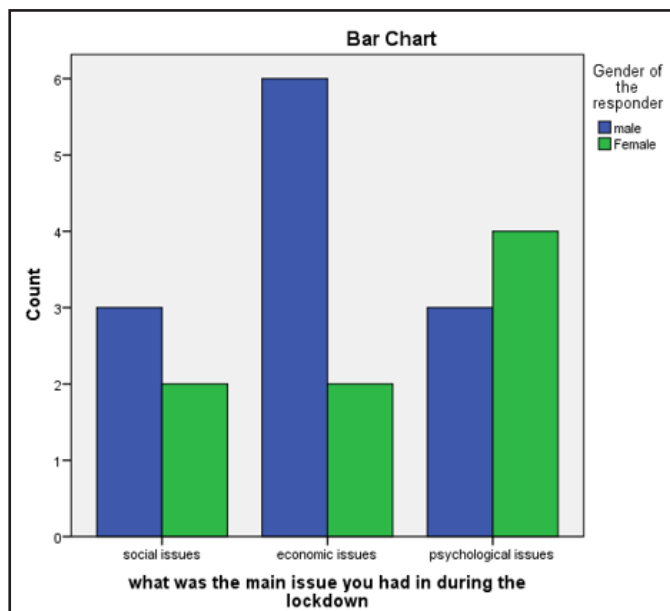


Figure 3: 1 issues during the lockdown



Table 3.2: cross tabulation results of gender with main issues

Main Issue	Male	Female
Social issues	25%	25%
Economic issues	50%	25%
Psychological issues	25%	50%

Crammers'v .283 Approx sign .448 (Not significant)

### **3.6.3. Behaviour and attitudes changes in food perception.**

Most of the countries have already past level of risk awareness and focus on health and wellbeing groups, but a minor change in spending is seen. as we are facing on official pandemic and people are increasing what happened in globally. Society have severe challenges in food perception style due to this pandemic

According to our static we can illustrate there is strong high relationship between monthly income and persevering food at home.(N=20) majority of the responders have very good perception on preserving food at home. Average amount of responders have mangle to preserve the food in during the lockdown period. Although majority of household members declared that they able to preserve the food in very good level. So we can share preserving food method has an increase in lockdown period.

During the epidemic period people preserve food according to their needs. When we consider the days 2-3, 4-6, 6-10, more than 10 days they have preserve the foods. Our finding says less number of responders have agreed that they store foods 2-3 days those who having monthly income (35000-45000) and also we can predict those who are getting more than 55000 monthly income they preserve food for more than 10 days. This is the high range of response we got as a good perception with more days.(35000-45000) monthly income responders have store food for 6-10 days. This can be an average level of people restore foods.

We can conclude monthly income have positive correlation (+1) with the food perception behaviour. These two variables are not statistically significant.  $P=0.419 < 0.05$

Correlations			
		Monthly income	How many days were you able to preserved food sufficient
Monthly income	Pearson Correlation	1	.191
	Sig. (2-tailed)		.419
	N	20	20
How many days were you able to preserved food sufficient	Pearson Correlation	.191	1
	Sig. (2-tailed)	.419	
	N	20	20

Source: Author 2020

Shopping behaviour is consider as a key method of food store (Fair whartoo, 2014). During the COVID 19 pandemic there was trendemorious concern about safety, there for supermarket have communicated as a way of resuming customers, safety measures such as social distancing, cleanliness and hygiene. Online shopping are offer to interesting benefits to customers with time saving.

N=20 over the population we measured there is a positive, low moderate relationship between way of food purchase and gender. Majority of the responders have purchased their food in grocery shops and also 35% of responders have done purchasing with small sellers those who identify as road sellers. Less amount of males and females are involved in online services.

"A large proportion of consumers do not give preference for E-commerce. (Santander)

We can implies from above statement people neglect online services for their consume.becasue most of complaints rise for online services. Delay on delivery, changes in odder and bad condition in food and goods are many other reasons.

Table 3. 4 Cross tabulation results of gender and way of food purchase

Way of food purchase	Male	Female
Grocery shopping	41.7%	50%
Small sellers	41.7%	25%
Online shopping	8.3%	25%

Source: Author 2020

Crammers'v - .371 significant level -.571 (Not statistically significant)

There is low moderate relationship with gender and buying discounted foods. As we know people more like to buy discounted foods and goods in this current situation. But our findings says most of the males and the females disagreed that they were not able to buy discounted foods in this pandemic period. Few responders have reply positively.

The chi-square test we can predict there is association between gender and buying foods. Low probity of reject null hypothesis in this variables. In addition we can predict 75% of responders have agreed they have changes in their shopping behaviour when we compare with other days. We can conclude their lock down has highly impact on household member's behaviours.

Table 3.5: Test statistic for "did you buy any discounted food products"

	Did you buy any discounted food products
Chi-sqaure	9.800
df	1
Asy.sign	.002

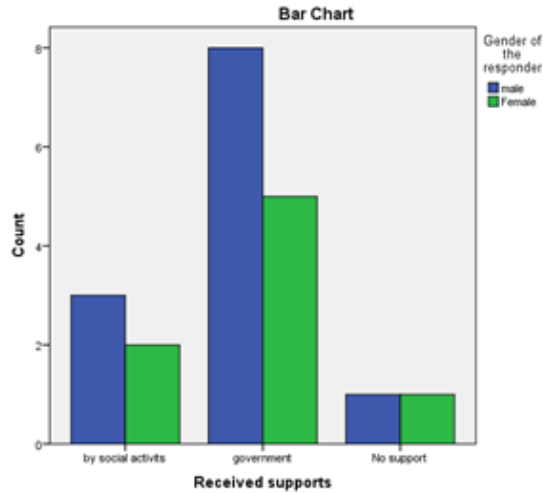


Figure 3.2: Received supports

**3.6.4. Behaviour attitudes changed in received supports due to lockdown.**

When we consider the srilanka house hold members the coved 19 has highly impacted on their quality of life in behaviour. The economic impact has felt on both supply and demand side. Factories, hotels, shops and offices have closed due to lockdown and curfew. The self-employers and highly waged workers unbaled to engaged in trade market. Many house hold member’s loss their monetary value in this epidemic period. In addition government, social activist other volute institutions have begun to give supports for those who have middle income.

When we discuss crosstab results there is low relationship with gender and received supports. Table illustrate 25% of responders have received supports from social activist and wast of majority have received supports from government. Low amount of responders did not received any supports. The chi- square says there is an association between these two variables. We can declared Gender has more connectivity with received supports.

Statistic says, 75% responders have received cash support rather than other, average amount of have got food support, 45% of responders have buy commodities for fair price. When we analyse the supports received from government, social activities, we can see majority of the male responders have agreed they received cash support from government

(75%).at the same time 71% of females have received cash support from government. Only few responders did not received the cash support. There is low association between these two variables.

36.4% of males and 33.3% females have received household items for fair price. Although statistic implies there is positive relationship with received food and gender. Males and females have same Average capacity of received food support than the other categories.

Table 3.5: results of cross tabulation with gender and received supports (only 'yes') with percentages.

Supports	Male	Female
Food	50%	50%
Cash	75%	71.4%
Providing commodities	36.4%	33.3%
Other requirement	44.4%	16.7%

Table 3.6: Test statistic

Chi-square level	Received supports
Chi-square	9.700
df	2
Asp.sign	0.008

(Chi-square test for general view of received support)

*Test statistic for received support for food, cash, providing commodities for fair price.*

Table 3.7: providing commodities for fair price.

	food support	Cash support	Providing committees for fair price
Chi- square	4.263	1.800	.889
df	1	1	1
Asp.sign	.039	.180	.346

Source- Author 2020

*'Government has declared the payment Rest 5000 Allowance for those who have lost their means of earning due to covid 19 (pavithra waniarachi-ministry of health)*

*"According to under this scheme, teachers, private bus drivers and conductors, Auyuruvaeda doctors, craft men, women receiving maintain ace, etc. will received the 5000 Allowance."(Daily mirror)*

The above statement prove how people seek supports to complete their necessary activity due to lockdown period. We can conclude People Normal behaviour and attitudes has changed in this pandemic.

**3.6.5. Identifying Psychological status during the lockdown period.**

When we analysis the relationships with family, friends, officemates there is positive moderate relationship has prevailed among these two variables.

Table 04 explain most of the responders have argued, they had a very good relationship with their family members. Self-employers, government office workers, private office workers, self-employers, had a very good relationship with their families and children's.

Living on lockdown has given us time to reflect on our self's our relationship is important for us. For some of us reached with friends, they communicate with their old friends, some are find relationships and improve their connectivity during the lockdown period. Our finding says less number of government, private sector employers had very good time with their friends.

In addition we can say quarter of responders have agreed they had very good, good level of relationship among their officemates. Although we could see majority are government and private sector employers, in this current situation we can clarify majority are doing work from home by using technology .this is the reason for relationship increases with officemates.

Relationships	Self-employers	Government employers	Private employers	Home maker
Family	50%	33.3%	27%	-
Friends	-	16.7%	18.2%	-
Officemates	50%	33%	36.4%	-

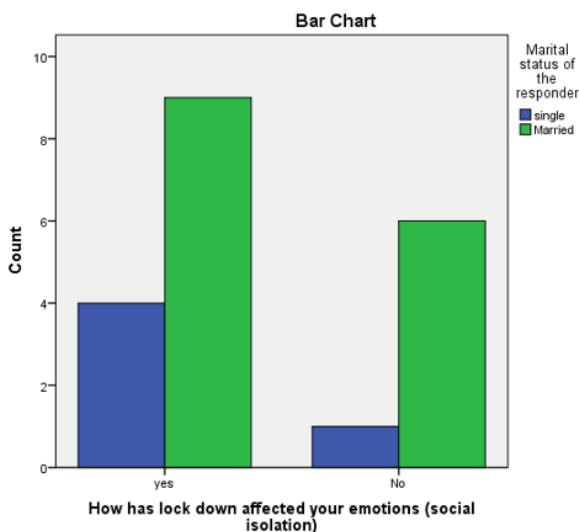
So, we can conclude novel pandemic has made value in all relationships among family, officemates. As COVID 19 occurs suddenly and highly contagious, this will inevitably cause people sadness, isolation, poor, social connection other stress reactions.it is necessary to understand and investigate public psychological status during the pandemic period.

While we analyse the static measurement among (N=20) almost 55% of responder's agreed with yes. Other 25% said No. there is low association between marital status with their emotions. Although majority of married responders agreed they feel very sad during the lockdown period, only few have did not feel any sadness emotions.

Although we can see there is negative relationship has implement with marital status and irritability. Most of the married responder's have agreed they feel irritability during the lockdown. Around 15 responders have suffer from loneliness, 70.6% poor social connection, 40% responders feel social isolation, and 15% responders feel fear of death. These are various kind of psychological status we find from the statistic.

So finally we can conclude social isolation, loneliness are more effected for people life. Social isolation has highly impact on single population rather than married.

Figure 3.3 Lockdown affected the emotions



We can predict almost every emotions and psychological status have negative consequences for all responders during the lockdown period.

Table 3.8: cross - tabulation Percentages of emotion and marital status (only 'yes' results)

Emotions	Married	Single	Crammers'v	Appro sign	Signi level
Sadness	80	67	.290	.194	Not significant
Irritability	60	40	.126	.573	Not significant
Loneliness	73	80	.000	1.000	Not significant
social connection	80	66.7	.133	.582	Not significant
Social isolation	80	60	.182	.417	Not significant
Fear of death	40	53	.115	.606	Not significant

Source – Author 2020

**3.6.6. Behaviour changes in spending free time during the lockdown.**

The corona virus outbreak has spearheaded many peoples from their typical past times. Relegating people to their home during sun free time they may have any certain past times are seeking new life. But how likely is it that people will continue to enjoy these past times post pandemic. Most of them have engaged in faith in god, watching movies. Engaged in social media, internet, cooking, cleaning.

Table - 07 express that half of the responders they had a very good sleep in during COVID 19.and we could see majority of responders 80% (married) have a god faith in god, more interest on religious activities. Responders have spent their free time like this. And also 61.5% of responders have engaged in watching movies. There is negative low association between these two variables. ( $p < .523$ ). Majority of responders have use social media, internet gaming, reading books to spend their free time during the lockdown period.

Normally working people do not want to do cooking, cleaning activities in their residence. But this COVID 19 out break has change their life style with what they ignore. They enjoyed by doing these activities. Majority



of the married responders have reply they involved in cooking cleaning rather than the single responders. We can predict married responders have enough house hold duties in their residence during the pandemic period.

Table 3.9: cross - tabulation results, Chi square results of marital status with spending free time.

Activities	Married	Single	Cramers'v	Approx.sign	Chi - square	df	Association
Sleep	80%	80%	.149	.801	19.900	2	Association
Faith in God	80%	53.3%	.236	.292	.800	1	No Association
Social media	80%	53%	.236	.292	.800	1	No Association
Internet gaming	80%	50%	.292	.243	.474	1	No Association
Reading books	60%	40%	.243	.091	3.200	1	No Association
Watching movies	61.5%	-	.031	.031	.059	1	No Association
cleaning	100%	-	-	-	-	-	-
cooking	60%	53%	.795	.795	.200	1	No Association

Source – Author, 2020

### **3.6.7. Behaviour changes by using social media in lockdown period.**

The current lockdown situation means that will be dealing with social limitations for a certain period. People will need to find new ways to stay connected. So they find social media to develop their connection. According to our findings responders have use WhatsApp, Facebook, Instagram, zoom for various reasons.

*"Perhaps unsurprisingly people report that they been spending longer time in watching movies with more than 34% of interest in across 17 countries (Global web indicates).It Says we been spending more time in social media."*

By following these statistic, our findings indicates large number of responders have engaged in social media for various reasons.

Frequency table illustrate most of the responders were engaged in Facebook, zoom and WhatsApp, because all the Administrative,

education activities. Commercial activities were done by using zoom, WhatsApp. Number of people have start to read news sites in social media. This is the reason for increases of social media during the curfew period. Statistic says, there is low relationship with gender and social media .In order majority of males are like to use Facebook rather than female and 66.7% of females were used face book for half day. In addition same relationship has continue for WhatsApp, instar gram.

Furthermore, almost every social media has used for more than one hour per day. When we compare with other social Medias.

Now days zoom app has major role in social media. Meeting and other conference were conducting by zoom. 70% of responders were used zoom app for their activities. But our findings says there is a negative relationship with gender and using zoom app.

We can identify majority of male responders were engaged in social media rather than females.

Table 3.10: explain the total amount of time spend in social media (percentage)

Social media	For hour per day	More than an hour	Half a day	Only few minutes
WhatsApp	20	33.4	46.7	-
Facebook	15.4	15.4	53.8	15.4
Instagram	-	30	-	70
Zoom	-	70	-	30

Source – Author, 2020

### 3.7. Conclusion

Coronavirus pandemic has taken the while world by storm .billions of people to change their lifestyle. Billions of people minds around the world are being forced to think differently, constructing the way for new solutions to major problems.

This paper attempt to investigate how household member’s behaviour and attitudes has changed due to lockdown during the pandemic period. People felt more difficulties to purchase foods and good to their necessary activities.

Our finding says majority of responders have purchase their foods through grocery shops and small sellers. Almost every responders have received cash support and other supports in Average.75% of private employers have attempt to their work from home with reduction of monthly salry.futher more we could see majority of responders had a good relationship among their family, friends, with their officemates. Highest amount of responders have occurred negative emotions such as sadness, loneliness, social isolation. Although we can mention they prefer to do sleep, faith in god, cleaning, cooking watching movies as their leisure time activities. Many responders suggest social media has played major role in lockdown period .repowers have more involved to use zoom, WhatsApp, Facebook for their successful communication in order to determine, the COVID 19 pandemic has negatively impacted on public economic, social, religious financial in our country. Lockdown completely or inspectors as results people life style completely change.

### **3.8. Recommendations**

- Introducing a new mechanism for reduce cost of living and buy foods and goods.
- Maintain positive COVID 19 driven behaviours forward food wastes.
- The monetary relief pacakges and provision of food parcels is good to overcome the immediate action to economic shock. The loan Rs.10, 000 for micro and self - employed should be strickley disbursed the economic crisis.
- Structured websites and toll for free helplines may be launced for alleviating psychological distress.
- Social media is to be used to for good sense to educate people and transmission the dynamics.
- Maintainig the good Hygine and Quality.

### **References.**

- Banerija Afr.2016.7.570 the Covid 19 out Break, Crucial role the physchiatrics can play.Asian.J.Psychaiatry 2020.102014.
- Brooks, S.K.; Webster, R.K.; Smith, L.E.; Woodland, L.; Wessely, S.; Greenberg, N.; Rubin (2020),G.J. The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. Lancet 2020, 395, 912–920.
- Fullana, M.A.; Hidalgo-Mazzei, D.; Vieta, E.; Radua, J. Coping behaviors associated with decreased anxiety and depressive symptoms during the COVID-19 pandemic and lockdown. J. Affect. Disord. 2020, 275, 80–81.

Lidia Alexa <sup>1,†</sup>, Andreea Apetrei <sup>2,\*</sup>, <sup>†</sup> and Juan Sapena <sup>2</sup>,(2021)  
“The COVID-19 Lockdown Effect on the Intention to Purchase Sustainable Brands”.

Mohamed E Azlan A A Covid-19 and Communication Planning for Health emergencies. *J Komu Malays. J. commu.* 2020; 36(1); 1-2.

[http://en.wikipedia.org/wiki/Srilanka/covid\\_19](http://en.wikipedia.org/wiki/Srilanka/covid_19) Retrived on March 2020.

World Health organization 'Novel Coronavirus- China' w.w.w. Who.int/csr/don/12 january-2020 Novel Coronavirus (Accessed on March 26 2020).

WHO (2020) There is a Current out Break of Coronavirus (Covid 19) Disease- Retrieved on 9th March 2020([http; //w.w.w. who.int/health-topics/coronavirus](http://w.w.w.who.int/health-topics/coronavirus)).

## CHAPTER 04

### Online Teaching during Covid-19 Pandemic Restrictions: A Study Based on Selected School's Teachers in Sammanthrai

**Hazib. A.M.M**

Department of Arabic Language  
South Eastern University of Sri Lanka  
haasibhaasibamm@gmail.com

**Saujan. I**

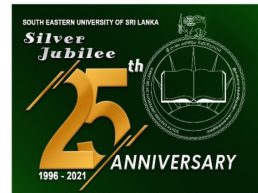
Department of Islamic Studies  
South Eastern University of Sri Lanka  
saujaniqbal95@gmail.com

**Nawas .A.N.M**

Department of Arabic Language  
South Eastern University of Sri Lanka  
nawassharafyhani@gmail.com

**Safna .M.J.F**

Department of Arabic Language  
South Eastern University of Sri Lanka  
fsafnag72@gmail.com



#### Abstract

*COVID-19 is a disease caused by a new Coronavirus strain. Symptoms can include fever, cough, and shortness of breath. As a result of the novel Corona virus, the world is facing an alarming situation. Millions have been made to stay at home because of this pandemic. According to UNESCO, 290 million students worldwide may be infected by this virus spread, schools across the globe have already been suspended. Teachers are suddenly faced with the challenge of how to continue their students' education. In order to address this critical situation, educators have established an e-learning approach to the protection and comfort of students and online educational platforms are recognized by the Sri Lankan government. This platforms should include multiple options for meeting practical teaching needs, such as synchronized video and voice for group learning and classroom interactions. In this study, we discussed the problems of e-learning. This is a qualitative research in the form of a field survey in primary schools. The key tool used in this study is the Open-ended Questionnaire which includes 250 teachers from primary schools. In this research also uses Interview as an additional instrument, with five principals in charge of the schools. The findings of the study shows that teachers are facing immense difficulties in adapting classroom time, instructional resources and teaching skills to students. Teachers want the school district to set up new classrooms with internet services to defend from similar disasters in the future.*

**Keywords:** *Online Teaching, Covid-19 Pandemic Restrictions, School's Teachers, Sammanthrai*

#### 4.1 அறிமுகம்

21 ஆம் நூற்றாண்டில் காலடி வைத்துள்ள மனிதன் இன்று அறிவியலின் தொழிநுட்ப வளர்ச்சி காரணமாக முழு உலகையே ஒரு குடும்பம் போன்று அமைத்திருக்கிறான். ஒரு தகவலை பரிமாறுவதற்காக புறாவை தூதனுப்பி, தந்தியிட்டு பல நாட்களை இதற்காக செலவிட்ட மனிதன் இன்று உலகளாவிய ரீதியிலே கனப்பொழுதில் விரல் சொடுக்கிலேயே தகவல்களைப் பரிமாறும் அளவிற்கு தொழிநுட்ப ரீதியாக வளர்ச்சி கண்டுள்ளான். இதன் இமயமாக கணினி மற்றும் இணையத்தின் வகிபாகம் காணப்படுகின்றது. இவை வெறுமென தொடர்பாடலுடன் மாத்திரம் சுருங்கிவிடாமல் வைத்தியத்துறை, வணிகத்துறை விவசாயத்துறை, போக்குவரத்துத்துறை மற்றும் கல்வித்துறை என அனைத்திலும் பங்களிப்பு செய்வது குறிப்பிடத்தக்கது. குறிப்பாக இன்று வளர்ச்சியடைந்த நாடுகளில் கல்வித்துறையில் கணினியின் செல்வாக்கு மெச்சத்தக்கது. பல கிலோமீற்றர்கள் பயணம் செய்து நூற்றுக்கணக்கான மாணவர்களுடன் இருந்து பல சவால்களுக்கு மத்தியில் நேரடியாக கற்பனை விட வீட்டிலிருந்தவாறே இலகுவாக ஒரு மாணவனுக்கு ஒரு ஆசிரியர் என்ற அடிப்படையில் இத்தொலைக்கல்வி தனது முழு பங்களிப்பினையும் மேற்கொண்டு வருகின்றது. இவ்விணையவழி கற்றல், கற்பித்தல் கல்வி முறை ஆசிரியர்களின் கற்பித்தலிலும் மாணவர்களின் கற்றலிலும் புதிய வகைப் பரிணாமங்களை ஏற்படுத்தியுள்ளது.

எளிமை, விரைவு, விரிவு, விளைபயன், ஈர்ப்பு, மனமகிழ்வு, (quatsn) பல்லூடகம் முதலான தன்மைகளைக் கொண்டிருப்பதனால் இணைய வழிக் கல்விமுறை தற்காலத்திற்கு மிகவும் ஏற்றதாகவும் தவிர்க்க இயலாத ஒன்றாகவும் மாறியுள்ளது (பூ.மு.அன்புசிவா, 2020). எனினும், இலங்கை போன்ற வளர்ச்சியடைந்து வரும் நாடுகளில் கோவிட் 19 என்னும் கொரோனாவினால் ஏற்பட்டுள்ள அசாதாரண சூழ்நிலைகள் காரணமாக பாடசாலைகளும் பல்கலைக்கழகங்களும் மற்றும் ஏனைய கல்வி நிறுவனங்களும் மூடப்பட்ட வேளையில் திடீரென தொலைக்கல்வியினூடாக ஆசிரியர்கள் தமது கற்பித்தல் நடவடிக்கைகளைத் தொடர்வதற்கு நிர்ப்பந்திக்கப்பட்டனர். இதனால் பெரும் சவால்களை இவர்கள் எதிர்நோக்க வேண்டி ஏற்பட்டுள்ளது.

இந்நிலையில் இலங்கையின் வடக்கு மாகாணத்தில் இணையத்தில் கற்பித்தலுக்கான இலகுவழி செயல்முறை ஒன்று சுவடி நிறுவகம், சிறகுகள் மையம் என இன்னும் பல சமூக ஆர்வலர்கள் இணைந்து, “ஆவணகம்” என்ற இணைய பக்கத்தினை உருவாக்கி அவற்றின் ஊடாக வெற்றிகரமான கற்பித்தல் செயற்பாடுகளை முன்னெடுத்து வருகின்றனர். இவற்றில் Google Classroom வசதியினூடாக தரம் இரண்டு முதல் கா.கொ.த. சாதாரண தரம் வரையிலான பாடஅலகுகள் ஆவணங்களாக ஒலி, ஒளி வடிவில் தயாரிக்கப்பட்டு பதிவேற்றப்பட்டுள்ளது. இதன் பிரதான நோக்கம் கல்வி வளங்களை ஒன்றிணைப்பதாகும்.

இவ்வாய்வில் primary ஆசிரியர்கள் இணையவழி கற்பித்தல் ஊடாக எதிர்கொள்கின்ற சவால்களை கண்டறிந்து அதற்கான தீர்வை முன்வைக்கும் முகமாக மேற்கொண்டுள்ளப்பட்டுள்ளது.

#### 4.2. ஆய்வுப்பிரச்சனை

மனிதனின் எல்லையற்ற அறிவியல் ஆராய்ச்சியின் உச்சம் இன்று உலக நாடுகள் அனைத்தும் கோவிட் 19 என்னும் உயிர்கொல்லி நோயை சுவாசிக்க வழிசமைத்துள்ளது. இது பல கோடிக்கணக்கான உயிர்களை காவு கொண்ட நிலையில் உலக நாடுகளின் பொருளாதாரம், சர்வதேச தொடர்புகள் என அனைத்தும் முடக்கப்பட்டுள்ளன. இத்தொற்றுப் பரவலுடன் வாழ பல மாற்றுவழிகளை கொண்டுவந்து நடைமுறைப்படுத்தி வருகின்றது. அவற்றில் “வீட்டில் இருந்து வேலையை மேற்கொள்ளல்” (Work from Home), கூகுல் பகுப்பரை (Google classroom) போன்றன குறிப்பிடத்தக்கவையாகும். இலங்கையிலும் இத்தெற்று நோய் பரவல் காரணமாக அனைத்து செயற்பாடுகளும் முடக்கப்பட்டுள்ளன. இருப்பினும் இலங்கை அரசு மாணவர்களின் கல்வியை தொடராக வழங்க வேண்டும் என்னும் நன் நோக்கில் இணையவழி கல்விக்கான வாயிலை திறந்து அதனை வலியுறுத்தி வருகின்றது. இதன் ஒரு வடிவமாக அரசாங்கம் ஒரு சுற்றுநிருபத்தை வெளியிட்டது. இதில் 2020 ஏப்ரல் 20 திகதி முதல் இணையவழி கற்றல் வளங்கள் மற்றும் தொலைக்காட்சி கல்வி நிகழ்ச்சிகள் ஆகியவற்றின் மூலம் கற்பிக்குமாறும் பெற்றோர்கள் தமது பிள்ளைகளை கற்றல் கற்பித்தல் செயற்பாடுகளில் வழிநடத்துமாறும் பாடசாலை ஆசிரியர்கள் இணையவழிகளினூடாக தங்குதடையின்றி கல்வி வழங்குமாறும் ஆலோசனை வழங்கியுள்ளது. இணையவழிகல்வி என்பது இலங்கையைப் பொருத்தவரையில் புதிய அனுபவமாக உள்ளமையால் வெற்றிகரமாக கற்பித்தல் நடவடிக்கைகளை முன்னெடுப்பதில் பாடசாலை ஆசிரியர்கள் பல சவால்களை எதிர்கொண்டு வருகின்றனர். அதிலும் குறிப்பாக ஆரம்ப பிரிவு பாடசாலை ஆசிரியர்கள் எதிர் நோக்கும் சவால்கள் குறிப்பிடத்தக்கவையாகும். இதற்கு ஆய்வுப்பிரதேசமான சம்மாந்துரையும் விதி விலக்கானதல்ல.

#### 4.3. ஆய்வு நோக்கம்

1. சம்மாந்துரைப் பிரதேச ஆரம்ப பிரிவு ஆசிரியர்களை எண்ணிக்கை அடிப்படையிலும் நிறைவு செய்யப்பட்ட பாட அலகுகள் அடிப்படையிலும் பகுப்பாவு செய்தல்
2. இணையவழி கற்பித்தலில் குறித்த பாடசாலை ஆசிரியர்கள் எதிர்நோக்கும் சவால்களை பட்டியலிடல்

#### 4.4. முன்னைய ஆய்வுகளின் மீளாய்வு

கடந்த காலங்களில் மேற்கொள்ளப்பட்ட ஆய்வுகளை தேடலுக்குற்படுத்திய போது இணைய வழிக் கல்வி தொடர்பில் பொதுவான பல ஆய்வுகள் இடம்பெற்றுள்ளமையை அறியமுடிந்தது. மேலும் கோவிட்-19 முடக்க காலத்தில் காலப்பகுதியில் இணையவழி கல்வி தொடர்பில் ஆய்வாளர்கள் கவணம் செலுத்தி வருகின்றனர். இவ்வாறு மேற்கொள்ளப்பட்ட ஆய்வுகளில் சில “Covid 19, Online Education System, and Front End Challenges” என்னும் தலைப்பில் மேற்கொள்ளப்பட்ட இவ்வாய்வு இணையவழி கற்பித்தலில் உள்ள சவால்களைக் கண்டறிதல் என்னும் நோக்கில் முன்னெடுக்கப்பட்டுள்ளது. இவ்வாய்விலிருந்து வினாக்கொத்து தயாரிப்பதற்கான தரவுகள் சில பெறப்பட்டன. ஆய்வின் பிரதான கண்டறிதல்களாக கோவிட்-19 தொற்றுக்காரணமாக மாணவர்களின் கல்வி பாதிக்கப்பட்டுள்ளதன் இப்பாதிப்பை குறைக்கும் ஒரு மாற்றுவழியாக இணையவழி கற்பித்தல் அமைந்துள்ளது. மேலும் இணையவழி கற்பித்தலில் உள்ள சவால்களை நீக்குவதற்கு பொறுத்தமான ஆலோசனைகள் முன்வைக்கப்பட்டுள்ளன.

“Covid-19 and Online Education: Teaching is a human endeavor” இவ்வாய்வு பின்தங்கிய கிராமங்களில் வாழ்கின்ற மாணவர்கள் இணையவழி கற்பித்தலில் எதிர்நோக்கும் சவால்கள், சாத்தியப் பாடுகள் கண்டறியும் நோக்கில் ஆய்வு முன்னெடுக்கப்பட்டுள்ளது. இவ்வாய்விலிருந்து ஆய்வு முறையியல் பெறப்பட்டு பின்வற்றப்பட்டதுடன். பொதுவான சில தரவுகளும் பெறப்பட்டது. இவ்வாய்வு நோக்கம், ஆய்வுப்பிரதேசம், ஆய்வின் முடிவு என்பனவற்றில் வேறுபட்டுள்ளது.

“Perception of Netizens towards Online Education during Covid-19, (2020)” என்னும் தலைப்பில் மேற்கொள்ளப்பட இவ்வாய்வில் “கோவிட்-19 காலத்தில் இணைய கல்வி முக்கியத்துவம் பெற்ற ஒன்றாக மாறியுள்ளது. இவ்விணைய கல்விபற்றிய டுவிட்டர் கருத்துக்களை மதிப்பீடு செய்யும் நோக்கில் ஆய்வு முன்னெடுக்கப்பட்டுள்ளது. ட்விட்டரில் இட்டவர்களில் கிட்டத்தட்ட 50 சதவிகிதத்தினர் ஆன்லைன் கல்வியைப் பற்றி நேர்மறையானவர்கள் என்பது கண்டறியப்பட்டது.

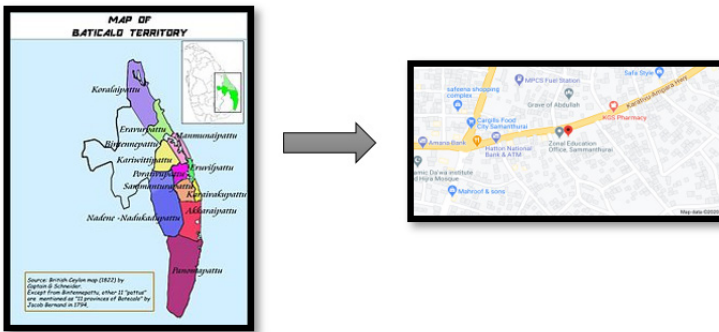
“Online education: Benefits, challenges and strategies during and after COVID-19 in higher education” நேபாலத்தில் அறிமுகப்படுத்தப்பட்டுள்ள இணைய கல்வியால் நண்மைகள், சவால்கள் என்பனவற்றைக் கண்டறியும் நோக்கில் ஆய்வு மேற்கொள்ளப்பட்டுள்ளது. இவ்வாய்விலிருந்து ஆய்வுத்தேவையான சில தகவல்களும், இணைய வழி கல்வியில் எதிர்நோக்கும் சவால்களும் பெறப்பட்டு வினாக்கொத்து தாயரிக்க உதவியது. இவ்வாய்வின் முடிவில் இணைய கல்வில் பல சவால்களை எதிர்நோக்குகின்ற போதிலும் பல நன்மைகள் ஏற்பட இம்முறை வழிசமைத்துள்ளது.



இலக்கியங்களுக்கு அமைவாக இலங்கைச் சூழலில் இணைய வழிக்கல்வி தொடர்பில் மேற்கொள்ளப்பட்ட ஆய்வுகள் அரிதாக உள்ளமையும், ஆய்வுப்பிரதேசத்தில் இவ்வாறான ஆய்வு எதுவும் மேற்கொள்ளப்படாமையும், இவ்வாறான ஒரு ஆய்வின் தேவையை ஆய்வுப்பிரதேசம் வேண்டி நின்றமையும் ஆய்வாளர்களால் அடையாளம் காணப்பட்டு இவ்வாய்வு மேற்கொள்ளப்பட்டுள்ளது.

#### 4.5. ஆய்வுப் பிரதேசம்

Figure 4.2: Ampara District & Sammanthurai



சம்மாந்துறை கல்வி வலயத்தில் 71 பாடசாலைகள் காணப்படுகின்றன இவற்றில் 17 ஆரம்ப பிரிவு பாடசாலைகளாகும் (primary school). இவ்வாய்வு சம்மாந்துறை பிரதேசத்தில் அமையப் பெற்றுள்ள 5ஆரம்ப பிரிவு பாடசாலைகள் நோக்க மாதிரி அடிப்படையில் (Purposive Sampling method) இன் அடிப்படையில் தெரிவு செய்யப்பட்டன. இப்பாடசாலைகளில் தரம் 1தொடக்கம் 5 வரையான வகுப்புகளுக்கு கற்பிக்கக்கூடிய 250 ஆசிரியர்களும் 5 அதிபர்களும் ஆய்வு மாதிரியாக தெரிவு செய்யப்பட்டு ஆய்வு முன்னெடுக்கப்பட்டுள்ளது.

#### 4.6. ஆய்வு முறையியல்

அளவு மற்றும் பன்பு சார் முறையில் அமைந்த இவ்வாய்வில் முதலாம் மற்றும் இரண்டாம் நிலை தரவுகள் பயன்படுத்தப்பட்டுள்ளன. இவ்வாய்வில் குறித்த பாடசாலைகளில் பனியாற்றும் 250 ஆசிரியர்களும் 5 அதிபர்களும் எளிய எழுமாற்று அடிப்படையில் (Simple Random Sampling Method) தெரிவு செய்யப்பட்டனர். தரவுத்திரட்டின் முதல் கட்டமாக குறித்த பாடசாலைகளின் 250 ஆசிரியர்களிடம் திறந்த வினாக்கொத்து (Open-ended questions) வழங்கப்பட்டு தரவுகள் திரட்டப்பட்டதுடன் இரண்டாம் கட்டமாக குறித்த பாடசாலைகளின் அதிபர்களிடம் கட்டமைக்கப்படாத நோர்காணல் (Unstructured Interview) மேற்கொள்ளப்பட்டது. தெரிவு செய்யப்பட்ட மாதிரிகளின் விபரம் அட்டவணை:01 இல் தெளிவு படுத்தப்பட்டுள்ளது. வினாக்கொத்து மூலம் பெறப்பட்ட தரவுகள்

SPSS மென்பொருளில் விபரணப்பகுப்பாய்வு முறையில் பகுப்பாய்வு செய்யப்பட்டதுடன் நேர்காணல் மூலம் பெறப்பட்ட தரவுகள் குறியீட்டு முறையில் (Coding system) பகுப்பாய்வு செய்யப்பட்டது. பெற்றப்பட்ட பெறுபேறுகள் அனைத்தும் MS Excel 2016 இல் வரைகலை விளக்கங்களாக விளங்கப்படுத்தப்பட்டுள்ளது.

ஆய்வுக்குத் தேவையான கோட்பாட்டுத் தகவல்களைப் பெற்றுக் கொள்வதற்காக இரண்டாம் நிலை தரவு மூலங்களான ஆய்வுக்கட்டுரைகள், புத்தகங்கள், சஞ்சிகைகள் மற்றும் இணைய ஆக்கங்களும் பயன்படுத்தப்பட்டுள்ளன.

அட்டவணை 4.1 ஆய்வு மாதிரி எடுப்பு

இல	பாடசாலைகளின் பெயர்	ஆசிரியர்களின் எண்ணிக்கை	ஆய்வு மாதிரிகளின் எண்ணிக்கை
01	Km/St/ Al-Jenis Vidyalayam	100	30
02	Km/St/ Al-Madheena vidyalaya	130	50
03	Km/St/ Gazzaly Muslim Vidyalayam	241	70
04	Km/St/ Hijra Muslim Vidyalayam	166	60
05	Km/St/ Ismail Vidyalayam	139	40
	<b>Total</b>	<b>776</b>	<b>250</b>

Source: Data collected from Schools' Principles (Documentary Data)

#### 4.7. கலந்துரையாடலும் பெறுபேறுகளும்

பொது முடக்க காலத்தில் நிறைவு செய்யப்பட்ட அலகுகளின் விபரம் வினாக்கொத்து மூலம் ஆசிரியர்கள் இணைத்தின் ஊடாக நிறைவு செய்த அலகுகள் பற்றிய விபரத்தை ஆய்வுக்குற்படுத்திய போது.

Table 4.2: Details of completed units

இல	பாடசாலையில் பெயர்	தரம்-01	தரம்-02	தரம்-03	தரம்-04	தரம்-05
01	Km/St/ Al-Jenis Vidyalayam	5%	10%	12%	20%	30%
02	Km/St/ Al-Madheena vidyalayam	12%	5%	23%	5%	4%
03	Km/St/ Gazzaly Muslim Vidyalayam	11%	18%	10%	17%	14%
04	Km/St/ Hijra Muslim Vidyalayam	14%	4%	24%	8%	6%
05	Km/St/ Ismail Vidyalayam	3%	8%	2%	11%	14%

Source: Subjects Evaluations Sheets Which is prepared by Researchers

இத்தகவல்கலைப் பெறுவதற்காக ஆசிரியர்களிடம் வினாக்கொத்து வளங்கப்பட்டதுடன் குறித்த பாடசாலை அதிபர்களிடம் நேர்காணலிக் போது தரவுகள் பெறப்பட்டது. பெறப்பட்ட தரவுகளின் படி மொத்தமாக இஸ்மயில் வித்தியாலயம் மற்றும் அல் மதீனா வித்தியாலயம் போன்ற வற்றைத் தவிர ஏணை அனைத்துப் பாடசாலைகளும் 50% அதிகமான அலகுகளை நிறைவு செய்துள்ளமையை அறிய முடிந்தது. 50% குறைவான அலகுகளை நிறைவு செய்த பாடசாலைகளின் அதிபர்களிடம் நேர்காணல் மேற்கொண்டு காரணத்தை வினவிய போது. அவர்களால் முன்வைக்கப்பட்ட காரணங்களாக ஆசிரியர்களின் வீட்டுச் சூழல் ஒத்துழையாமை, கற்பித்தலில் ஆர்வமின்மை, இணையவழி கற்றல் பற்றிய அறிவின்மை போன்ற பிரதானமாக முன்வைக்கப்பட்டன. மேலும் ஆய்வாளர்களால் அறிய முடிந்த விடயம் குறித்த இரு பாடசாலைகளிலும் உள்ள ஆசிரியர்கள் அனைவரும் 50வயதைக் கடந்தவர்கள் என்பது இவர்களின் சமூக புள்ளிவிவர விவரங்களை (Socio demographic details) ஆய்வுக்குட்படுத்திய போது அறிய முடிந்தது. எனவே இவர்களின் வயது ஒத்துழையாமையும் ஒரு காரணமாக அமைந்துள்ளமை ஆய்வாளர்களால் இணங்கானப்பட்டது.

ஐந்து பாடசாலைகளிலும் வகுப்பு வாரியாக நிறைவு செய்த அலகுகளின் வீதத்தை ஆய்வுக்குட்படுத்தியபோது குறித்த பாடசாலை ஆரம்ப நிலையாக இருப்பதால் மாணவர்களுக்கு இணையத்தின் ஊடாக கற்பிப்பது சிரமமாகும். மேலும் இவர்கள் தமது தந்தை அல்லது தாயின் தொலைபேசியின் மூலம் இணைய வகுப்பில் இணைவதால். இது தாய், தந்தையரின் ஓய்வு நேரத்தில் மாத்திரமே சாத்தியமானது. காரணம் பொரும்பாலான மாணவர்களின் பெற்றோர்கள் தங்கள் அலுவலக வேலைகளை மேற்கொள்வதால் பிள்ளைகளின் கல்விக்காக தங்களது தொலைபேசியை வழங்க முடியாத நிலை காணப்பட்டது (நேர்காணல்). இதற்கு மாற்றமாக அலகுகளைக் கையேடுகளாக தாயரித்து பெற்றோர்களிடமும், மாணவர்களிடமும் வழங்கும் மாற்றுவழி மேற்கொள்ளப்பட்டது. இதனை சிறப்பாக பின்பற்றியமையே அல் ஜீனியஸ் வித்தியாலயம் -78% கஸ்ஸாலி முஸ்லிம் வித்தியாலயம் -70% மற்றும் ஹிஜ்ரா வித்தியாலயம் -56% போன்ற பாடசாலைகள் அலகுகளை நிறைவு செய்ய வாய்ப்பாக அமைந்தது (நேர்காணல்). மேலும் தொலைக்காட்சி மூலம் கற்பித்தல் செயற்பாடுகளை மேற்கொண்டது தொடர்பில் ஒரு அதிபர் இவ்வாறு கருத்துத் தெரிவித்தார்.

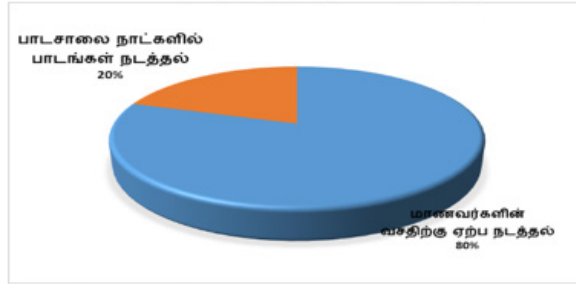
“எனது பொறுப்பில் உள்ள பாடசாலையில் 241 ஆசிரியர்கள் உள்ளனர். இவர்கள் கோவிட்-19 காலப்பகுதியில் அரசு சுற்று நிருபத்திற்கு ஏற்ப கற்றல் செயற்பாடுகளை முன்னெடுப்பதற்கு தேவையான அனைத்து முயற்சிகளையும் மேற்கொண்டனர். மேலும் பிள்ளைகளின் பெற்றோர்களை வட்ஸ்அப் இல் இணைத்து செயலட்டைகள் பதிவிறக்கினர், மிக

முக்கியமாக “குருகுலம்” நிகழ்ச்சியில் மாணவர்கள் கற்றுக் கொள்வதற்கு வழிகாட்டினார்” (நேர்காணல்).

இணைத்தின் ஊடாக கற்பித்தல் செயற்பாடானது பாடசாலை நாட்களில் நடைமுறைப்படுத்தப்பட்டதா? அல்லது மாணவர்களின் வசதிக்கு ஏற்ப நேரங்களிலும் நாட்களிலும் மாற்றங்கள் மேற்கொள்ளப்பட்டதா? என்பது பற்றி வினவிய போது. கிடைக்கப் பெற்ற பதில்கள் பின்வரும் பை வரைபில் விளக்கப்பட்டுள்ளது.

### இணைய கற்பித்தலுக்காக ஆசிரியர்கள் பயன்படுத்திய காலப்பகுதி

Figure 4.2 Duration of lessons covered



Source: Questionnaire

20% பங்குபற்றுனர்கள் பாடசாலை நாட்களில் பாடங்கள் நடத்தியதுடன் 80% பங்குபற்றுனர்கள் மாணவர்களின் வசதிக்கு ஏற்ப பாடங்களை நடத்தியுள்ளமை அறிய முடிகின்றது. இது தொடர்பில் நேர்காணலின் போது வினவிய வேளை ஒரு அதிபர் இவ்வாறு குறிப்பிட்டார்.

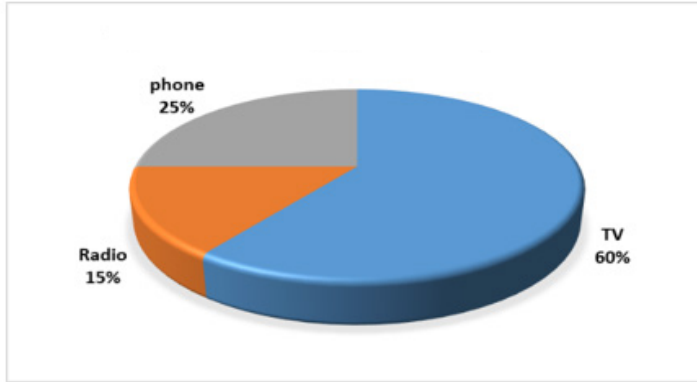
“எமது பாடசாலை ஆசிரியர்கள் மாணவர்களுக்கான பாடங்களை ஆரம்பத்தில் உரிய நேரத்திற்கு ஏற்பாடு செய்து இருந்த போதிலும் மாணவர்களின் பங்குபற்றுதல் குறைவாக காணப்பட்டமையால் மாணவர்களுடனும் பெற்றோர்களுடனும் கலந்துரையாடி மாணவர்களுக்கு பொருத்தமான நேரங்களில் கற்பித்தல் செயற்பாடுகளை நடைமுறைப்படுத்தப்பட்டன. மேலும் தொலைக்காட்சி மூலம் கற்பிக்கப்பட்ட பாடங்களுக்கான அறிவுறுத்தல்களையும் நேரம் தொடர்பிலான வழிகாட்டலையும் மாணவர்களுக்கு அறிவிப்பதற்காக பெற்றோருடன் ஆசிரியர்கள் தொடர்பினை பேணி வந்தார்கள்” (நேர்காணல்).

இங்கு அறியக்கிடைத்த விடயம் ஆசிரியர்கள் உரிய நேரத்தில் பாடங்களை நடாத்துவதில் அவர்களின் தனிப்பட்ட வேலைப்பளு, வீட்டுச் சூழல் ஒத்துழையாமை போன்றன தாம் எதிர் கொண்ட தடைகளாக குறிப்பிட்டனர்.

### கற்றபித்தலுக்காக பயன்படுத்தப்பட்ட சாதனங்கள்:

ஆய்வுக்கு உட்படுத்திய பாடசாலையில் தொலைபேசி, தொலைக்காட்சி அலைவரிசை, வானொலி என்பன கற்றித்தல் நடவடிக்கைகளுக்காக பயன்படுத்தப்பட்டுள்ளது. அது பற்றிய விபரங்கள் அருகில் உள்ள அட்டவணையில் காட்டப்பட்டுள்ளது. குறைந்த நிலையிலயே தொலைபேசி பயன்படுத்தப்பட்டுள்ளது. இம்முடக்க காலப்பகுதியில் இணையத்தின் ஊடக கற்றல் நடவடிக்கைகளை மேற்கொள்ள விசேடமாக வடிவமைக்கப்பட்ட Zoom, Meeting போன்ற மென்பொருட்கள் பாவனையில் காணப்படுகின்றன. இவைகளுடன் தொடர்பற்ற ஒரு நிலை ஆசிரியர்களிடம் காணப்பட்டது. இதனை நேர்காணலுக்குட்படுத்திய போது.

Figure 4.3: Equipment used to teach



Source: Questionnaire

“எமது பாடசாலையில் கடமையாற்றும் பெறும்பாலான ஆசிரியர்களிடம் தொழிநுட்ப சாதனத்தை பயன்படுத்தும் வசதி இன்மை, இது தொடர்பான அறிவு அற்றவர்களாக காணப்படுகின்றமை இதற்கு பிரதான காரணமாகும். மேலும் ஆய்வுப்பிரதேசத்தில் கடமையாற்றும் அதிகமான ஆசிரியர்கள் வயதில் கூடியவர்கள் என்பதனால் அவர்கள் தொடர்பாடலுக்கு தேவையான அமைப்பில் மாத்திரம் தொலைபேசியை பயன்படுத்துகின்றனர். எனவே ஏனைய ஆசிரியர்கள் தொழிநுட்ப சாதனத்தை பயன்படுத்தி கற்றிப்பதில் சிரமத்தை எதிர்கொண்டனர். மேலும் இந்த ஆசிரியர்கள் தமது கற்றித்தல் செயற்பாட்டினை மாணவர்களுக்கு செயல் அட்டைகளை அனுப்பி நடைமுறைப்படுத்தினர்” (நேர்காணல்).

தொழிநுட்ப சாதனங்கள், தொழிநுட்ப சாதனங்களுடன் கூடிய வசதிகள் தொடர்பாக எந்தவெரு உதவியும் பாடசாலை சமூகத்தினால் மேற்கொள்ள முடியாமல் இருந்தது என்பதும் குறிப்பிடத்தக்க விடயமாகும். மேலும்

தொழிநுட்ப சாதனங்களை பயன்படுத்தும் மாணவர்களின் நிலை தொடர்பில் ஒரு அதிபர் இவ்வாறு குறிப்பிட்டார். “எமது பாடசாலையில் தரம் 5இல் 25மாணவர்கள் கல்வி கற்கின்றார்கள். இவர்களில் 15பேரிடம் மாத்திரமே தொலைபேசியை பயன்படுத்தும் வசதி காணப்பட்டது. மேலும் தரம் 4ல் 36 மாணவர்கள் உள்ளனர் இவர்களில் 17 பேரிடம் தொலைபேசியை பயன்படுத்தும் வசதி காணப்பட்டது” (நேர்காணல்).

தொழிநுட்ப சாதனங்களை பயன்படுத்தும் வசதி மாணவர்களிடமும் ஆசிரியர்களிடமும் குறைந்த நிலையில் இருந்ததனால் 100% கற்பித்தல் செயற்பாட்டினை நடைமுறைப்படுத்த முடியாத சூழல் இங்கு நிலவியுள்ளது. மேலும் ZOOM போன்ற இணைய பொறிமுறைகளை பயன்படுத்தி கற்பித்தலை மேற்கொள்வதற்கான போதுமான தொழிநுட்ப வசதியோ, பயிற்சியோ இருக்கவில்லை என்பதும் ஆசிரியர்களால் குறிப்பிட்டுக் காட்டப்பட்டது.

பாடத்திட்டத்தையும் அதன் உள்ளடக்கத்தையும் கற்றுக் கொடுப்பதில் ஆசிரியர்கள் எதிர்கொண்ட சவால்கள்

1. மாணவர்களை ஒன்று சேர்ப்பது கடினமாக இருந்தது.
2. கற்பித்தல் திறன்களை முழுமையாக பயன்படுத்த முடியவில்லை. இதனால் பூரணமான தெளிவினை மாணவர்களுக்கு வழங்குவது கடினமாகும்
3. மாணவர்களை நேரத்திற்கு இயங்க வைப்பது கடினம்
4. பயிற்சிகளை செய்ய வைப்பதில் சிரமம்
5. பயிற்சிகளை வீட்டில் உள்ளவர்கள் செய்தல்
6. நேரடி தொடர்பை பேணி கற்றுக் கொடுக்கும் முறைமை பாதிக்கப்பட்டதால் மாணவர்களை பாடத்தின் பக்கம் கவனக் குவிப்பை ஏற்படுத்துவதில் 100 வீதம் சிரத்தை காணப்பட்டது
7. வினாக்களை கேட்டு திருத்தும் சந்தர்ப்பம் இருக்கவில்லை
8. மாணவர்களை தூண்டுதல் மூலம் ஊக்கப்படுத்தும் சந்தர்ப்பம் இருக்கவில்லை
9. மாணவர்களைப் பார்வை எல்லைக்குள் வைத்திருத்தல்
10. புரிய வைத்தல், ஆர்வத்தை ஏற்படுத்தல்
11. தேர்வு வைத்தல், தரம் பிரித்தல்.
12. மின் உள்ளடக்கங்களை உருவாக்குதல்

போன்ற பிரச்சினைகள் ஆசிரியர்களினாலும் அதிபரினால் முன்வைக்கப்பட்டது. ஆய்வுக்குட்படுத்திய ஆசிரியர்களில் அதிகமானவர்கள் “கற்பித்தல் திறன்களை முழுமையாக பயன்படுத்த முடியவில்லை. இதனால் பூரணமான தெளிவினை மாணவர்களுக்கு வழங்குவது கடினமாகும்” என்ற காரணத்தை பரவலாக குறிப்பிடப்பட்டுள்ளனர்.

## கற்பித்தல் திறன்கள் முறையாக பேணப்படாமை

1. மாணவர்களிடம் ஆசிரியர்களும், ஆசிரியர்களிடம் மாணவர்களும் வினாக்கள் கேட்டல்
2. வலுவூட்டிகளைப் பயன்படுத்தல்
3. பல்வகைத்தூண்டல்களை பயன்படுத்தல்
4. விளக்குதல்
5. எடுத்துக்காட்டுகளுடன் விளக்கம் கொடுத்தல்
6. செய்து காட்டி விளக்குதல்
7. கரும்பலகை பயன்படுத்தல்
8. கிளர் வினாத் தொடுத்தல்
9. பாடம் தொடங்கும் திறன்
10. பாடம் முடிக்கும் திறன்
11. மாணவர் பங்கேட்பை வலுவூட்டல் (Jaufar, 2016).

கற்றல் இடம்பெற வேண்டுமானால், மாணவர்கள் கலந்துரையாடலில் நன்றாக ஈடுபட வேண்டும். அதற்கான சந்தர்ப்பம் இணைவழி கற்பித்தலில் மிகவும் குறைவாகக் காணப்பட்டுள்ளது.

இணையத்தில் கற்பிக்கும் போது மாணவர்கள் சார்ந்த சில சவால்களும் அடையாளப்படுத்தப்பட்டன. அவற்றில்

1. மாணவர்களிடம் தொலைபேசி இல்லை
2. மாணவர்களை ஒரு நிலைப்படுத்துவது கடினம்
3. நேரத்திற்கு அனைவரையும் இயங்க வைத்தலில் சிரமம் ஏற்பட்டது
4. பயிற்சிகளை செய்ய வைப்பதில் சிரமம்
5. பயிற்சிகளை வீட்டில் உள்ளவர்கள் செய்தல்
6. மாணவர்களை கவனக் குவிப்பை மேற்கொள்ளவைக்க முடியவில்லை
7. மாணவர்களை குறித்த நேரத்துக்கு தொலைக்காட்சி அலைவரிசைக்கு முன்னர் அமர்த்துவதற்கான அறிவித்தலை வழங்குவதில் சிரமம்.

மாணவர்களின் நடத்தையிலும் கல்வி மேம்பாட்டிலும் வீட்டின் செல்வாக்கு அதிகமாக காணப்பட வேண்டும். ஆனால் இங்கு வீட்டுச் சூழல் வறுமைக் கோட்டின் கீழ் இருப்பதால் மாணவர்கள் அதிகம் இடர்களை சந்திக்க வேண்டியுள்ளது.

### 4.8. முடிவுரை

ஆய்வுப்பிரதேசத்தில் ஆரோக்கியமான கல்விச்சூழல் காணப்பட்டுள்ள போதிலும் கோவிட் காலப்பகுதியில் இந்நிலையை சிறப்பாக எதிர்கொண்டு மாணவர்களுக்கு முறையான கல்வியை வழங்க முடியாத நிலை ஏற்பட்டது இதற்கு காரணம் இணையவழி கல்விக்கு மாணவர்கள், ஆசிரியர்கள் பழக்கப்படாமை, குறித்த இணை கல்விபற்றிய அனுபவம், அறிவு

இன்மையும் இதில் இவர்களின் வயது செல்வாக்குச் செலுத்தியுள்ளமையும். ஆய்வின் பிரதான கண்டறிதலாகும். இக்குறைபாட்டை நிவர்த்தி செய்ய பொறுத்தமான விதந்துரைகள் முன்வைக்கப்பட்டுள்ளன.

#### 4.9. ஆலோசனைகள்

ஏதிர்காலத்தில் இணையவழி கற்பித்தல் செயற்பாடு எவ்வாறு அமைய வேண்டும் எனும் ஆசிரியர்களின் எதிர்பார்ப்பு:

- அனர்த்த காலங்களில் இவ்வாறான ஒரு தேவை ஏற்படும். அவ்வாறு ஏற்படும் போது பாடசாலை சமூகத்தினால் அதற்கான வசதிகள் ஏற்படத்தப்படல் வேண்டும். கோவிட் -19 காலப்பகுதியில் மாணவர்களும் ஆசிரியர்களும் இணையத்தில் கற்பித்தல் எனும் புதிய முறைக்குள் உள்வாங்கப்படுவதில் பெரும் சவால்களை எதிர் கொண்டனர்.
- பாடசாலையில் இணைய வசதியுடன் கூடிய ஸ்மாட் வகுப்பறை ஏற்படுத்தப்பட்டு மாணவர்களுக்கும் ஆசிரியர்களுக்கும் பெற்றோர்களுக்கும் கற்றல் கற்பித்தல் தொடர்பிலான வழிகாட்டல்கள் வழங்கப்பட்டு தயார்படுத்தப்படல் வேண்டும்
- பெற்றோர் இணையத்தில் பாடங்களை கற்றல் தொடர்பிலான அறிவினை பெற்றுக்கொண்டு பிள்ளைகளை தயார்படுத்தல்
- பாடசாலை சமூகம் இணையத்தில் கற்பித்தலுக்கான வசதியினை ஏற்படுத்த வேண்டும். அப்போது அதனை ஒலி, ஒளிப்பதிவு செய்து இணையத்தில் கற்றுக்கொள்ள வசதியற்ற மாணவர்களுக்கும் வழங்கி குறைபாட்டினை நிவர்த்தி செய்ய முடியும்.

#### References

- Anbusiven.P,M (2020, 04 15). tamilauthors. Retrieved from tamilauthors.com: <https://www.tamilauthors.com/01/875.html>
- Ministry of Education (2016). School Censuses preliminary report. Sri Lanka: Ministry of Education Sri Lanka.
- Paudel, P. (2021). Online Education: Benefits, Challenges and Strategies During and After COVID-19 in Higher Education. International Journal on Studies in Education (IJonSE), 70-85.
- presidential secretariat . (2020, 04 18). Retrieved from presidents office: <https://www.presidentsoffice.gov.lk/wp-content/uploads/2020/04/Circular-Tamil-PS-GPA2020.pdf>
- Sarita Singh, Dr. Shanu Singh. (2020). Perception of Netizens towards Online Education during Covid-19. Econophysics, Sociophysics and Multidisciplinary Sciences Journal, 200-208.
- Sharma, N. (2020). Covid 19 and Online Education: Teaching is a human endeavor. IOSR Journal of Humanities And Social Science (IOSR-JHSS), 9-11.



*Covid 19 Pandemic and Socio Economic Issues : an Experience of Sri Lanka*  
ISBN: 978-624-5736-22-5 (E-Copy); ISBN: 978-624-5736-23-2

Snehal A. Jadhav, Snehal H. Kulkarni, Trupti S. Gaikwad, Ruta R. Vaidya. (2020). Covid 19, Online Education System, and Front End Challenges. Vishwakarma College of Arts, Commerce and Science, Pune, 1-9.

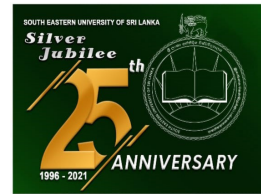
ஐஹ்பர், ப. (2016). ஐனநாயகவகுப்பறை முகாமைத்துவம், இலங்கைஇ ஷெராணி பப்ளிகேசன்.

## CHAPTER 05

### Students' Perception of Virtual Learning Environment: A Case Study on South Eastern University of Sri Lanka based on TAM.

**Shafana, A.R.F.**

Department of Information and Communication Technology  
Faculty of Technology  
South Eastern University of Sri Lanka  
arfshafana@seu.ac.lk



**Musfira, A.F.**

Department of Information and Communication Technology  
Faculty of Technology  
South Eastern University of Sri Lanka  
ameermusfi@seu.ac.lk

#### Abstract

*The integration of Information and Communication Technology (ICT) with the traditional mode of teaching has always been a practice in higher education institutes of Sri Lanka since the past. This has created potentially a greater impact in teaching-learning practices. Virtual Learning Environment (VLE), a web-based application has emerged as an essential, yet powerful tool in the higher education system of Sri Lanka in the recent days. This platform has evolved from Moodle/ LMS in order to assist teachers and students to cope up to the global standards. This paper has assessed the opinion and the perception of students towards VLE through the lens of Technology Acceptance Model (TAM) under various perspectives in incorporating the VLE in place of traditional mode of studies. The study is based on South Eastern University of Sri Lanka. The study found that the students are strongly positive towards the use of VLE to undertake their studies than the traditional method of teaching-learning process. Moreover, it underlines that the student responsiveness for the use of VLE's within an educational context is relatively high. Further, this paper also proposes suggestions on the essential measures needed to be taken in order to improve the active participation in VLE since it is highly beneficial to both the parties involved.*

**Keywords:** *Perceived usefulness, Virtual Learning Environment, Technology Acceptance Model*

### **5.1. Introduction**

The advent of Information and Communication Technology in the Education sector has paved ways for many of the opportunities. Currently, the ability to incorporate Information Technology with teaching is considered to be much efficient. Rather, the ability is deemed to be one of the very important professional competency among teachers (Ghavifekr & Rosdy, 2015). In the present context where the word “smart” has gained control of the world, the delivery of web-based teaching material has become much easier and prominent (Awan, 2013). However, the traditionalists still believe that the use of VLE is not effective as the traditional classroom teaching method and they raise questions on the effectiveness of the investment of institutional resources and the time of lecturers (Raftery & Rísquez, 2018). This study mainly focuses on evaluating the perceptions and perspectives of undergraduate students of Sri Lanka in adopting such ICT integrated education over traditional methods. The paper describes the case study conducted among the undergraduate students from South Eastern University of Sri Lanka where Virtual Learning Environment has been introduced recently.

Virtual Learning Environment or Managed Learning Environment or Learning Management System or Course Management System are few terms used invariably to refer an online based learning system designed to support the academic activities. The particular system supports to deliver web-based materials and allow much interaction with students in much efficient way. In Sri Lankan State Universities, the system is incorporated to ease the delivery of learning materials while facilitating the interaction in a better way. As multimedia based instructional materials offer an interactive learning, this approach has been succeeded in various ways to facilitators as well as to the students. In addition, a student can communicate with other students and facilitators through forums and chat sessions. Since this system enable facilitators to conduct quizzes and assignments online, it saves both time and money by getting rid of papers and saves time to assess the assignments.

This paper aims to evaluate the opinions and perspectives of the undergraduates of the South Eastern University of Sri Lanka in using the recently introduced Virtual Learning Environment (VLE) by using Technology Acceptance Model (Davis, 1989) as a tool.

## **5.2. Related works**

Ifinedo, Pyke and Anwar (2018) investigated the role of perceived ease of use, perceived usefulness, and satisfaction on Moodle's use outcomes. The research was built upon technology acceptance model, information systems continuance model, and the theory of reasoned action. The study was able to identify that the three factors under the study had a significant effect on the Moodle's use outcomes. Another significant work on assessing the VLE was conducted by Gulbinskienė, Masoodi & Šliogerienė (2017). The study evaluated the relative effectiveness of Moodle in three ways on developing language skills, fostering metacognitive awareness and promoting learner autonomy. The attitude towards the VLE was measured and the results showed that VLE was positive in all three aspects.

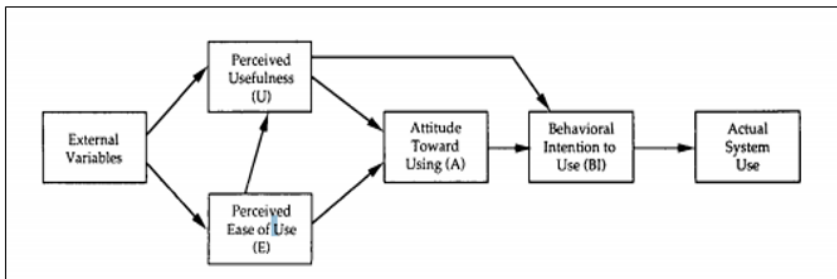
The acceptance and use of Virtual Learning Environment was assessed and a conceptual model was built after a critical analysis of TAM, TAM2 and Unified Theory of Acceptance and Usage of Technology model (Van Raaij & Schepers, 2008). The model built was tested successful. The results of the study indicates that perceived usefulness directly affects on the use of VLE and the effect of perceived ease of use and subjective norm was indirect via perceived usefulness. Another assessment of VLE was based on predicting the undergraduates' performance in VLE (Al-Azawei & Al-Masoudy, 2020). Various factors such as demographic and behavioural variables were studied. The study concluded that financial and service instability, participation level in a course, assessment grades, the total number of clicks made, the interaction with different course activities, and students' engagement with respect to VLE are significant antecedents of measuring students' academic achievement via VLE.

## **5.3 Methodology**

### **5.3.1. Technology Acceptance Model**

From the extant literature, Technology Acceptance Model (TAM) as in Figure 5.1 was chosen as the spine of conducting this case study. This study mainly focusses on perceived usefulness and perceived ease of use as key factors under study.

Figure 5.1 Technology Acceptance Model (TAM) by Fred Davis (1989)



Undergraduate students currently studying in South Eastern University of Sri Lanka has been used as a population where 30 students from each of the faculty has been taken as the sample. All the 180 students under this study were presently studying for a Bachelor's degree. All participants indicated that they have used VLE of the University at least once in their lifetime.

### 5.3.3. Materials and procedure

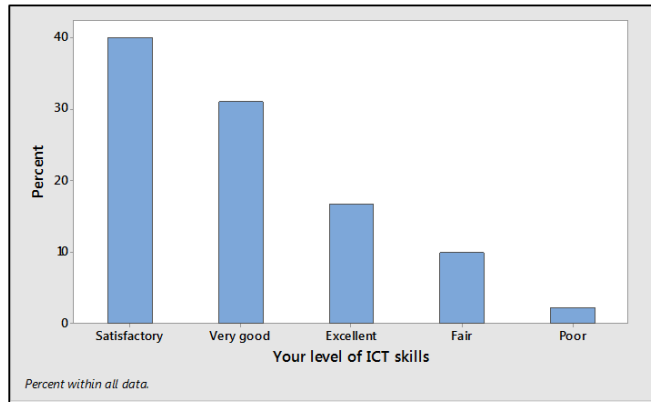
A 13-item questionnaire was designed to capture the information pertaining to the students' opinions and perceptions of VLE. The responses were collected from the students who had at least a module followed in VLE. The questionnaire clearly mentioned that their participation in the study was not compulsory and they were allowed to participate without any external persuasion.

The first part of the questionnaire was designed in a way to gather the demographic information such as gender, faculty, and the ownership of any web enabled device. The latter part of the questionnaire was designed to obtain the perceived usefulness and the perceived ease of use of the VLE.

### 5.4. Results

It could be revealed from the responses that only 15% of the students had either poor or fair knowledge in ICT where the rest of the students had relatively better ICT skill (Figure 5.2). Therefore, the students responded in very efficient way.

Figure 5.2 Level of ICT Skills



The importance of the web-based material was assessed which revealed that nearly 99.4% of the students were much positive towards the use of web-based materials rather than the traditional printed materials. The students either considered VLE as either very important or important as shown in Figure 5.3.

The activities related to the use of VLE was categorized as Communication, Outline / Description / Timetable, Submitting Take Home Assignments, Use of Forums/ Discussions Board and to obtain Course Material. The above classified purposes were analyzed and it showed that students were primarily using VLE for obtaining the course materials and to submit the take home assignments. However, a great number of students were also using VLE for other mentioned purposes as depicted in Figure 5.4.

Figure 5.3 Views and Perception on the use of Web based Materials

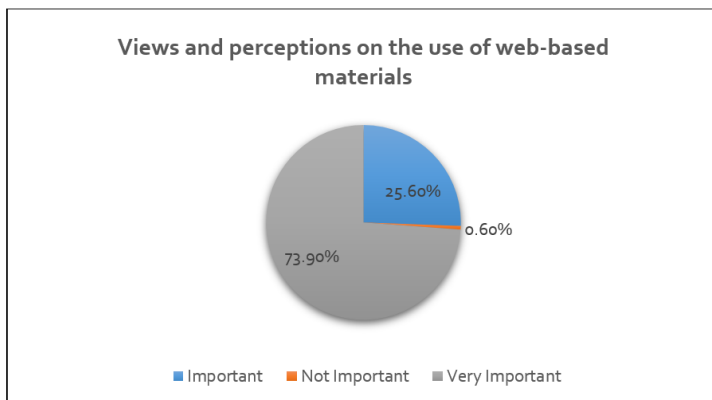
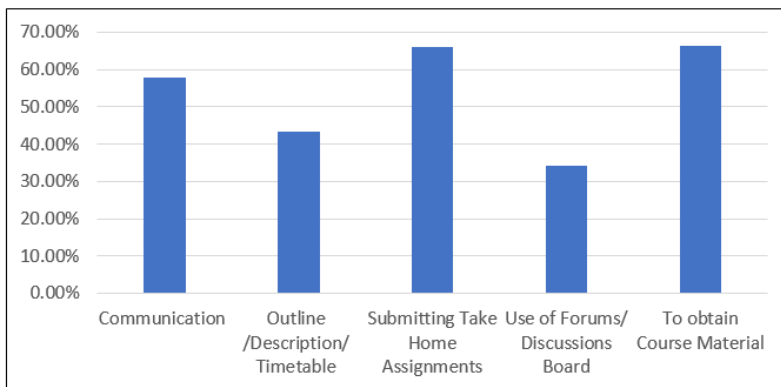
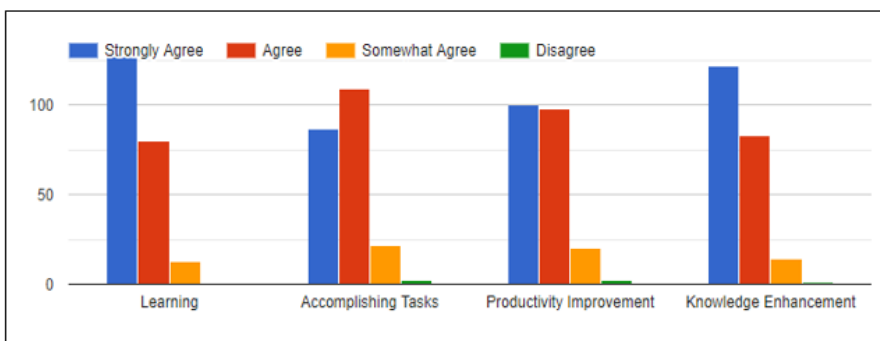


Figure 5.4 Activities related to the use of VLE.



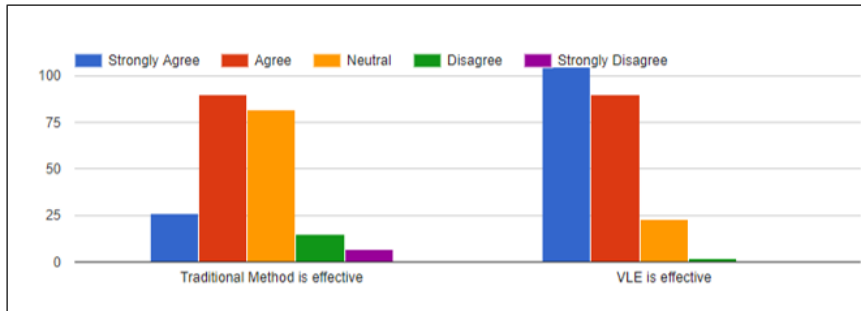
The perceived usefulness of the VLE was assessed (Figure 5.5). When the usefulness was evaluated in terms of VLE’s usage for learning, accomplishing tasks, productivity improvement and knowledge enhancement, the responses depicted that the VLE was very supportive in varying degrees.

Figure 5.5 Perceived Usefulness of VLE



As VLE was introduced recently in the South Eastern University of Sri Lanka, the study also focused on obtaining whether the students were able to adapt to the newly introduced technology. Despite the fact that a considerable amount of students mentioned that the traditional method is effective, almost 75% of the students have strongly supported to the use of VLE for their studies. This is further described in Figure 5.6.

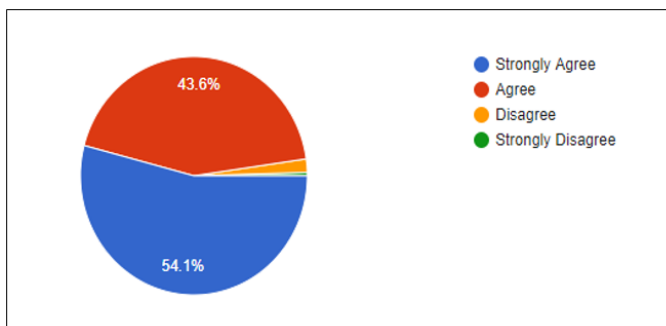
Figure 5.6 Mode of Learning (Traditional vs VLE)



The user-friendliness of the system was also assessed where almost 90% of the students have found that VLE is very user-friendly. The interface of the VLE has been made very much easy for accessing, navigation, communication with the lecturers, attempting a quiz, downloading course materials and for the uploading of the assignments. However, around 10% of the students still find it difficult to use this platform for their educational purposes.

The research has also focused on to evaluate the intention of the students in using VLE to undertake their future studies as in Figure 5.7. The results showed a greater positive response where almost all the students are highly interested in using VLE for their future studies where only a spare amount of students have shown a negative response in this regard.

Figure 5.7 Intention to use VLE in future

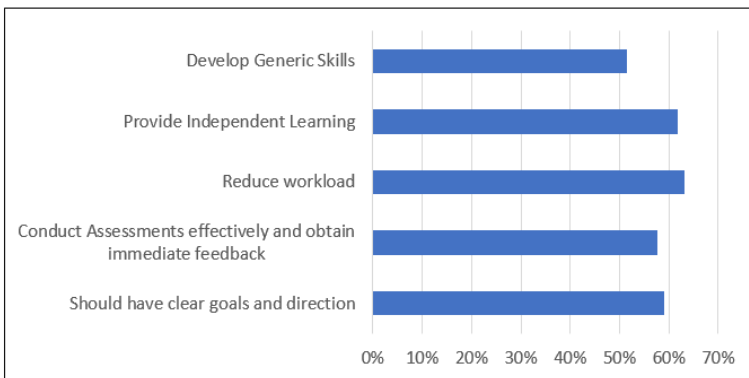


The factors affecting the effectiveness of the Learning environment have been evaluated by means of five factors such as having clear goals and direction, conducting assessments effectively, reducing the workload, providing independent learning and developing generic skills. All the factors under the consideration have been identified as an effective



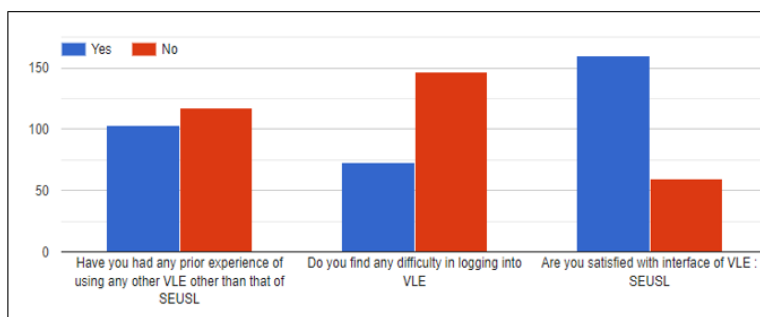
factor by most of the students where reduce workload factor has gained the prominent place than the others which can be inferred from Figure 5.8.

Figure 5.8 Factors affecting the effectiveness of the VLE.



Moreover, the views and perception of the Virtual Learning Environment of the South Eastern University of Sri Lanka were also queried. Despite the fact that this platform is very new to almost half of the students under this particular study, the responses showed that the difficulty in using VLE is very low and they find it more satisfying. Hence, it could be concluded that the interface has been designed in such a way that students have less difficulties in pursuing their studies through VLE.

Figure 5.9 Extent of difficulty in using VLE



## 5.5. Discussion and recommendation

Teaching and learning over a Virtual learning Environment has their own unique challenges and falls. Hence, the environment and the virtual atmosphere need to be designed so that the aligned throughput and the learning outcome of every course are met to its maximum. Thus,

more practices need to be incorporated to the VLE in terms of technical features, and even more, practices need to be incorporated in terms of practicing both teaching and learning via VLE.

This study has been able to detect that utilizing VLE as a forum or discussion board is significantly less (34.1%). Thus, the authors would recommend that this feature needs to emphasize further which can enhance the utility of VLE by both parties effectively. This recommendation is based on the suggestions made by de Lima et al. (2019) that having a discussion forum can highly engage students in learning activities. Thus, actively creating a forum or Frequently Asked Questions (FAQ) section in each course can positively impact the way students use VLE rather than other usual stuff like downloading lecture material or attending a scheduled quiz, and uploading assignments.

Further, the results prove that the students perceive that the VLE is useful and it is easier to interact. Thus, we suggest that the use of VLE for every module would improve the engagement in learning as well as the competence in learning. Thus, this study can be further expanded in these dimensions to get many insights of VLE besides its perceived ease of use and perceived usefulness.

## **5.6. Conclusion**

The study has revealed that the students from South Eastern University of Sri Lanka possess sufficient ICT skills and have access to network enabled devices. Further, the students have shown a very strong interest and perceived it to be easy for undertaking their studies. The students also recommended the use of VLE for their prospective studies as well.

The activities related to VLE was also assessed where the students were primarily using it to gain access to their lecture materials. The assessed perceived usefulness of the VLE depicted that the VLE was very supportive in varying degrees as mentioned above. The findings from this study highlight that the student receptiveness for the use of VLE's within an educational context is relatively high.

It is a widely accepted fact that the VLE allows the students to contribute in the process of creating a 'collective intelligence' (Martín-Blas & Serrano-Fernández, 2009). Rather, VLE is also a key factor that arouses interests in students besides the classroom-based learning and allows them to regularize themselves. Hence, this case study concludes that

the suitable application of VLE for the learning is the ultimate choice to be made by the educational institutes to cope with the global standards.

## References

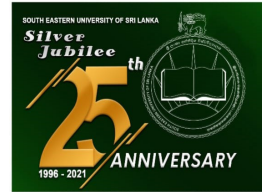
- Al-Azawei, A., & Al-Masoudy, M. (2020). Predicting Learners' Performance in Virtual Learning Environment (VLE) based on Demographic, Behavioral and Engagement Antecedents. *International Journal of Emerging Technologies in Learning (IJET)*, 15(9), 60-75.
- Awan, R. N. (2013). Students' opinions on the use of a virtual learning Environment at a higher Education Institution in Dubai. *Concern*, 7, 8.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- De Lima, D. P., Gerosa, M. A., Conte, T. U., & Netto, J. F. D. M. (2019). What to expect, and how to improve online discussion forums: the instructors' perspective. *Journal of Internet Services and Applications*, 10(1), 1-15.
- Ghavifekr, S., & Rosdy, W. A. W. (2015). Teaching and learning with technology: Effectiveness of ICT integration in schools. *International Journal of Research in Education and Science*, 1(2), 175-191.
- Gulbinskienė, D., Masoodi, M., & Sliogerienė, J. (2017). Moodle as virtual learning environment in developing language skills, fostering metacognitive awareness and promoting learner autonomy. *Pedagogika*, 127(3), 176-185.
- Ifinedo, P., Pyke, J., & Anwar, A. (2018). Business undergraduates' perceived use outcomes of Moodle in a blended learning environment: The roles of usability factors and external support. *Telematics and Informatics*, 35(1), 93-102.
- Ma, Q., & Liu, L. (2004). The technology acceptance model: A meta-analysis of empirical findings. *Journal of Organizational and End User Computing (JOEUC)*, 16(1), 59-72
- Martín-Blas, T., & Serrano-Fernández, A. (2009). The role of new technologies in the learning process: Moodle as a teaching tool in Physics. *Computers & Education*, 52(1), 35-44.
- Raftery, D., & Rísquez, A. (2018). Engaging students through the VLE: comparing like with like using the #VLEIreland student survey. *Irish Journal of Technology Enhanced Learning*, 3(2), 24-34.
- Van Raaij, E. M., & Schepers, J. J. (2008). The acceptance and use of a virtual learning environment in China. *Computers & education*, 50(3), 838-852.

## CHAPTER 06

### The public awareness on the facts of cancer in Eastern province, Sri Lanka

**Fathima Jemziya, M.B.**

Department of Biosystems Technology  
Faculty of Technology  
South Eastern University of Sri Lanka.  
jemziya@seu.ac.lk



**Sivarajah, P**

Department of Agricultural Economics  
Faculty of Agriculture  
Eastern University.  
sivaponniah@yahoo.com

#### Abstract

*The present study was designed to determine the public awareness on behalf of facts of cancer in Eastern province. Random sampling technique from the adult population of ordinary public was employed throughout the survey. Based on the output, Batticaloa districts people heard about cancer somehow higher (41.56%) than the Ampara (35.58%) and Trincomalee districts (22.86%), of which 49.47% men and 50.23% women (N = 385). The women population of youngest generation with higher education recognized the cancer compared to other group of public. There was significant association at 95% confidence level between knowing about cancer and educational level  $\chi^2 (4, N = 385) = 11.16, p = 0.025$ . There are types of common cancer, breast cancer was mostly identified by the respondents, though abundantly did not know much about colon cancer and prostate cancer. From the overall observances, 17.14% of the respondents do not have aware on that the cancer is a non - communicable disease, of which who attained limited educational level did not distinguish the facts of infectious ethics of the cancer. Most of the respondents had lack of awareness on the cancer causative factors. The respondents (62.90%) well recognized the habits of smoking. However, obesity and food habit were disagreed to be as causative agents of the cancer. Conclusively, the Eastern public have to be driven towards overcome the cancer incidences in future by making awareness and proposed mitigating measures.*

**Keywords:** Cancer, Public awareness, Sri Lanka, Eastern regions

## **6.1. Introduction**

Cancer, a non - communicable disease which preceding for long phases of time and evolve slowly, is a set of ailments involving abnormal growth of cells with the probable outbreak to various body parts. There are more than hundred type of cancers affect humans including breast cancer, skin cancer, lung cancer, colon cancer, prostate cancer, and lymphoma (National Cancer Institute, 2019). The symptoms depend on the nature of cancer including a lump, abnormal bleeding, prolonged cough, unexplained weight loss and a change in bowel movements (National Cancer Institute, 2019). Environmental factors (90-95%) and genetic factors (5–10%) are involving to develop type of cancers (Anand et al., 2008). Lifestyle, economic and behavioral factors and pollution are categorized into the environmental factors (Kravchenko, 2010) including consumption of tobacco (25–30%), food habit and fatness (30–35%), infections (15–20%), radiation (up to 10%), strain, physically inactive and environmental pollutions (Anand et al., 2008).

Sri Lanka is an island located in the Indian Ocean, which have multi - ethnic and multi religious groups of publics. Cancer incidence in Sri Lanka is progressively on the upsurge. The island's cancer incidence rate has doubled since the eighties (NCCP, 2006). In Sri Lanka the cancer incidence has increased from 128 per 100,000 population in 1980 to 287 in 2000. Similarly, the death rate has increased by 100% within these two decades (Neomal, 2009). Sri Lanka ranks the highest in NCDs in Southeast Asia but Sri Lanka's cancer trend is similar to that of Western countries, also the rank of cancer deaths is hundred and sixty-four among world countries (WHO, 2014).

Cancer incidence data (2010) by geographical region of Sri Lanka revealed that, Colombo, Gampaha, Kandy and Galle are in uppermost position having cancer - affected people respectively than other regions. In case of Eastern province, incidence of cancer trend is high in Batticaloa compared to Ampara and Trincomalee (NCCP, 2010). This brief review considers some of the relevant literatures, with emphasis on what is cancer, cancer causing factors, status of cancer incidence in Sri Lanka and worldwide. The current study focuses to evaluate the public awareness of cancer who live in eastern region of Sri Lanka.

## **6.2. Literature review**

Sri Lanka has various diagnosing and treatment centers and units located in island wide, can be grouped as cancer treatment centers, oral - maxilla

facial surgery units and pathology laboratories. Cancer mortality data in the period of 2000 - 2009 revealed that cancer death was cumulatively increased year by year, around 500 - 700 individuals per year. Cancer incidence in Sri Lanka by geographical regions were also expressed in different contribution to degree of cancer risk and death. According to that, Western region was identified as having most proportion of affected population by cancer. Dominantly, Colombo and Gampaha districts had highest number cancer affected people compared to other districts of Sri Lanka, tailed by Kandy districts. Data on Eastern region expressed, which were on prompt developing on cancer incidence, of which Batticaloa district shared greater proportion of cancer hazard, compared to Trincomalee and Ampara districts (NCCP, 2010).

Most of cancer deaths were recorded in female population (52.9%) rather than male individuals (WHO, 2014; NCCP, 2010) Cancer risk can be varied with age of individual, may be possible to affect the all group of people. Cancer cases were observed in trigger from the age group of 45 - 49 of population had huge contribution in the incidence of cancer mortality rate and aggressively initiated with 40 years of age and after onwards. Sri Lanka had vulnerable probability to develop cancer as one in every 10 males and females will develop cancer during their lifetime (0 - 14). All types of cancers are on the rise in Sri Lanka, around 17,000 new cancer patients are diagnosed annually by the local health system. The Ministry of Health, Sri Lanka states that over 14,000 patients have died owing to cancer in 2013. Most common cancer was oral cancer in Sri Lanka, while most of women cancer patients had breast cancer (Samaraweera, 2017), cervix uteri and thyroid gland related type of cancers. The male cancer with the highest incidence was the cancer of the lip, oral cavity and pharynx, trachea, bronchus and lungs cancer and esophagus related cancers. Younger population had addicted to develop lymphoma and leukemia type of cancer. Lip, oral cavity and pharynx cancer were dominant in aged male population and breast cancer were foremost in aged female population. Along with, esophagus and colon, rectum related cancers were to be considered in aged population according to the cancer deaths rates. Adult risk factors for cancers were identified, which to be ordered in descending as household solid fuel use, physical inactivity, tobacco smoking, obesity and alcohol consumption (WHO, 2014).

Sri Lanka is one of the multi - cultural nation, therefore there are different religions are followed by Sri Lankan public, mainly, Buddhism, Hindu,

Islam and others. Ethnicity are also showing greater differences in cancer incidence in Sri Lanka, males and females belongs to all primary ethnicity, were mostly deserved bronchus, lung and breast cancers respectively, but affected cases are in different fractions. Prominently, Buddhist mostly affected by lung, esophagus and breast related cancer. Esophagus and breast site cancers were prevalent in Hindus community, as well as, esophagus, larynx and breast cancer were popular in Islamic society (NCCP, 2010).

### **6.3. Materials and methods**

#### **The Study area**

The Eastern province is the most diverse in Sri Lanka, both ethnically and religiously. Sri Lankan population around 8% live in Eastern province, where the population was 1,551,381 in 2012. Almost 87% of population in this province lives in the same province since birth. Municipal council and urban council population of this province were 217,054 and 172,633 in 2012 (Census of population & housing, 2012). Out of the total population of Eastern province, 48.4% were men and 51.6% were women. According to the census, Trincomalee district sex ratio was higher than those ratios in Batticaloa district. In Batticaloa district, the highest men population was recorded in age group 10-14 and the highest women population was seen in age group 15-19.

Majority of public is following Islam (37.0%) followed by Hindus (34.7%), Buddhism and other religions. The data showed that the most of Hindus of this province live in Batticaloa district and Islamic people of this province live in Ampara and Trincomalee districts. Further Buddhists of this province live in Ampara district, relative to the other two districts. Regarding educational attainment of Eastern province, majority of the population completed education up to secondary level. Those who have completed the highest education level which is degree and above (2%) significantly low. Nearly 5.8% of the population in Eastern province reported that they have never attended in a school. However, not attended to a school is higher among old aged population (Census of population & housing, 2012).

#### **Population, sample and sampling**

Random sampling from the adult population of ordinary public was employed throughout the survey. Stratified probability sampling was used to select the appropriate respondents based on gender; men and women and age group; less than 35 and more than 35 according to the

proportion of population density. The semi - structured questionnaires (385) were allocated and self - interviewed in the ways for the data collection.

### **Data collection and analytical procedure**

Data were analyzed by using of statistical software; SPSS (Statistical Package for Social Science) with the version of 22.0. Descriptive statistics and chi square test were used to achieve the objectives of this study.

### **6.4 Results and discussion**

The study area was comprised of three districts including Ampara (37%), Batticaloa (42%) and Trincomalee (21%). Batticaloa district has highest density population followed by Ampara and Trincomalee districts. Therefore, most of the respondents from Batticaloa district compared to other districts. Batticaloa districts people heard about cancer somehow higher (41.56%) than the Ampara (35.58%) and Trincomalee districts (22.86%), of which 49.47% men and 50.23% women. This may be due to that considerable number of cancer patients were recorded in Eastern province, of which Batticaloa district lead Ampara and Trincomalee districts (NCCP, 2016). Accompanied by, there was significant association at 95% confidence level between knowledge on cancer and educational level  $\chi^2(4, N = 385) = 11.16, p = 0.025$ . Therefore, there was variation on the knowledge on the cancer and strata of educational level.

### **The common types of cancer**

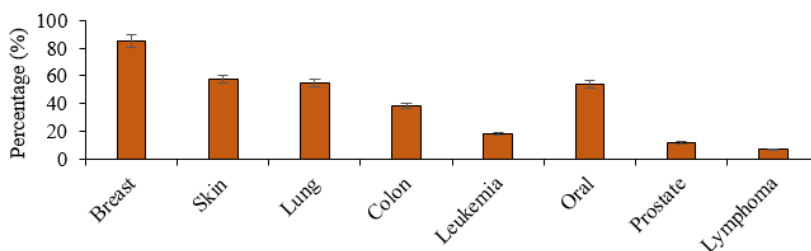
There are several types of cancers prevailing worldwide, which can be, named generally by either the affected region or organ of human body such as breast, lung, oral cavity etc. Certain types of cancer are dominating in the various quantity to country - country, region - region, sex, age, ethnicity, and other related aspects. The respondents revealed that the data relevant to type of cancer according to their knowledge and familiarity related to occurred cancer in the respected regions.

Concerning the responses, known type of cancer in the study area were ordered in descending order; breast cancer (85.2%), skin cancer (57.5%), lung cancer (54.8%), oral cavity cancer (54.3%), colon cancer (38.2%) and so on, illustrated in Fig. 6.1. According to the graphical output, the most of the respondents knew about breast cancer and abundantly did not know much about colon cancer and prostate cancer. This may be due to the highly occurred cancer in their respected areas is breast cancer particularly which affect the women (Bray et al, 2018). However,



in Batticaloa district, breast cancer was highly recorded, equally lung cancer mostly in Ampara districts. Oral cavity cancer observed more in Ampara and Batticaloa districts. Colon and rectum cancer documented equally including three districts (NCCP, 2016).

However, lung and breast cancer were the most common cancer worldwide, each contributes 12.30% of the total number of new cases diagnosed in 2018, and likewise, colorectal cancer was the third most common cancer with 1.8 million new cases in 2018 followed by prostate and oral cavity cancers. The data expressed worldwide, that men mostly affected by lung and prostate cancer, as well women mostly affected by breast and colorectal cancer (Bray et al., 2018). In case of Sri Lanka, men mostly affected by oral cavity cancer, correspondingly women mostly affected by breast cancer. Regarding ethnicity cluster prevailed in Sri Lanka, Sinhalese, Hindus and Muslims' men and women were recorded more frequently as cancer patients due to bronchus, lung and breast cancers respectively (NCCP, 2016).



Kown Types of Common Cancer

Source: Field Survey Output, 2019

### **Cancer as non - communicable disease**

Cancer is one of a number of chronic, non - communicable diseases that share common risk factors whose prevention and control would benefit a majority of the world's population (Cannon et al., 2012). From the overall observances, 17.14% of the respondents did not know that the cancer is a non - communicable disease, and meant that the cancer has possibility to outbreak human to human like infectious disease. The women (44.16%) distinguished the infectious degree of cancer compared to the men (38.70%).

Regarding the age group concerns, 21.82% of the respondents were belongs to 18-28 age group of people followed by 29-39 age groups of the respondents (18.96%) attained highest education occupied in

Eastern province well distinguished the infectious facts of cancer. In case of the respondents, who accomplished minimum educational level including no formal educations and primary education, were not much distinguish the facts about communication ethics of cancer. The education is a powerful tool to determine the degree of well - beings in the societies. Making the awareness of public related issues may deplete the level of hazardous in future.

### **Vulnerable gender and age ranges to cancer**

In 32 of 35 cancer sites, the men had a higher incidence rates consistently across geographical regions (Dorak & Karpuzoglu, 2012). The increased men: women ratio for incident cancer is not unique to a particular country, population, or region. In Sri Lanka, the higher number of cancer patients are recognized as women (53%) in 2010 (NCCP, 2016). American cancer society (2018) stated that cancer can happen at any age, but nearly 9 out of 10 cancer are diagnosed in people ages 50 and older and there are no variation in racial and ethnic groups to be affected by cancer. Cancer incidence data of Sri Lanka stated that in 2010, cancer incidences were highest proportion in men and women with the age range of 70-74 and 60-64 respectively (NCCP, 2016). Age, gender and communities are affected by cancer with equal degree of variation although there are regional dissimilarities.

Both men and women recognized the mostly cancer affected sex and age range, who revealed that both of gender were mostly affected by cancer. Of which, the men were responded more (68.23%) compared to the women (63.54%). Regarding the age ranges, the respondents (67.27%) did not much more about cancer mostly affected age, though men and women recognized that reached more than 40 years old having to expect cancer.

### **Cancer causative factors**

A question queried to the respondents to evaluate their knowledge or experienced regarding on factors/reasons involved on the development of cancer. The respondents (65.71%) from the study area, they knew somewhat regarding cancer causative factors/reasons, though 34.03% of the respondents did not response to the inquiry, this may be due to the lack of awareness on cancer causative factors. Of which, the men somewhat knew more about cancer causative factors/reasons, the highest frequency (50.39%) recorded by less than 40 years age groups of individuals. Cancer may cause by several reasons and factors, of which

dominant causative factors; family history, drinking alcohol, smoking/tobacco usage, aging, food habit, lack of physical activity and obesity, radiation, pollution, infections (John, 2018), were studied regarding the knowledge on cancer causative factors or reasons of the respondents occupied in Eastern province, showed in Table 6.1.

Table 6.1. Knowledge on Cancer Causative Factors.

Cancer Causative Factors	Strongly Agree (%)	Agree (%)	Not Sure (%)	Disagree (%)	Strongly Disagree (%)
Family History	14.8	26.8	41.3	9.90	7.30
Alcohol Consumption	42.6	33.5	17.9	3.10	2.90
Smoking	62.9	24.4	10.6	1.60	0.50
Aging	2.60	9.60	36.1	31.4	20.3
Food Habit	19.2	23.4	20.5	28.1	8.80
Obesity	9.10	21.6	42.9	18.7	7.80
Radiation	38.7	27.3	26.8	5.20	2.10
Pollution	19.2	30.1	40.0	8.10	2.60
Infections	9.60	28.8	42.6	12.5	6.50

Source: Field survey output, 2019

The responses were measured by Likert scale; strongly agree, agree, not sure, disagree, and strongly disagree. The respondents placed on the study area had difference experiences and knowledge concerning cancer causative factors. According to the results of this study, the most of the respondents had confusion regarding on the cancer causative agents including family history (genetic), aging, lack of physical activity and obesity, polluted environment and infection. However, they strongly agreed the alcohol consumption, smoking and radiation, which are causing types of cancer. At contrast, aging, obesity and food habit were disagreed by most of the respondents.

However, the total cancer accountability is highest in prosperous societies, primarily due to smoking culture and western lifestyle. In Sri Lanka, causes of cancer can be traced to bad eating habits, such as consuming too much animal fat and too little vegetables, obesity, sedentary lifestyles and consumption of alcohol and tobacco (Charundi, 2013). The highest proportion of death caused by smoking, carcinogenic food and by alcohol. Avoiding these causative factors, change of life style, food habits with regular exercise can overcome the vulnerability to cancer to some extent (Neomal, 2009).

## 6.5. Conclusion

Now a day, concerning the type of cancer is progressively upright worldwide, particularly urban regions compared to rural. This may be due to genetic and environmental factors. Making awareness on the facts and the causative factors of cancer may reduce the disaster of incidence of the regions in forthcoming decades, which are arising by non - inherited ethics. Therefore, further investigations will be required to point out the facts regarding on this.

## References

- American Cancer Society. (2018). Glossary: Definitions and Phonetic Pronunciations. <https://www.cancer.org/cancer/glossary.html>
- Anand, P., Kunnumakkara, A.B., Kunnumakara, A.B., Sundaram, C., Harikumar, K.B., Tharakan, S.T., Lai, O.S., Sung, B., & Aggarwal, B.B. (2008). Cancer is a preventable disease that requires major lifestyle changes. *Pharmaceutical Research*. 25(9), 2097-2116.
- Bray, F., Ferlay, J., Soerjomataram, I., Siegel, R.L., Torre, L.A., & Jemal, A. (2018). Global Cancer Statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *A Cancer Journal for Clinicians*. 68(6), 394-424.
- Cannon, G., Gupta, P., Gomes, F., Kerner, J., Parra, W., Weiderpass, E., Kim, J., Moore, M., Sutcliffe, C., & Sutcliffe, S. (2012). Prevention of cancer and non-communicable diseases. *Asian Pacific Journal of Cancer Prevention*. 13(4), 3-11.
- Census of Population and Housing. (2012). Eastern Province, Department of Census and Statistics, Sri Lanka.
- Charundi, P. (2013). Cancer on the rise in Sri Lanka. *Sunday times*. <https://www.pressreader.com/sri-lanka/sunday-times-sri-lanka/20130210>
- Dorak, M.T., & Karpuzoglu, E. (2012). Gender differences in cancer susceptibility: an inadequately addressed issue. *Frontiers in Genetics*. 3, 268.
- John, P.C. (2018). Cancer risk Factors. *Medicine Net*. [https://www.medicinenet.com/cancer\\_causes/article.htm#caner\\_risk\\_factor\\_facts](https://www.medicinenet.com/cancer_causes/article.htm#caner_risk_factor_facts)
- Kravchenko, J., Akushevich, I., & Manton, K.G. (2009). Cancer mortality and morbidity patterns in the U. S. population: an interdisciplinary approach. Springer, Berlin. ISBN 0-387-78192-7
- National Cancer Control Programme (NCCP). (2016). Cancer incidence data Sri Lanka 2010. 12th Publication. ISBN: 978-955-0505-84-5

- National Cancer Control programme (NCCP). (2010). Cancer incidence data Sri Lanka 2010. Ministry of Health and Indigenous Medicine.
- National Cancer Institute. (2019). Symptoms of cancer. <https://www.cancer.gov/about-cancer/diagnosis-staging/symptoms>
- National Cancer Institute. (2019). Common cancer types. <https://www.cancer.gov/types/common-cancers>
- National Cancer Control Programme (NCCP). (2006). Cancer incidence data. <http://www.nccp.health.gov.lk/index.php/publications/cancer-registries>
- Neomal, P. (2009). Can we control the hazard of cancer in Sri Lanka? *Business Today*. <http://www.businesstoday.lk/article.php?article=1966>
- Samaraweera, S. (2017). Cancer on the rise in Sri Lanka: 17,000 new patients detected annually. <http://www.dailynews.lk/2017/09/19/local/128678/cancer-rise-sri-lanka-17000-new-patients-detected-annually>
- World Health Organization (WHO). (2015). Non - communicable disease risk factor survey, Sri Lanka.
- World Health Organization (WHO). (2014). Cancer Country Profiles, Sri Lanka.

## CHAPTER 07

### Social representation in Tamil Cinema: Life of fisher folk and challenges.

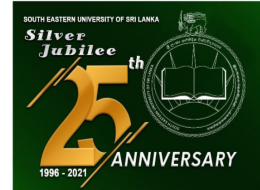
**S.Jude Dinesh Koduthor**

Department of Media Studies

Faculty of Arts

University of Jaffna

dineshkodi@univ.jfn.ac.lk / sdineshkodi@gmail.com



#### Abstract

*Fishermen are known for their hard work. They are confident enough to face any hostility with courage. Particularly, many distinct features can be seen among the fisher folk with literary and artistic appreciation. Tamil cinema has not failed to capture such fishing community/fisher folk. The fisher folk and the challenges faced by them are structurally visualized in Tamil cinema as a theme, a story and plot. The key intention of this research is to analyze about how the fisher folk is portrayed in Tamil cinema. This study is intended to identify the dialect variation of fisherman/unique jargons of fisherman, distinct features of fisher folk as depicted in the Tamil films and to demonstrate the obstacles, background of the challenges faced by them and to find out the reasons for the portrayal of them in Tamil cinema and the solutions for them. Tamil films which reflect the particular society have been used as the primary data of this study and film criticisms, books, research books, articles and research articles related to the theme of this study have been employed as secondary data. Comparative and Content analysis have been used to demonstrate the life of the fisher folk and the challenges faced by them and Tamil films are occupied as a source for this study through Content analysis. These studies will help to understand the life of the fisher folk and indicate the way to find out the solutions for their challenges.*

**Key words:** *Film, fisher folk, Portrayal, society*

## **7.1. Introduction**

Cinema is one of the wonders of the serious world. The individuals who see it just because get excited and wonderstruck. The specific presentation of people and things are a victory of Science and Technology. Cinematography is the dream of development by the recording and resulting in a fast projection of numerous still photographic pictures on a screen. Initially, a result of nineteenth-century logical undertaking, film has become a medium of mass entertainment and communication, and today it is a multi-billion-pound industry. From the start, or anywhere a screen could be set up and a room darkened. Subjects included local scenes and activities, perspectives on unfamiliar grounds, short comedies, and newsworthy events. The films were joined by lectures, music and a lot of audience support. In spite of the fact that they didn't have synchronized dialogue, they were not 'silent' as they are sometimes described.

Be that as it may, the recreational side of the films simultaneously ought not to be dismissed. It is basic to have a decent story, great talk, great landscape, great photography, and great music and tunes in a film. Only somewhat more thought and understanding can help. It is acceptable that now in numerous film houses; significant matches have moreover appeared on the big screen.

### **Film in social relations**

From the historical backdrop of the world, we find that Hitler and Mussolini understood the significance of cinema as a powerful ideological weapon and utilized it to facilitate their political advantages. If the fundamental character of the cinema is to bring out real factors, it from the outset shows up liberated from any subjective judgment. In any case, cinema is a medium acting inside individuals' perception- and aspect of their physical, mental, social, and political context.

From a sociological point of view, the media assume a significant part in practically all aspects of daily life. Anyway, their influence is not restricted to what we know. The sociological centrality of media reaches out past the substance of media messages. Media additionally influences how we find out about our reality and communicates with one another. That is, mass communications are bound up with the cycle of social relations.

### **Cinema as an ideological tool**

'The rationalistic connection among cinema and politics could be seen

from in any event two alternate points of view. As specified by one perspective, film as a 'reflector' or a 'window' or a 'validator' of the socio-political and social structures of a given society is essentially political. The other perspective spares the term 'political' to a particular class of films portrayed by a power struggle both in technique and substance.

"All films are political. But all films are not political in the same way," observes Wayne. Not all films bend equally political, notwithstanding. While each film is political in the most nonexclusive sentiment of the term, just a few films are specifically in political ideology. Such films are utilized for explanations behind propaganda or more radical socio-political change. Incomprehensibly, 'political films' in this particular sense can be utilized as an extreme instrument to keep up the foundation and at the same time to undermine the framework.

### **Film: the Directors' medium**

A movie director is an individual who directs the creation of a film. A film director controls a film's artistic and sensational perspectives and imagines the screenplay while managing the specialized group and actors in the satisfaction of that vision. The film director has a key part in picking the cast individuals, creation plan, and the innovative aspects of film making. Under European Union law, the director is seen as the creator of the film. The film director guides the cast and team and makes a general vision through which a film, in the long run, gets acknowledged, or noticed. The film director should have the option to mediate contrasts in creative ideas and remain inside the limits of the film's budget.

There are numerous pathways to turning into a film director. Some film directors began as screenwriters, cinematographers, film editors, or actors. Other film directors have studied at a film school. Directors utilize various methodologies and approaches. Some diagram a general plotline and let the actors develop dialogue; while others control each perspective, and request that the actors and team members to directions decisively. A few directors additionally compose their screenplays or work together on screenplays with long-standing composing accomplices.

### **7.2. Literature review**

Venkataraman Manjula. (2015), analysed about the Indian films and they have been a mirror to the multidimensional nature of the subcontinent, be it in its portrayal of Indian culture, religion, society,



classes, casts, politics, or language. In this research paper researchers have endeavours to analyse at the portrayal of a minority community in India.

Rita Ray. (2013), talks about the state of India and its economic cycle through the theme of the film of Slum dog Millionaire. The researcher builds up a list utilizing three advancement rules: poverty and pay imbalance; individual freedom and gender equality; democracy and freedom. This list is utilized to measure the range of improvement subjects and yearly normal score of 2345 Bollywood films somewhere in the range of 1980 and 2010 Pp. 36 – 47.

Braswell Michael.(2010),stated a picture worth a thousand words: educating peacemaking and equity topics in a films studies Michael bras well east, Tennessee, state college this article talks about how exemplary, and contemporary films can be utilized to inspect equity and peacemaking subjects in personal, social, and criminal equity settings.

Martin Sopocy,(1979) state Edison films were seen by each client in turn in Kine to scope machines, it was difficult to consider them anything besides photos: a picture (say) of a man wearing a boater in which the subject moves in the direction of you out of now here and offers his appreciation. A supernatural occurrence has occurred: for a moment the photo has come to life.

### **7.3. Methodology**

This research has done with the quantitative and qualitative method including interview to collect data and with those data the researcher has done comparative and content analysis to find out the results for these research questions. According to that, the researcher has focused some factors throughout this research as operational definitions; those are Fisher's life with the poverty line, love & marriage, Religion, structure of caste, level of education, travelling, language, and family life. The first one is fishers' life. From the historical period to modern period, the novels, literatures, and films are representing fishers' life and coastal area issues in a general way. So, in that way, the cinema is a media, which portrays their life as an alternative way. Poverty functions as a main role among their life. Directors also concentrate their selves on that. For instance, in the selected film of Mariyan, the hero aborts his fishing & goes to other country (foreign) to earn. In the film Sura, the coastal area people are living in a small cottage. And in the film of

Citizen the entire village was wiped off including women and children by the three kidnapped officials because of their greed for power and money. But government officials are not considering that as an incident. The main reason would be the money and power.

#### **7.4. Theoretical background of the study**

##### **Auteur theory**

Film analysis essentially manages - Auteur Theory, because the films are predominantly founded on the producer or director's consciousness, perception and process. Therefore, this study employed the auteur theory as its one of the theoretical frameworks.

Auteur theory holds that a director's film reflects the director's very own inventive vision as if he or she was the primary – auteur. The creation of a film is a part of an industrial process; along these lines, the director's voice is sufficiently particular to sparkle all through the film. Auteurism is the utilization of auteur theory to analyze films or to understand the characteristics that recognize the director as an auteur. The film director-auteur writes with his camera as writer writes with his pen. The advanced film industry would be a personal one, and technology, team and cast would be no more than instruments in the artist's creative process.

##### **Dependency theory**

The film directors used to apply the dependence of the contemporary issues to portray in films. As per that, the researcher utilizes the Dependency theory as another theoretical framework to investigate the dependence on current and local issues in the scope of the research.

Dependency Theory was developed in the last part of the 1950s under the guidance of the Director of the United Nations Economic Commission for Latin America, Raul Prebisch. Prebisch and his colleagues were disturbed by the fact that monetary development in the serious industrialized nations did not necessarily lead to development in the more unfortunate nations. In fact, their examinations recommended that monetary action in the richer countries frequently prompted serious economic problems in the poorer countries. Such a possibility was not anticipated by neoclassical theory, which had assumed that economic growth was beneficial to all (Pareto optimal) regardless of whether the benefits were not always equally shared.

### **7.5. Objectives of the study**

The main objective of this study is to analyze about how Tamil films are portrayed or represented in the sense of expressing fisher's life & their life style in a general manner. Plot will be more attractive through the theme and setting of the cinema. Even Tamil cinema has risen based on the new stories, new theme, the main theme of the fisher's life and coastal area's stories.

### **7.6. Research questions**

How do the films (based on fishing) portray the life style of the fishers? What are the strategies used in films to express the difficulties of their life style and their residence (coastal areas)?

### **7.7. Hypothesis of the study**

The hypothesis of this study is, the films which were directed by south Indian film directors, they talk about much more variety of themes even including about the fisher's life. But in some time, they failed to portray some matters of fisher's life and coastal area issues in an appropriate way.

### **7.8. Scope of the study**

The scope of this study is that, the films were selected which released after the year of 2000. In that way, more Tamil cinema has the theme of fisher's life in a partial way or fully. According to that, the researcher has selected nine films which were released after the year of 2000.

Theme is a main part and important role of a film, and its function as a life of a story. Selected films are: Citizen, Mariyan, Kadal, Neerparavai, Irudhisuttru, Sura, David, Richchi, and Singampuli.

### **7.9. Data collection and data analysis**

#### **Primary data collection**

The basic data for the research has been collected (DVD format) and watched by the researcher three times according to the defined categories in descriptive analysis. Citizen, Mariyan, Kadal, Neerparavai, Irudhisuttru, Sura, David, Richchi, Singampuli.

#### **Secondary data collection**

Already available or existing data come under the secondary data. Web and book sources have been used as secondary data for this study.

Likewise journal, research articles, dissertations, movie review, movie ratings, essays, research papers, books were collected by the researcher from the internet. The secondary data for this study have been collected from the internet sources, essays, journal articles, books, film analysis and reviews.

### **7.10. Results and discussions**

This research is based on the topic of 'Social representation in Tamil Cinema: Life of fisher folk and challenges' with the basis of the stories which basically evolved from the theme of fisher's life and coastal area. Theme and plot are the basic fundamental of a story. If a director chooses same plot or same theme that will create the distractions and they will lose the interests in his film. New themes always create more interests from the viewers. In that way, this research based on the theme of fisher's life and difficulties, challenges which they face in their day to day life. Films which were released based on the theme of fishers' life, their livelihood, profession, language, culture and coastal area, also received more points of speeches among viewers.

The themes about fisher folk are an underlying message, idea, or concept that motivates characters to behave the way they do. An author may start a work with a theme in mind or may write to a theme unconsciously. The theme about fisher folk can also be seen as the moral of the story. There are main theme and sub themes. And story based on fisher folk somewhere have one main theme with many sub themes as well. The settings of the films about fisher folk are more than simply a geographical location or time period that makes a nice backdrop to a story. It is just one area of the 'visual systems' that affects the creation and reception of a film. As a single element the set houses all other elements which are in fisher folk based film such as characters, props, etc. thus it is important that filmmakers understand the importance of setting in production and overall film design. A film setting not only functions as a backdrop for the film, or a container for the action taking place but it goes further to reflect the themes and mood, style, and emotions of a film as well as indicating the historical or geographical context of the production. Those things audience can find in these films. Films about fisher folk explain about the life of the fisher folk and how they suffer to live. In other words, film setting should communicate to the audience, creating dramatic action, causing tension, and a signifier of meaning.

It is an integral part of the whole production process, it is disheartening to see sets that are poorly convinced, which lack coherence and are given a poor second place in production. Films based on the lives of fisher folk are none too uncommon. Even some of the prominent ones, both past and future. MGR in Padagotti epitomized a fisherman in his days and Kamal's Kadal Meengal will go down in history for the beautiful songs of Isaignanillayaraja. While Ajith portrayed the anguish of fishermen in Citizen, Vijay tried to be their savior in Sura. Jiiva followed it up in his SingamPuli. The latest in the list, Seenu Ramasamys Neerparavai is creating a lot of buzz already and is a story based around the fishing community. Rumour has it that while Dhanush is poised to play a fisherman in his Mariyaan, Vikram is also playing one in the film of David. Maniratnam's most anticipated movie Kadal is set in the coastal region of Tamil Nadu and it is to also revolve around the fishing community.

Films about fisher folk talk about mirror society. Since media are a fundamental aspect part of fisher folk communities lives, they create a great deal of notable interest and discussion. Sociological perspectives request us to consider the capacity from media in our individual continues with (the micro-level) concerning social forces, for instance, economy, legislative issues, and technological development (the full-scale level). Films give society an unprecedented strategy to see vintage style including how to wear period ornament that goes with the articles of clothing; moreover, it provides the overall population a viewpoint on performers portraying wartime heroes, extremists, or gangsters which may influence people human behavior. Further, they convey lots of messages to society, a couple of films for entertainment, some offer the social issues and current issues, and others reflect the social values and norms, a few films motion severe practices, and some of them are for children, so on.

The utilization of films about fisher fork as an instructing asset is reasonable for interdisciplinary education since films speak about innovative conjectures and forecasts on future human culture, helping general society acknowledge what could happen in the future. By using these films in guidance, students can be prepared to understand the significant highlights. A fisher fork film containing a human story is a proper model for the interdisciplinary methodology showed previously.

Films about fisher fork empower individuals to see life fundamentally and can assist individuals with gaining recently required ethics. The films

about fisher folk teaching method is, in this manner, a confrontation of the individual convictions inside the understudy with what is represented on the screen. The connection between communities, film, and politics is fairly a mind-boggling subject. A community assumes a significant function as methods for transferring, material, and ethical values of a country as per the states of the occasions from generation to generation.

### **7.11. Conclusion**

This study has been explored under the title of "Social representation in Tamil Cinema: List of fisher folk and challenges". The key intention of this is to know how the portrayal of fisher folk in Tamil cinema. This study will be a pioneer to understand and analysis the concepts of Tamil cinema about fisher folk. It can be seen that the directors have expressed their opinion and concept about a subject through various strategies. Tamil film directors have exposed several innovative matters, subjects that many people are afraid to talk about, realistic matters that are occurring in fisher folk society, emotional matters like Caste, Religion and Language in fisher folk communities through the Mass Media of film. Despite the Tamil films bring about the life of fisher folk by storytelling, visualization, plot, and the verses that evoke the inner emotion through the characters. Tamil film directors use Cinema as a tool to reflect not only the reality but also to construct the ideology in every point of view. Then, they used films to portray the entertainment theme or political theme to convey the real issue to their audience.

### **7.12 Recommendations**

The researcher has analyzed selected nine films which talk about the fisher folk. The researcher has chosen nine films which talk about fisher folk after released 2000. Future researchers can analyze the theme of fisher folk before released 2000. Further, they can comparatively analyze this theme in films with another language films director.

Future researchers could also consider the audience-level analysis on —Perception of fisher folk ideology by audiences. By screening these films, they can conduct the audience analysis. After the screening, the participants can answer the questionnaires or focus group interview. This study will be a pioneer for an extensive study about fisher folk and impact in the Tamil Film industry. It can be recognized that the impact of the Tamil film on the life of the people and suggests the ways and means carry out a comparative study about the impact of the director's individual ideologies with the comparison of other language directors.

## **References**

- Braswell.M. (2010), 'A picture is worth a thousand words: Teaching peacemaking and justice themes in a film course', *Journal of contemporary Justice Review*, Volume 23, Issue 3.
- Diwakar.S. (2004), *Mass communication: Theory and Practice in the 21st Century*, (p-36), New Delhi: Deep and Deep publication.
- Martin.S. (1979), 'A Narrated Cinema: The Pioneer Story Films of James A. Williamson', *Cinema Journal*, Volume.18, Issue.1, University of Texas Press.
- MotiGokulsing.K, Wimal.D. (1998) "Indian popular cinema, A narrative of cultural change" New Delhi: Deep and Deep publication.
- Perianayagam.J.(2009), *Centre for the Study of Communication and Culture,Tamil Cinema*, (pp 4-5), Salesian Pontifical University, Rome, Volume 28
- Rita.R.(2013), 'Wither Slum dog Millionaire: India's Liberalization and Development Themes in Bollywood Films', *World Journal of Social Sciences*, Volume.3, Issue 2, Pp. 36 – 47.
- Venkataraman.M.(2015), 'Portrayal of the Muslim Community and Islam', *Indian Cinema Post 9/11*, *Journal of Media Studies*, ISSN 18127592.
- Wimmer Roger.D., Dominick Joseph.R. (2003), 'Content analysis', *Mass Media Research*,(pp.140-141) USA: Holly J.Allen.

## CHAPTER 08

### The Impact of Corruption on Sri Lanka's Gross Domestic Product: An Economic Analysis

Vasantha, V.

Discipline of Economics  
Eastern University, Sri Lanka  
Nirovasa2919@gmail.com

Jeyapiratheeba, A.A.

Discipline of Economics  
Eastern University, Sri Lanka.  
ajeyapiratheeba@yahoo.com



#### ஆய்வுச் சுருக்கம்

ஊழழானது பொருளாதாரத்திற்குத் தடையாக அமையும் ஒரு காரணியாகும். எனவேதான் மொத்த உள்நாட்டு உற்பத்தியில் இதனது தாக்கம் குறித்து பரீசீலிக்கப்பட வேண்டியது அவசியமாகும். அந்த வகையில் இவ் ஆய்வின் பிரதான நோக்கமாக நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியில் ஊழலின் தாக்கத்தினை கண்டறிதல் என்பது காணப்படுவதோடு, துணை நோக்கங்களானது, நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியினை தீர்மானிக்கும் ஏனைய பேரினப் பொருளாதார காரணிகள் மற்றும் அவற்றுக்கிடையிலான நீண்டகால மற்றும் காரண காரியத் தொடர்பு ஆகியவற்றைக் கண்டறிதலாகும். மத்திய வங்கி, உலக வங்கி, *Transparency International* ஆகிய வலைத்தளங்களில் இருந்து 2002 - 2018 வரையான வருடாந்த தரவுகள் பெறப்பட்டு அவை ஆய்வில் பயன்படுத்தப்பட்டுள்ளன. இவ் ஆய்வில் நிலையான விலைகளின் அடிப்படையிலான மொத்த உள்நாட்டு உற்பத்தியி சார்ந்த மாறியாகவும், ஊழல் தரச் சுட்டெண், சனத்தொகைப் பருமன் மற்றும் மொத்த மூலதன உருவாக்கம் ஆகியவற்றை சாரா மாறியாகவும் பயன்படுத்தப்பட்டுள்ளன. ஆய்வில் உள்ளடக்கப்பட்ட மாறிகளுக்கான நிலைத்த தன்மைச் சோதனையின் *Augmented Dicky Fuller* முடிவுகளின் படி அனைத்து மாறிகளும் மடக்கை முதலாம் வித்தியாசத்தில் நிலைத்த தன்மைச் செயல்முறையினைப் பின்பற்றுவனவாகக் காணப்படுகின்றன. பன்மடங்கு பிற்செலவுப் பகுப்பாய்வு மூலம் நீண்டகால கூட்டொருங்கிணைவுத் தொடர்பானது ஆராயப்பட்டுள்ளது. கிரேஞ்சர் காரண காரியச் சோதனையின் அடிப்படையில் மாறிகளுக்கு இடையிலான காரண காரியத் தொடர்பானது ஆராயப்பட்டுள்ளது. பகுப்பாய்வு மென்பொருட்களாக *Excel, E-Views 10* ஆகிய மென்பொருட்கள் பயன்படுத்தப்பட்டுள்ளன. அய்வின் முடிவுகளின் படி நீண்ட காலத்தில் 10 வீத பொருண்மை மட்டத்தில் ஊழல் தரச் சுட்டெண்ணும், 1 வீத பொருண்மை மட்டத்தில் சனத்தொகைப் பருமன் மற்றும் மொத்த மூலதன உருவாக்கம் ஆகியவை நேர்க்கணிய ரீதியில் புள்ளிவிபர ரீதியாக பொருளுள்ள வகையில் தாக்கம் செலுத்துகின்றது எனக் கண்டறியப்பட்டுள்ளது. காரண காரியச் சோதனைப் பெறுபேறுகளின் முடிவுகளின் படி, நிலையான விலைகளில் இருந்தான மொத்த உள்நாட்டு உற்பத்தியில் இருந்து 1, 5 வீத பொருண்மை மட்டத்தில் முறையே ஊழல் தரச் சுட்டெண், சனத்தொகைப் பருமன் ஆகியவற்றுக்கு ஒரு வழிக் காரண காரியத் தொடர்பானது காணப்படுகின்றது என அறியப்பட்டுள்ளது. எனவே ஊழல், சனத்தொகைப் பருமன் மற்றும் மொத்த மூலதன உருவாக்கம் ஆகியவற்றின் மூலம் மொத்த உள்நாட்டு உற்பத்தி சார்ந்த கொள்கைத் தீர்மானங்களை மேற்கொள்ள கொள்கை வகுப்பாளர்கள் அக்கறை செலுத்த வேண்டும் எனவும், எதிர்கால ஆய்வுக்காக சில விடயங்களும் பரிந்துரைக்கப்பட்டுள்ளது.

**முதன்மைச் சொற்கள்** - மொத்த உள்நாட்டு உற்பத்தி, ஊழல், பல்மாறி பிற்செலவுப் பகுப்பாய்வு



### 8.1. அறிமுகம்

ஊழல் என்பது ஒரு பொதுவான நிகழ்வாகும். ஆனால் அதனது பேரினப் பொருளாதார விளைவுகள் பற்றி அறியப்படாதவரை ஒப்பீட்டளவில் சிறியதாகக் காணப்படுகின்றது (Andrew Hogdge et al., 2009). ஊழல் என்பது தனியார் இலாபத்திற்காக பொது அதிகாரங்களைத் தவறாகப் பயன்படுத்துதல் ஆகும் (Bardhan, 1997). ஊழல் பற்றி பல பரவலான விவாதங்கள் உள்ளன. ஒரு சாரார், ஊழல் தனியார் முதலீட்டில் எதிர்க்கணிய விளைவினை ஏற்படுத்தக்கூடிய அதேவேளை உற்பத்தி நடவடிக்கைகளின் வருமானத்தையும் குறைக்கும் என்கின்றனர். மேலும் அதிகரித்த சமத்துவம் இன்மைக்கான வாய்ப்பை உருவாக்குவதோடு பொருளாதார பலம் குன்றியவர்களுக்கு உளவியல் விரக்தியையும் உருவாக்கும் என்றும் கூறுகின்றனர். இதனை விட மற்றுமொரு சாரார், பொருளாதாரத்தின் வளர்ச்சி நிலைக்கு ஊழலின் பங்களிப்பு அவசியமானதாகும் எனவும் கூறுகின்றனர்.

கடந்த 17 வருடங்களில் 180 நாடுகளுடனான ஒப்பீட்டில் இலங்கை அதிக ஊழல் இடம்பெறும் நாடாக அடையாளப்படுத்தப்படுகின்றது. 2018 ஆம் ஆண்டில் இலங்கை ஊழல் இடம்பெறும் நாடுகளின் தரவரிசையில் 38 ஆவது நிலையில் காணப்படுகின்றது (Transparency, 2018). ஊழல் தரச் சுட்டெண்ணினை பொறுத்தவரை  $CPI \geq 5$  ஆகக் காணப்படுமாயின் குறைந்தளவான ஊழலினையும்,  $CPI < 5$  ஆகக் காணப்படுமாயின் அதிகளவான ஊழலினையும் விளக்கும்.  $CPI = 0$  ஆயின் ஊழல் உச்ச நிலையில் காணப்படுகின்றது என்பதோடு,  $CPI = 10$  ஆயின் ஊழலற்ற ஓர் ஆரோக்கியமான நிலை காணப்படுகின்றது எனவும் கொள்ளப்படும். இலங்கையில் 2002 - 2018 வரையான 17 வருடங்களில் இந்த ஊழல் தரச் சுட்டெண்ணானது 3.1 - 4 வரையான வீச்சுக்குள் தளம்பலடைந்து காணப்படுகின்றது. ஆகவே ஆய்வுக்கு உட்படுத்தப்பட்ட 17 ஆண்டுகளில் இலங்கையில் உயர்ந்த ஊழலானது காணப்படுகின்றது என முடிவு செய்யலாம். இதனை வரைபடம் 1 இன் மூலம் விளங்கிக் கொள்ளலாம். மேலும் நிலையான விலைகளின் அடிப்படையிலான மொத்த உள்நாட்டு உற்பத்தியானது 2002 - 2018 காலப்பகுதியில் அதிகரித்துச் செல்கின்ற போக்கினைக் கொண்டு காணப்படுகின்றது (Theglobeconomy, 2018). இதனை வரைபடம் 8.1 ஆனது காட்டுகின்றது.

Figure 8.1: இலங்கையின் ஊழல் தரச் சுட்டெண்ணின் போக்கு (2002-2018)

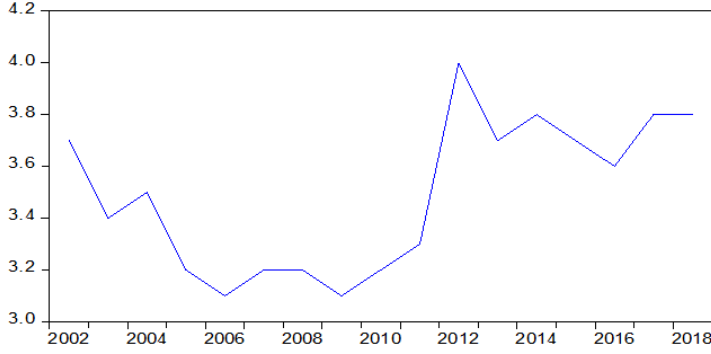
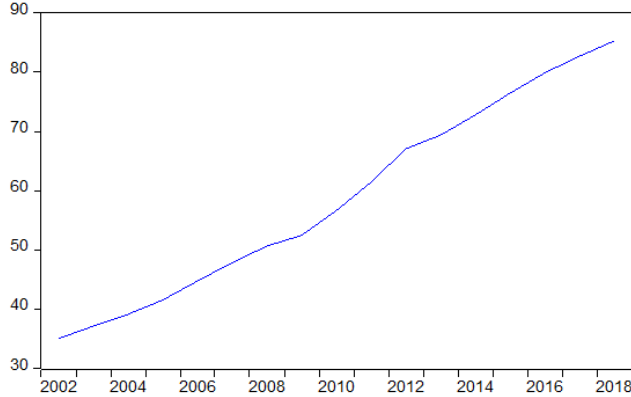


Figure 8.2: இலங்கையின் நிலையான விலைகளின் அடிப்படையிலான மொத்த உள்நாட்டு உற்பத்தியின் போக்கு (2002 - 2018)



மூலம் : ஆய்வாளரால் கணிபிடப்பட்டது.

இந்நிலையில்தான் இலங்கையில், மொத்த உள்நாட்டு உற்பத்தியில் ஊழல் பெறும் முக்கியத்துவமானது ஆராயப்படுகின்றது. இவ்வாய்வானது ஊழலானது மொத்த உள்நாட்டு உற்பத்தியில் ஏற்படுத்தும் தாக்கத்தினைக் கண்டறிதல் என்கின்ற பிரதான நோக்கத்தினையும், பொருளாதார வளர்ச்சியினைத் தீர்மானிக்கும் ஏனைய பேரினப் பொருளாதார மாறிகளைக் கண்டறிதல், ஊழல், ஏனைய பேரினப் பொருளாதார மாறிகள் மற்றும் மொத்த உள்நாட்டு உற்பத்திக்கு இடையிலான நீண்டகாலத் தொடர்பு, காரண காரியத் தொடர்பினைக் கண்டறிதல் ஆகிய துணை நோக்கங்களையும் அடைந்து கொள்ள முயற்சிக்கின்றது.

## 8.2. முன்னைய ஆய்வுகளின் மீளாய்வு

கடந்த காலங்களில் உலகின் பல்வேறு நாடுகளிலும் ஆய்வாளர்களின் ஆய்வுக் கண்ணோட்டமானது ஊழல் சார்ந்த எண்ணக்கருவின் மீது திசை திரும்பியுள்ளது. அந்தவகையில் பொருளாதார வளர்ச்சியில் ஊழலின் தாக்கம், அவற்றுக்கிடையிலான தொடர்பு, வேறு என்ன காரணிகள் மீது ஊழல் செல்வாக்குச் செலுத்துகின்றது எனப் பல ஆய்வுகள் மேற்கொள்ளப்பட்டுள்ளன. அந்தவகையில் முன்னைய ஆய்வுகளின் கருத்தியல்களை நோக்குவோம்.

Andrew et al. (2009) என்பவர்களினால் பொருளாதார வளர்ச்சிக்கும், ஊழலுக்கும் இடையிலான தொடர்பு குறித்து பகுப்பாய்வொன்று மேற்கொள்ளப்பட்டுள்ளது. 1984 - 2005 ஆம் ஆண்டு வரையான காலப்பகுதியில் 81 நாடுகளில் இருந்து மாதிரிகள் ஆய்வுக்குப் பயன்படுத்தப்பட்டுள்ளன. ஊழல் மறைமுகமாக வளர்ச்சியினை பாதிக்கின்ற அதேவேளை அரசாங்க நுகர்வைக் குறைக்கின்றது. பௌதீக மூலதனம், மனித மூலதனம் மற்றும் அரசியல் உறுதியற்ற தன்மை ஆகியவற்றின் மீது ஊழல் தாக்கம் செலுத்துகின்றது. ஆகையால் பொருளாதார வளர்ச்சியின் மீது ஊழலானது எதிர்க்கணியத் தாக்கத்தைக் கொண்டுள்ளது என முடிவு பெறப்பட்டுள்ளது. அதாவது தரமற்ற நிர்வாக நிலைகள் அல்லது அதிகளவு கட்டுப்பாடு கொண்ட பொருளாதாரங்களில் ஊழல் எதிர்க்கணியத் தாக்கத்தை செலுத்துகின்றது எனவும் கண்டறிந்துள்ளனர்.

மேலும் Jia et al. (2007) ஆகியோர்கள் பொருளாதாரக் காரணிகளுக்கும் மற்றும் ஊழலுக்கும் இடையிலான தொடர்பு குறித்து மேற்கொள்ளப்பட்ட ஆய்விலும் கூட நீண்ட காலத்தில் பொருளாதார வளர்ச்சி மற்றும் ஊழல் ஆகியவற்றுக்கு இடையில் எதிர்க்கணிய இணைவானது காணப்படுகின்றது என்ற முடிவு பெறப்பட்டது. மேலும் ஊழலானது வெளிநாட்டு முதலீட்டிலும் தாக்கம் செலுத்துகின்றது எனவும் கண்டறியப்பட்டது. இவர்கள் 1980 - 2005 வரையான ஐக்கிய அமெரிக்காவின் பொருளாதாரப் பகுப்பாய்வில் இருந்து பெற்ற 26 வருடாந்தத் தரவுகளைப் பயன்படுத்தியுள்ளதோடு விபரண ஆய்வு முறையினையும் பயன்படுத்தியுள்ளனர்.

Salma et al. (2015) என்பவர்களினால் -அபிவிருத்தியடைந்து வருகின்ற நாடுகளில் பொருளாதார வளர்ச்சிக்கும் மற்றும் ஊழலுக்கும் இடையிலான தொடர்பு” என்னும் தலைப்பில் ஆய்வொன்று மேற்கொள்ளப்பட்டது. இவர்கள் அபிவிருத்தியடைந்து வரும் நாடுகளில் பொருளாதார வளர்ச்சியில் ஊழலின் செல்வாக்கினையும் மற்றும் உயர்கல்வியைத் தொடர இளைஞர்களை ஊக்கப்படுத்துவதன் மூலமான மனித மூலதன வளர்ச்சியைப் பாதிக்கும் நிலையினையும் ஆராய்ந்தார்கள். 1996 – 2013 வரையான 26 அபிவிருத்தியடைந்து வரும் நாடுகளின் குழுத் தரவுகள் பெறப்பட்டு சாதாரண இழிவு வர்க்க முறை மூலம் முடிவுகள்

பெறப்பட்டுள்ளன. அந்த வகையில் ஊழலானது பொருளாதார வளர்ச்சியின் குறை மதிப்பீட்டுக்கும், மனித மூலதன வளர்ச்சியில் எதிர்மறையான தாக்கத்தையும் ஏற்படுத்துகின்றது என ஆய்வாளர்கள் கண்டறிந்தனர். அபிவிருத்தியடைந்து வரும் நாடுகளில் உயர்ந்த மட்ட ஊழலானது அரசியல் நிறுவனங்களின் குறைந்தளவான ஜனநாயகத்தினால் ஏற்படுவதாகும். எனவே ஊழலுக்கு எதிரான எந்தவொரு கொள்கையும் பொருளாதார வளர்ச்சி மற்றும் கல்விக்கான பொதுச் செலவுகளில் குறிப்பிடத்தக்க தாக்கத்தை ஏற்படுத்தும். எனவே நிறுவன ரீதியான சீர்திருத்தங்களைச் செயற்படுத்தல், பொருளாதார முகவர்களுக்கான விதிமுறைகளை அமுல்படுத்தல் வேண்டும் எனவும் பரிந்துரைத்துள்ளனர்.

“மொத்த உள்நாட்டு உற்பத்தி மற்றும் ஊழல் என்பவற்றுக்கு இடையிலான காரண காரியத் தொடர்பினை ஆராய்தல்” என்னும் தலைப்பின் கீழ்” (2016) ஆய்வொன்றினை மேற்கொண்டிருந்தனர். இவர்கள் ஊழலினை அளவிடுவதற்காக ஊழல் தரச் சுட்டெண்ணினையும் மற்றும் மொத்த உள்நாட்டு உற்பத்தியினையும் ஆய்வுக்காக பயன்படுத்தியுள்ளதோடு 1995 - 2011 வரையான தரவுகளை 3 கட்டங்களாகப் பிரித்தமையும் குறிப்பிடத்தக்கது. 1 ஆவது கட்டத்தில் முதல் 5 வருடங்களையும் (குறுங்காலத் தாக்கம்), கட்டம் 2 இல் அடுத்த 5 வருடங்களையும் (இடைக்கால தாக்கம்), 3 ஆவது கட்டத்தில் கடைசி 5 வருடங்களையும் (நீண்ட காலத் தாக்கம்) பகுத்து நோக்கினர். ஆய்வின் முடிவில் இவ்விரண்டுக்கும் இடையில் 2 ஆவது கட்டத்தில் பலமான இணைவு இருப்பதானது இனங்காணப்பட்டது. ஊழல் நிலைகளில் ஏற்படும் மாற்றம் 10 ஆண்டுகளுக்குப் பிறகு நேர்மாறாக தாக்கம் செலுத்தக்கூடியது என்று குறிப்பிடுகின்றனர். மேலும் இது தொடர்பான ஆய்வுகள் அவசியமானது எனவும் அவர்கள் குறிப்பிட்டுள்ளனர். இவர்கள் இத்தகைய ஆய்வு முடிவுகள் அரசாங்கம், சர்வதேச நிறுவனங்கள் மற்றும் சர்வதேச உதவி வழங்குனர்கள் ஆகியோருக்கு பயனுள்ள வழிகாட்டியாகவும் அமையும் என்றும் முன்மொழிந்துள்ளனர்.

Girijashankar and Shrabani (2012) என்பவர்களினால் வளர்ச்சிக்கும் ஊழலுக்குமான தொடர்பு குறித்து ஆய்வொன்று மேற்கொள்ளப்பட்டுள்ளது. இவர்கள் 1984 - 2009 வரையான காலப்பகுதியில் 146 நாடுகளை மாதிகளாகக் கொண்டு ஆய்வினை மேற்கொண்டுள்ளனர். ஆய்வின் முடிவானது ஊழல் எப்போதும் வளர்ச்சியினை தடுக்காது என்பதுடன் சில நாடுகளுக்கு அது வளர்ச்சியினை மேம்படுத்தும் அதாவது நடுத்தர ஊழலானது பொருளாதார வளர்ச்சியினைத் தூண்டுவதாக அமையும் எனக் கூறுகின்றது.

OdubunmiandAgbelade (2014) ஆகிய ஆய்வாளர்களினால் நைஜீரியாவின் பொருளாதார வளர்ச்சிக்கும், ஊழலுக்கும் இடையிலான தொடர்பினைக்

கண்டறிவதற்கான பகுப்பாய்வொன்றினை மேற்கொண்டிருந்தார்கள். இவர்கள் பொருளாதார வளர்ச்சியின் மீது ஊழலின் செல்வாக்கினையும், அவற்றுக்கிடையிலான தொடர்பினையும் மற்றும் ஊழல் வேறு என்ன காரணிகளின் மீது செல்வாக்குச் செலுத்துகின்றது எனவும் ஆராய்ந்தனர். 1990 – 2010 வரையான இரண்டாம் நிலை காலத் தொடர் தரவுகளைப் பயன்படுத்தியுள்ளதோடு, Johansen cointegration test, ADF unit root test, Granger causality test and Ordinary Least Square methods ஆகிய பொருளியலளவை நுட்ப முறைமைகளையும் பயன்படுத்தி ஆய்வினை மேற்கொண்டிருந்தனர். இவர்கள் தங்களது ஆய்வில் நிலையான விலைகளிலான மொத்த உள்நாட்டு உற்பத்தி, வெளிநாட்டு நேரடி முதலீடு, அரசாங்க செலவீடு, வர்த்தகத்தின் திறந்த நிலை, மொத்த மூலதன உருவாக்கம், ஊழல் தரக் குறிகாட்டி ஆகியவற்றை ஆய்வுக்காகப் பயன்படுத்தியுள்ளனர். 5 பிற்செலவுச் சமன்பாடுகள் ஆய்வின் நோக்கத்தை அடைந்து கொள்ள பயன்படுத்தப்பட்டுள்ளதோடு 5 அவது மாதிரி மூலம் ஆய்வின் முடிவில் ஊழலுக்கும், பொருளாதார வளர்ச்சிக்கும் இடையே பொருளுள்ள வகையில் தாக்கம் உண்டு என்பதும், இது பொருளாதார வளர்ச்சியின் மீது நேர்க்கணியத் தாக்கத்தினைக் கொண்டிருக்கிறது எனவும் கண்டறியப்பட்டது. ஆய்வாளர்கள் நைஜீரிய பொருளாதார மற்றும் நிதிக்குற்ற ஆணையகம், சுயாதீன ஊழல் நடைமுறைகள் மற்றும் தொடர்புடைய குற்றவியல் ஆணையகம் ஆகியன பலப்படுத்தப்பட வேண்டும் எனவும், அவற்றின் விழுமியப் பெறுமதிகளை இளைஞர்கள் புரிந்து கொள்ள வேண்டும் எனவும் பரிந்துரைக்கின்றார்கள்.

Yuanyuan and Jing (2012) என்பவர்களினால் ஊழல் மற்றும் நிறுவன வளர்ச்சி என்னும் இரு எண்ணக்கருக்களைத் தொடர்புபடுத்தி சீனாவில் ஆய்வொன்று மேற்கொள்ளப்பட்டுள்ளது. இவ் ஆய்வானது சீனாவின் உயர்ந்தபட்ச ஊழல், விரைவான பொருளாதார வளர்ச்சி ஆகியவற்றை நிறுவன நிதியான தன்மையின் அடிப்படையில் இரண்டுக்கும் இடையிலான தொடர்பைக் கொண்டும், முன்னரான நிதியியல் வளர்ச்சி பற்றிய பகுப்பாய்வுகளை கொண்டும் விளக்குகின்ற நோக்கத்தினை அடிப்படையாகக் கொண்டதாகும். 34 சீன மாகாணங்களில் 30 மாகாணங்கள் ஆய்வுக்கு உட்படுத்தப்பட்டு 12,212 நிறுவனங்கள் மாதிரிகளாக தெரிவு செய்யப்பட்டு சாதாரண இழிவு வர்க்க முறை மூலம் பகுப்பாய்வு செய்யப்பட்டுள்ளது. இவ்வாய்வின் மூலம் ஊழலானது நிறுவனத்துறையின் வளர்ச்சிக்கு பங்களிப்புச் செய்கின்றது என முடிவு செய்யப்பட்டுள்ளது.

### 8.3. ஆய்வு முறையியல்

#### தரவுப் பகுப்பாய்வு

ஆய்வுக்காக இரண்டாம் நிலைத் தரவுகளானது பயன்படுத்தப்பட்டுள்ளது. இத்தரவுகள் 2002 - 2018 வரையான வருடாந்த தரவுகளாகக்

காணப்படுகின்றது. ஊழலினைக் காட்டும் குறிகாட்டியாக சர்வதேச ரீதியில் 180 நாடுகளினை அடிப்படையாகக் கொண்டு கணிப்பிடப்படும் Corruption Perceptions Index (CPI) பயன்படுத்தப்பட்டுள்ளது. இந்த சுட்டெண்ணானது 0 - 10 என்னும் வீச்சுக்குட்பட்டதான எல்லைப் பெறுமானங்களை அடிப்படையாகக் கொண்ட கணிப்பீட்டுப் பெறுமானங்களே ஆய்வுக்கு உட்படுத்தப்பட்டுள்ளன. இத்தரவானது Transparency International என்னும் வலைத்தளத்தில் இருந்து பெறப்பட்டுள்ளது. மேலும் ஆய்வுக்கு பயன்படுத்தப்பட்டுள்ள ஏனைய மாறிகளான நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தி (பில்லியன் டொலர்), சனத்தொகையின் பருமன் (மில்லியன்) மற்றும் மொத்த மூலதன உருவாக்கம் (பில்லியன் டொலர்) ஆகியவை உலக வங்கி, மத்திய வங்கி ஆகியவற்றின் இணையத்தில் இருந்தும் பெறப்பட்டுள்ளன. இவ் மாறிகள் Odubunmi and Agbelade (2014), Eatza et al. (2012) என்பவர்களின் ஆய்வினை அடிப்படையாகக் கொண்டு ஆய்வுக்கு தெரிவு செய்யப்பட்டுள்ளன. ஆய்வுக்காக பொருளியளவைப் பகுப்பாய்வு மென்பொருளான E-Views 10 மற்றும் புள்ளிவிபரப் பகுப்பாய்வு மென்பொருளான Excel ஆகியவையும் பயன்படுத்தப்பட்டுள்ளது. நிலைத்த தன்மைச் சோதனையினை மேற்கொள்வதற்காக ADF unit root test உம், மாறிகளுக்கு இடையிலான நீண்டகாலத் தொடர்பினைக் கண்டறிந்து கொள்வதற்காக பன்மடங்கு பிற்செலவு மாதிரியுரு அடிப்படையிலான கூட்டொருங்கிணைந்த சோதனை முறையும், காரண காரிணத் தொடர்பினைக் கண்டறிந்து கொள்வதற்காக ஊயரளயடவைல வநளவ உம் பயன்படுத்தப்பட்டுள்ளது.

### மாதிரியுரு

ஆய்வில் இழிவு வர்க்க முயைனைப் பயன்படுத்தி பன்மடங்கு பிற்செலவுச் சமன்பாடு மதிப்பிடப்படுகின்றது. இவ்வாய்வில் கருத்திலெடுக்கப்பட்டுள்ள மாறிகளை அடிப்படையாகக் கொண்ட பிற்செலவு சமன்பாட்டினை வருமாறு வரையறுத்துக் கொள்ளலாம். இச்சமன்பாடானது மடக்கை மடக்கை வடிவத்தில் அமைந்துள்ளது. இதனை கீழ்வரும் சமன்பாடு 1 இன் மூலம் விளங்கிக் கொள்ளலாம்.

$$\ln CGDP_t = \beta_0 + \beta_1 \ln COPI_t + \beta_2 \ln POP_t + \beta_3 \ln GCF_t + \mu_t$$

இங்கு,

$\ln CGDP_t$	-	மடக்கை வடிவிலான நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தி
$\ln COPI_t$	-	மடக்கை வடிவிலான ஊழல் தரச் சுட்டெண்
$\ln POP_t$	-	மடக்கை வடிவிலான சனத்தொகைப் பருமன்
$\ln GCF_t$	-	மடக்கை வடிவிலான மொத்த மூலதன உருவாக்கம்
$\beta_0$	-	இடைவெட்டு
$\beta_1, \beta_2, \beta_3$	-	சரிவுக் குணகங்கள்
$\mu_t$	-	வழு உறுப்பு

#### 8.4. பெறுபேறுகளும் கலந்துரையாடலும்

##### அடிப்படைப் புள்ளிவிபரப் பகுப்பாய்வு

அடிப்படைப் புள்ளிவிபரப் பகுப்பாய்வானது ஆய்வு தொடர்பான செயற்பாட்டுக்கும், விளக்கங்களிற்கும் அடிப்படையாக அமைகின்றது. இது ஆய்வாளர் மற்றும் ஏனையவர்களுக்கு பொருளியலளவை தொடர்பான விளக்கங்களினை முன்வைப்பதற்கு உதவியாகவும் அமையும். கீழ் காட்டப்பட்டுள்ள அட்டவணை 01 இன் படி, நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியின் சராசரிப் பெறுமதியானது 58.87 பில்லியன் டொலர்களாகக் காணப்படுகின்றது. இதன் உயர்ந்தளவான பெறுமதி 85.3 பில்லியன் டொலர்களாகவும், குறைந்தளவான பெறுமதி 35.1 பில்லியன் டொலர்களாகவும் காணப்படுகின்றது. நியம விலகலானது 16.92 ஆகக் காணப்படுகின்றது. எனவே அவதானங்களானது சராசரிப் பெறுமதியில் இருந்து 16.92 இற்கிடையில் விலகிக் காணப்படுகின்றது எனலாம். சராசரியானது இடையத்தினை விட அதிகமாகக் காணப்படுவதனால் இது ஒரு நேர்க்கணிய ஓராயப் பரம்பலாகவும், Kurtosis (1.60) < 3 ஆகக் காணப்படுவதால் தாழ் குடிமமாகவும் காணப்படுகின்றது. அதே வேளை Jargue-Bera நிகழ்தகவுப் பெறுமதியானது 5% பொருண்மை மட்டத்தினை விட 0.49 ஆக உயர்வாகக் காணப்படுவதால் சூனியக் கருதுகோளான, மாறியானது சாதாரண நியம செவ்வண் பரம்பலாகக் காணப்படுகின்றது என்பதனை ஏற்றுக்கொள்ள முடியும்.

ஆனால் ஊழல் தரச் சுட்டெண்ணினை நோக்கும் போது அதன் பெறுபேறுகளானது நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியின் பெறுபேறுகளில் இருந்து சற்று வேறுபட்டவையாகக் காணப்படுகின்றது. சராசரிப் பெறுமதியானது 3.49 ஆகக் காணப்படுகின்றது. எனவே இலங்கையில் அதிக ஊழல் பொதுவாகக் காணப்படுகின்றது என்ற முடிவுக்கு வரக்கூடியதாக இருக்கின்றது. இதனது உயர், குறைந்த பெறுமதிகள் முறையே 4, 3.5 ஆகக் காணப்படுகின்றது. நியம விலகலின் அடிப்படையில் நோக்கும் போது ஊழல் தரச் சுட்டெண் தரவுகளானது அதன் சராசரிப் பெறுமதியில் இருந்து 0.29 வரை விலகிக் காணப்படுகின்றது. மேலும் சராசரியானது இடையத்தினை விட குறைவாகக் காணப்படுவதனால் இது ஒரு எதிர்க்கணிய ஓராயப் பரம்பலாகவும், Kurtosis (1.59) < 3 ஆகக் காணப்படுவதால் தாழ் குடிமமாகவும் காணப்படுகின்றது. மேலும் Jargue-Bera நிகழ்தகவுப் பெறுமதியானது 5% பொருண்மை மட்டத்தினை விட 0.49 ஆக உயர்வாகக் காணப்படுவதால் சூனியக் கருதுகோளான, மாறியானது சாதாரண நியம செவ்வண் பரம்பலாகக் காணப்படுகின்றது என்பதனையும் ஏற்றுக்கொள்ள முடியும். ஏனைய மாறிகளினைப் பொறுத்தவரையில் அனைத்தினதும் Jargue-Bera நிகழ்தகவுப் பெறுமதியானது 5% பொருண்மை மட்டப் பெறுமதியினை விட உயர்வாகக் காணப்படுவதனால் சூனியக் கருதுகோளான, மாறி சாதாரண நியம செவ்வண் பரம்பலாகக் காணப்படுகின்றது என்பதை ஏற்றுக்கொள்ளலாம்.

Table 8.1: அடிப்படைப் புள்ளிவிபரப் பகுப்பாய்வு முடிவுகள்

	CGDP	COPI	GCF	POP
Mean	59.11176	3.488235	16.06882	20.27588
Median	56.70000	3.500000	17.22000	20.26000
Maximum	85.30000	4.000000	26.73000	21.67000
Minimum	35.10000	3.100000	3.850000	19.06000
Std. Dev.	16.92856	0.293433	8.977481	0.779768
Skewness	0.091386	0.088354	-0.110385	0.186133
Kurtosis	1.608328	1.589782	1.278390	2.031120
Jarque-Bera	1.395528	1.430791	2.133983	0.763095
Probability	0.497697	0.488999	0.344042	0.682804
Sum	1004.900	59.30000	273.1700	344.6900
Sum Sq. Dev.	4585.218	1.377647	1289.523	9.728612
Observations	17	17	17	17

மூலம் : ஆய்வாளரால் கணிப்பிடப்பட்டது.

### அலகு மூலச் சோதனை

$$\Delta Y_t = \beta_1 + \beta_t + \delta Y_{t-1} + \sum_{i=1}^m \theta_i \Delta Y_{t-1} + u_t$$

ஆய்வுகளில் காலத்தொடர் தரவுகளைப் பயன்படுத்தும் போது மாறிகளின் நிலைத்த தன்மையானது பரிசோதிக்கப்பட வேண்டியது அவசியமான ஒன்றாகும். அலகு மூலச் சோதனைக்கான சமன்பாட்டு வடிவமானது வருமாறு சமன்பாடு (2) இன் மூலம் காட்டப்பட்டுள்ளது.

இவ்வாய்வினைப் பொறுத்தவரை மாறிகளுக்கான அலகு மூலச் சோதனையை மேற்கொள்ள Augmented Dicky Fuller சோதனை முறையானது பயன்படுத்தப்பட்டுள்ளது. அனைத்து மாறிகளும் மடக்கை வடிவில் காணப்படுகின்றன. ஒவ்வொரு மாறிகளினதும் நிலைத்த தன்மையானது இடைவெட்டு மட்டும் சேர்த்துக்கொள்ளப்பட்டு மடக்கை மட்டம் (Level), முதலாம் வித்தியாசம் (1st Different) ஆகியவற்றில் பரிசோதிக்கப்பட்டுள்ளது. அதன் பெறுபேறுகளை ஒப்பிட்டு அலகுமூலச் சோதனையின் முடிவுகள் சுவாட்ஸ் (Schwarz) தகுதிவிதியின் அடிப்படையில் பெறப்பட்டுள்ளது. இதனை அட்டவணை 8.2 ஆனது விளக்குகின்றது.



Table 8.2: அலகுமூலச் சோதனையின் முடிவுகள்

மாறிகள்	சோதனைப் புள்ளிவிபரம்		நிகழ்தகவுப் பெறுமதி		முடிவு
	மட்டவடிவம்	1ஆம் வித்தியாசம்	மட்டவடிவம்	1ஆம் வித்தியாசம்	
<i>lncgdp</i>	-1.326392	-3.306921	0.5904	0.0333**	I(1)
<i>lncopi</i>	-1.540805	-4.872921	0.4881	0.0019*	I(1)
<i>lnpop</i>	0.987558	-3.101792	0.9939	0.0482**	I(1)
<i>lncgf</i>	-1.894430	-3.386384	0.3262	0.0288**	I(1)

\*5% பொருண்மை மட்டம்

மூலம் : ஆய்வாளரால் கணிபிடப்பட்டது.

அலகு மூலச் சோதனையினைப் பொறுத்தவரையில் சூனியக் கருதுகோளானது மாறி நிலையற்ற செயன்முறையினைக் கொண்டுள்ளது எனவும், மாற்றுக் கருதுகோளானது மாறியானது நிலைத்த தன்மைச் செயன்முறையினைக் கொண்டுள்ளது எனவும் வரையறுக்கப்படுகின்றது. மேற்படி முடிவுகளின்படி, மடக்கை மட்ட வடிவத்தில் மாறிகளின் நிகழ்தகவுப் பெறுமதியானது 5 வீத பொருண்மை மட்டத்தில்  $\alpha (0.05) < p$  ஆகக் காணப்படுவதால் நிலையற்ற தன்மையினைப் பின்பற்றுகின்றன எனலாம். இதனால் மடக்கை மாறிகளுக்கு முதலாம் வித்தியாசமானது மேற்கொள்ளப்பட்டு அவற்றுக்கு அலகு மூலச் சோதனையானது மேற்கொள்ளப்படும் போது ஊழல் தரச் சுட்டெண்ணின் நிகழ்தகவுப் பெறுமதியானது 1 வீத பொருண்மை மட்டத்தில்  $- (0.01) > p (0.0019)$  ஆகக் காணப்படுவதாலும், ஏனைய மாறிகளின் நிகழ்தகவுப் பெறுமதியானது 5 வீத பொருண்மை மட்டத்தில்  $- (0.05) > p$  ஆகக் காணப்படுவதாலும் அவை நிலைத்த தன்மையினைப் பின்பற்றுகின்றது எனலாம். எனவே அனைத்து மாறிகளும் I(1) இல் நிலைத்த தன்மைச் செயன்முறையினைக் கொண்டுள்ளன.

கூட்டொருங்கிணைந்த பிற்செலவுச் சமன்பாட்டு வடிவத்தினது வழுவின்னது அலகு மூலச் சோதனைப் பெறுபேறுகளை கீழ்வரும் அட்டவணை 8.3 காட்டுகின்றது.

Table 8.3: கூட்டொருங்கிணைந்த பிற்செலவுச் சமன்பாட்டு வடிவத்தினது வழுவின்னது அலகு மூலச் சோதனை முடிவுகள்

வழு	மட்டப்பெறுமதி		முடிவு
	சோதனைப் புள்ளிவிபரம்	நிகழ்தகவுப் பெறுமதி	
	-5.7449971	0.0003*	I(0)

\*1% பொருண்மை மட்டம்

மூலம் : ஆய்வாளரால் கணிபிடப்பட்டது.

வழுவினது அலகு மூலச் சோதனைக்கான நிகழ்தகவுப் பெறுமதியானது 1 வீத பொருண்மை மட்டப் பெறுமதியினை விடக் குறைவாகக் காணப்படுவதனால் ( $\alpha > p$ ) மாற்றுக் கருதுகோளை ஏற்றுக்கொள்ளலாம். அந்த வகையில் வழுவானது மட்ட வடிவில்  $I(0)$  நிலைத்த தன்மையினைக் கொண்டிருக்கின்றது என முடிவினைப் பெற்றுக்கொள்ளலாம். எனவே, நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியின் மீது ஊழல் தரச் சுட்டெண், சனத்தெகைப் பருமன் மற்றும் மொத்த மூலதன உருவாக்கம் ஆகியவை கூட்டொருங்கிணைந்த தொடர்பினைக் கொண்டிருக்கின்றன என முடிவு செய்யலாம்.

### கூட்டொருங்கிணைந்த பிற்செலவுப் பகுப்பாய்வு முடிவுகள்

கூட்டொருங்கிணைந்த பிற்செலவுப் பகுப்பாய்வு முடிவுகளை கீழ்வரும் அட்டவணை 8.4 ஆனது காட்டுகின்றது.

Table 8.4 : கூட்டொருங்கிணைந்த பிற்செலவுப் பகுப்பாய்வு முடிவுகள்

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNCOPI	0.134168	0.070721	1.897129	0.0802***
LNPOP	4.513133	0.339986	13.27449	0.0000*
LNGCF	0.175375	0.018266	9.600953	0.0000*
C	-10.15904	0.968532	-10.48911	0.0000*

R-squared - 0.996125

Adjusted R-squared - 0.995231

F-statistic - 1113.922

Prob(F-statistic) - 0.000000

\*1% பொருண்மை மட்டம், \*\*\*10% பொருண்மை மட்டம்  
மூலம் : ஆய்வாளரால் கணிபிடப்பட்டது.

மேற்படி முடிவுகளின் படி, ஏனைய காரணிகள் பூச்சியமாகக் காணப்படும் நிலையில் நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியானது -10.16 என்பதாகக் காணப்படும். ஏனைய காரணிகள் மாறாத நிலையில் ஊழல் தரச் சுட்டெண்ணின் பெறுமதியானது 1 சதவீதத்தினால் அதிகரிக்கும் போது நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியானது 0.13 சதவீதத்தினால் அதிகரிக்கின்றது எனலாம். அதாவது ஊழல் தரச் சுட்டெண்ணின் நிகழ்தகவுப் பெறுமதியானது 10 சதவீத பொருண்மை மட்டத்தில்  $\alpha(0.1) > p(0.08)$  ஆகக் காணப்படுவதனால் பொருளுள்ள வகையில் புள்ளிவிபர ரீதியாக நேர்க்கணிதத் தாக்கத்தினைக் கொண்டுள்ளது எனலாம்.

அதேவேளை ஏனைய காரணிகள் மாறாத நிலையில் சனத்தொகைப் பருமனானது 1 சதவீதத்தினால் அதிகரிக்கும் போது நிலையான

விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியானது 4.51 சதவீதத்தினால் அதிகரிக்கின்றது எனலாம். அதாவது சனத்தொகைப் பருமனின் நிகழ்தகவுப் பெறுமதியானது 1 சதவீத பொருண்மை மட்டத்தில்  $\alpha(0.01) > p(0.0000)$  ஆகக் காணப்படுவதனால் பொருளுள்ள வகையில் புள்ளிவிபர ரீதியாக நேர்க்கணியத் தாக்கத்தினைக் கொண்டுள்ளது எனலாம். அதேபோல் ஏனைய காரணிகள் மாறாத நிலையில் மொத்த மூலதன உருவாக்கமானது 1 சதவீதத்தினால் அதிகரிக்கும் போது நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியானது 0.17 சதவீதத்தினால் அதிகரிக்கின்றது எனலாம். அதாவது மொத்த மூலதன உருவாக்கத்தின் நிகழ்தகவுப் பெறுமதியானது 1 சதவீத பொருண்மை மட்டத்தில்  $\alpha(0.01) > p(0.0000)$  ஆகக் காணப்படுவதனால் பொருளுள்ள வகையில் புள்ளிவிபர ரீதியாக நேர்க்கணியத் தாக்கத்தினைக் கொண்டுள்ளது எனலாம்.

மதிப்பிடப்பட்ட மாதிரியுருவின்  $R^2$  0.996125 ஆகக் காணப்படுகின்றது. எனவே மாதிரியுருவில் உள்ளடக்கப்பட்ட மாறிகள் அனைத்தும் 99 சதவீதம் மாதிரியினை விளங்கப்படுத்துகின்றது. ஏனைய 1 வீதமானவை வழுவினால் விளக்கப்படுகின்றது எனலாம். மேலும் சரிப்படுத்தப்பட்ட  $R^2$  0.995231 பெறுமதியும்  $R^2$  விடக் குறைவாக உள்ளதோடு அதற்கு அண்மித்த பெறுமதியினையும் கொண்டு காணப்படுகின்றது. எனவே மாதிரியுருவானது பொருத்தப்பாடுடையதாகக் காணப்படுகின்றது எனலாம். ஒட்டு மொத்த நிகழ்தகவுப் பெறுமதியானது 5 வீத பொருண்மை மட்டத்தினை விட குறைவாகக் காணப்படுவதனால் மாதிரியுருவில் உள்ளடக்கப்பட்ட மாறிகள் அனைத்தும் கூட்டான வகையில் நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியில் பொருளுள்ள வகையில் புள்ளிவிபர ரீதியாக தாக்கம் செலுத்துகின்றன எனலாம்.

### காரண காரியச் சோதனையின் முடிவுகள்

இவ் ஆய்வில் பயன்படுத்தப்பட்டுள்ள சார்ந்த மாறிகள் மற்றும் சாரா மாறி என்பனவற்றுக்கு இடையிலான காரண காரியத் தொடர்பு குறித்த சோதனை முடிவுகளானது கீழ்வரும் அட்டவணை 8.5 இல் காட்டப்பட்டுள்ளது.

**Table 8.5:** கிரேஞ்சர் காரண காரியச் சோதனையின் முடிவுகள்

Null Hypothesis:	Obs	F-Statistic	Prob.	Granger Causality
DLNCOPI does not Granger Cause DLNCGDP	15	1.25269	0.3270	No
DLNCGDP does not Granger Cause DLNCOPI		12.2033	0.0021*	Yes
DLNPOP does not Granger Cause DLNCGDP	15	0.14884	0.8636	No
DLNCGDP does not Granger Cause DLNPOP		4.24005	0.0464**	Yes

\*1% பொருண்மை மட்டம், \*\*5% பொருண்மை மட்டம்  
 மூலம் : ஆய்வாளரால் கணிப்பிடப்பட்டது.

முடிவுகளின் படி, முதலாம் வித்தியாச மடக்கை அடிப்படையிலான ஊழல் தரச் சுட்டெண்ணானது முதலாம் வித்தியாச மடக்கை அடிப்படையிலான நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியின் மீது காரண காரியத் தொடர்பினைக் கொண்டிருக்கவில்லை என்னும் சூனியக் கருதுகோளானது நிராகரிக்கப்படுகின்றது. எனவே முதலாம் வித்தியாச மடக்கை அடிப்படையிலான ஊழல் தரச் சுட்டெண்ணானது முதலாம் வித்தியாச மடக்கை அடிப்படையிலான நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியின் மீது காரண காரியத் தொடர்பினைக் கொண்டிருக்கின்றது என்னும் மாற்றுக் கருதுகோளானது 1 வீத பொருண்மை மட்டத்தில் ஏற்றுக்கொள்ளப்படுகின்றது.

அதேபோல் முதலாம் வித்தியாச மடக்கை அடிப்படையிலான சனத்தொகைப் பருமனானது முதலாம் வித்தியாச மடக்கை அடிப்படையிலான நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியின் மீது காரண காரியத் தொடர்பினைக் கொண்டிருக்கவில்லை என்னும் சூனியக் கருதுகோளானது நிராகரிக்கப்படுகின்றது. எனவே முதலாம் வித்தியாச மடக்கை அடிப்படையிலான சனத்தொகைப் பருமனானது முதலாம் வித்தியாச மடக்கை அடிப்படையிலான நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியின் மீது காரண காரியத் தொடர்பினைக் கொண்டிருக்கின்றது என்னும் மாற்றுக் கருதுகோளானது 5 வீத பொருண்மை மட்டத்தில் ஏற்றுக்கொள்ளப்படுகின்றது. எனவே நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியில் இருந்து ஊழல் தரச் சுட்டெண்ணுக்கும், சனத்தொகைப் பருமனுக்கும் ஒரு வழி காரண காரியத் தொடர்பானது காணப்படுகின்றது எனலாம்.

### உறுதிப்படுத்தல் சோதனைகளின் முடிவுகள்

மதிப்பிடப்பட்ட பன்மடங்கு பிற்செலவு மாதிரியுருவினது பொருத்தப்பாட்டுத் தன்மையினை நிரூபிக்கக்கூடிய சில சோதனை முடிவுகளின் பெறுபெறுகளை கீழ்வரும் அட்டவணை 8.6 ஆனது காட்டுகின்றது.

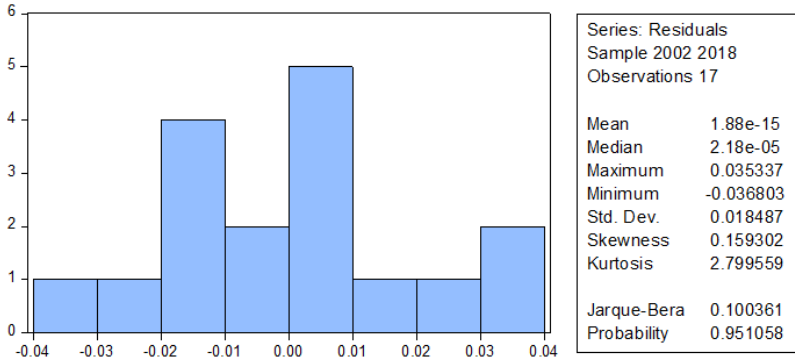
Table 8. 6: உறுதிப்படுத்தல் சோதனைகளின் முடிவுகள்

சோதனைகள்	சோதனை முறை	நிகழ்தகவுப் பெறுமதி	முடிவு
தன்னிணைவுப் பிரச்சினை	Breusch-Godfrey Serial Correlation LM Test:	0.0818	$H_0$ : ஏற்றுக்கொள்ளப்படும் - தன்னிணைவுப் பிரச்சினை இல்லை
பல்பரவல்தன்மை பிரச்சினை	Heteroskedasticity Test: ARCH	0.8255	$H_0$ : ஏற்றுக்கொள்ளப்படும் - வழமாற்றற்றன் ஒரினத்தன்மை வாய்ந்தது
நீக்கப்பட்ட மாறிகளுக்கான சோதனை	Ramsey RESET Test	0.7711	$H_0$ : ஏற்றுக்கொள்ளப்படும் - நீக்கப்பட்ட மாறிகள் இல்லை

முலம் : ஆய்வாளரால் கணிபிடப்பட்டது.

மேற்படி முடிவுகளின் படி, 5 வீத பொருண்மை மட்டத்தில் மதிப்பிடப்பட்ட பன்மடங்கு பிற்செலவு மாதிரியுருவானது தன்னிணைவுப் பிரச்சினை இல்லாத, பல்பரவல் தன்மைப் பிரச்சினை இல்லாத மற்றும் நீக்கப்பட்ட மாறிகள் இல்லாத ஒரு சிறந்த மாதிரியுருவாகக் காணப்படுகின்றது. இது மட்டுமல்லாது மாறிகளினது செவ்வண் தன்மை குறித்த சோதனையின் பெறுபேற்றினை கீழ்வரும் வரைபடம் 8.3 ஆனது காட்டுகின்றது.

Figure 8.3: செவ்வண் பரம்பல் குறித்த சோதனை முடிவு

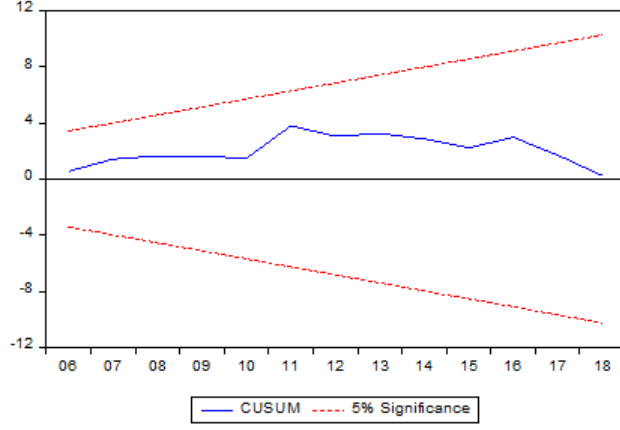


மூலம் : ஆய்வாளரால் கணிபிடப்பட்டது.

முடிவுகளின் படி, Jarque-Bera பெறுமதியானது 3 இனை விடக் குறைவானதாகவும், அதன் நிகழ்தகவுப் பெறுமதியானது 5 வீத பொருண்மை மட்டப் பெறுமதியினை விட உயர்வானதாக 0.95 என்பதாகவும் காணப்படுவதனால் மாறிகள் நியம செவ்வண்ணாகப் பரம்பியுள்ளது எனலாம். இது தவிர மாதிரி உருவின் ஓட்டு மொத்த உறுதித்தன்மையானது CUSM மற்றும் CUSUM of Squares ஆகிய சோதனைகள் மூலம் பரிசோதிக்கப்பட்டுள்ளது. இச்சோதனையின் பெறுபேறுகள் முறையே வரைபடம் 4, வரைபடம் 5 மூலம் காட்டப்பட்டுள்ளது.

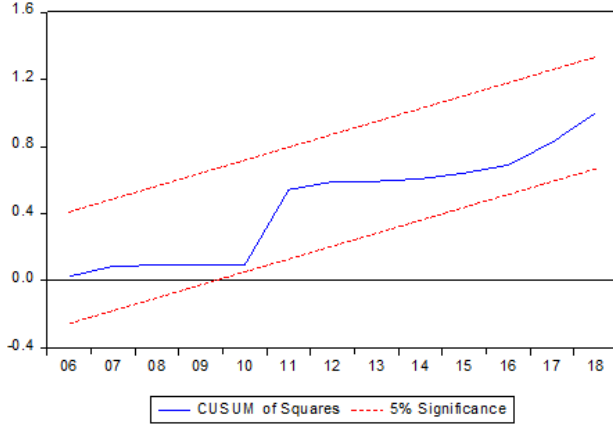
கீழுள்ள வரைபடத்தில் காட்டப்பட்டுள்ள சிவப்புக் கோடானது 95 வீத மேல் எல்லை, கீழ் எல்லை நம்பிக்கையாயிடை மட்டத்தினை விளக்கி நிற்கின்றது. நீலக் கோடானது வழுவினை குறிப்பிடுகின்றது. எனவே 95 வீத நம்பிக்கையாயிடைப் பெறுமதிக்குள் வழுப்பெறுமதியானது வருவதனால் மதிப்பிடப்பட்ட மாதிரியுருவானது உறுதித்தன்மை வாய்ந்தது எனலாம்.

Figure 8.4: CUSM பெறுபேற்று வரைபடம்



மூலம் : ஆய்வாளரால் கணிபிடப்பட்டது.

Figure 8.5: CUSM of Squares பெறுபேற்று வரைபடம்



மூலம் : ஆய்வாளரால் கணிபிடப்பட்டது.

நீலக் கோடானது வழி வர்க்கத்தினைக் குறிப்பிடுகின்றது. எனவே 95 வீத நம்பிக்கையாயிடைப் பெறுமதிக்குள் வர்க்கப் பெறுமதிகளானது வருவதனால் மதிப்பிடப்பட்ட மாதிரியுருவானது உறுதித்தன்மை வாய்ந்தது எனலாம்.

### 8.5. முடிவுகள்

இவ்வாய்வானது தனது பிரதான மற்றும் துணை நோக்கங்களை அடைந்து கொண்டுள்ளமை குறிப்பிடத்தக்கது. இலங்கையினைப் பொறுத்தவரை ஊழலானது பொருளாதார வளர்ச்சி தொடர்பில் சாதகமான விளைவுகளை

வழங்கக் கூடிய ஒன்றாகக் காணப்படுகின்றது. இது தவிர சனத்தொகைப் பருமன் மற்றும் மொத்த மூலதன உருவாக்கம் ஆகியவற்றின் அதிகரிப்பும் நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியினை அதிகரிக்கின்றதாகவே காணப்படுகின்றது. ஆத்தோடு, நிலையான விலைகளினாலான மொத்த உள்நாட்டு உற்பத்தியில் இருந்து ஊழல் தரச் சுட்டெண்ணுக்கும், சனத்தொகைப் பருமனுக்கும் ஒரு வழி காரண காரியத் தொடர்பானது நிலவுகின்றது என்பதும் கண்டறியப்பட்டுள்ளது. எனவேதான் கொள்கை வகுப்பாளர்கள், பொருளியலாளர்கள் ஆகியோர் பொருளாதார வளர்ச்சி குறித்த கொள்கைத் தீர்மானங்களில் இந்த மாறிகள் கொண்டுள்ள செல்வாக்கின் அடிப்படைகளைக் கவனத்தில் கொள்வது சாலச்சிறந்ததாக அமையும்.

### 8.6. பரிந்துரைகள்

முக்கியமான ஒரு ஆய்வுப் பொருளாகக் காணப்படுகின்ற இத்தலைப்போடு தொடர்புடைய விரிவான ஆய்வுகள் எதிர்காலங்களில் மேற்கொள்ளப்பட வேண்டும் என்பதோடு, மொத்த உள்நாட்டு உற்பத்தி சார்ந்த எண்ணக்கருவில் ஊழல் சார்ந்த கொள்கைத் தீர்மானங்களை பொருளாதார வளர்ச்சி பற்றிய நோக்கோடு வகுத்துக் கொள்ள இவ்வாய்வு அவசியமாக அமையும் என்பதும் குறிப்பிடத்தக்கது. இவ்வாய்வினைப் பொறுத்தவரையில் 17 வருட அவதானங்களே பகுப்பாய்வுக்கு உட்புகுத்தப்பட்டுள்ளன என்பதோடு, 3 சாரா மாறிகள் மட்டுமேதான் கருத்தில் கொள்ளப்பட்டுள்ளன. எனவே இத்தலைப்புக்களில் எதிர்காலங்களில் ஆய்வுகளை மேற்கொள்ளும் ஆய்வாளர்கள் காலப்பகுதியினை அதிகரித்து, வேறுபட்ட பேரினப் பொருளாதார மாறிகளையும் அடையாளங் காண்பது மேலும் பொருத்தமான முடிவுகளைப் பெற வழிவகுக்கும். இதை விட வேறுபட்ட முறையியல்களினைப் பயன்படுத்தியும், வேறுபட்ட பதிலீட்டு மாறிகளைப் பயன்படுத்தியும் ஆய்வினை மேற்கொள்வது சிறப்பாக அமையும்.

### References

- Bardhan, P. (1997). Corruption and development: a review of issues. *Journal of Economic Literature*, 35, 1320-1346.
- Girijashankar, M. and Shrabani, S. (2012). Corruption and growth: a complex relationship. The 8 th Annual Conference on Economic Growth and Development, 1.
- Salma H.F. and Amira Lachhab. (2015). Relationship between corruption and economic growth: the case of developing countries. *International Journal of Economics. Commerce and management*, 3(9), 862 – 875.
- Eatzaz, A., Muhammad, A.U. and Muhammad, I.A. (2012). Does Curruption Affect Economic Growth?. *Latin American Journal of Economics*, 49(2), 277-305.

- Yuanyuan, W. and Jing, Y. (2012). Corruption and firm growth: Evidence from China. *China Economic Review*, 23(2), 415 – 433.
- Andrew, H., Sriram Shankar, D.S., Prasada Rao, and Alan Duhs. (2009). Exploring the links between corruption and growth. School of Economics Discussion Paper. 392, Retrieved from: <https://www.uq.edu.au/economics/abstract/392.pdf>.
- Danilo, L., Mladen Radisic and Dusan Dobromirov. (2016). Causality between corruption and the level of GDP. *Economic Research-Ekonomska Istrazivanja*, 360 – 379. Retrieved from: <https://doi.org/10.1080/1331677X.2016.1169701>.
- Jia, S., Plamen Ch Ivanov, Boris Podobnik, H. and Eugene Stanley. (2007). Quantitative relations between corruption and economic factors, 1 - 8. Retrieved from: <http://www.phy.pmf.unizg.hr/~bp/fulltext.pdf>.
- Odubunmi, A.S. and Agbelade, L.I. (2014). Corruption and Economic Growth in Nigeria. *Journal of Economics and Sustainable Development*, 45 – 56. Retrieved from: <https://www.iiste.org/>.

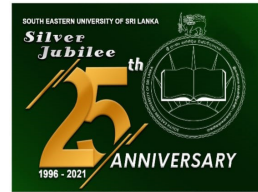


## CHAPTER 09

### Denim and youth: understanding Sri Lankan youth preference for denim garments

**PVM Karunaratne**

Fashion Design & Product Development  
Department of Textile and Apparel Engineering  
Faculty of Engineering  
University of Moratuwa.  
virajinik@uom.lk



**J K Kulasekara,**

Fashion Design & Product Development  
Department of Textile and Apparel Engineering  
Faculty of Engineering  
University of Moratuwa.

#### Abstract

*Denim is considered as one of the most popular textiles all over the world even though it has been taken as the textile which has achieved more negative ratings than others. Therefore, it is essential to have innovations in the denim fabric and needs to address consumer demands. The present study is bridging the link between consumers and designers who create designs by using denim fabrics. The objective of the research seeks to study the innovative developments of denim in the local market, explore the consumer awareness of new developments, and understand the properties of denim which has led the consumers to dissatisfaction and the new developments that they demand in the local market. The factors affecting the consumer preference for purchasing denim garments were also analyzed. The study is based on structured interviews which were carried out with 6 denim wear designers of popular denim brands in the local market and distributed closed ended questionnaires to the female consumers. The sample size is about 183 which are both male and female consumers in the age of 15-24 years. It was revealed that most of the consumers were not able to purchase their preferred denim garments. The research reveals that consumer awareness about the innovations of denim garments had a strong impact on their buying behavior. Most of the consumers are not fully satisfied about their denim garments and they seek new developments. There were several product dominated factors identified which affected the consumer decision of purchasing denim garments.*

**Keywords:** Denim, Sri Lankan Consumer, Youth, Preference

### **9.1. Introduction**

Denim is known as fabric which has evolved from workers' wear to the catwalk (Card, Moore, & Ankeny, 2006). According to Clouse (2018), the global denim market is projected to reach \$56 billion by 2018. NPD group's published statistics stated that, US consumers spent approximately \$16 billion on denim in 2011 (Lifestyle cottoninc monitor). As Miller and Woodward (2007) said in their "Manifesto for a study of denim", the proportion of persons wearing denim out of the first hundred to pass by on a random street in London, Rio, Manila, etc. ranged from 34% to 64%. Denim is considered as the most preferred clothing of today's youth (Ahmed, 2016). UN has been defined a youth as persons who are between the ages of 15 and 24 years (YOUTH\_Definition\_2013-1-23.docx). The CEO – Denims, Arvind Ltd, Aamir Akhtar has stated that denim is originally a product for youth (Shah, 2018). The usage of denim in the world has increased in terms of consumer preference and the growth has been influenced mainly by the usage of denim by the youth (Ians, 2018). In India 26% of youth are consuming denim garments (Indiaretailing Bureau, 2015). Denim is now established as a high fashion fabric and one of the most preferable fabrics of youth (Memon, 2014). Dio Kurazawa director of denim at WGSN (Worth Global Style Network) stated that "consumers under age 25 are the biggest proponents of wearing denim" and it is a percentage of 74% (Cotton Incorporated Lifestyle Monitor Survey). According to that factor, it can be assumed that the youth, between the ages of 15 – 24 are the most powerful consumers in the denim market today.

### **9.2. Research problem, objectives and significance of the study**

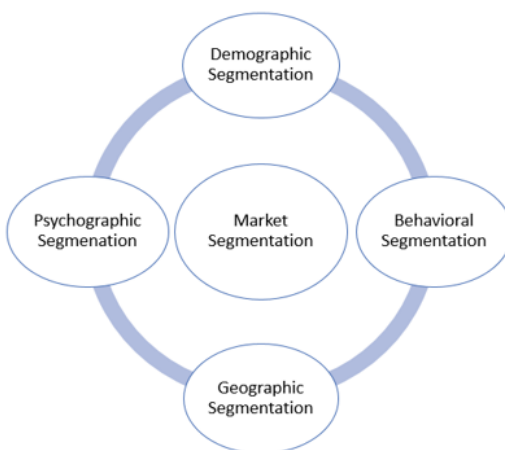
According to the consumer feedback for cotton incorporated fabrics it is revealed that the dissatisfaction for clothing quality for the denim garments are higher, compared to the other textiles. As an example, only denim jeans have received 30% of negative customer ratings which are highlighted among other apparel products. Consumers reviewed denim jeans negatively by mentioning its poor quality and is about 25%, consumer disappointment are about 28%, and the level of dissatisfaction is about 28% and it is significantly visible in returning denim garments. Considering the product attributes with their past experiences, consumers reviewed denim garments negatively by mentioning fading (23%), shrinking (22%), stretch recovery (19%), wear and tear (16%), and odor (10%). According to the reports of the NPD group, one out of every 4 consumers have mentioned that they were not able to find denim garments which they prefer most. So, the NPD group has suggested to the

designers to bridge the gap between consumers and the product range and must rejuvenate the denim market by considering the consumer needs (Lifestyle cottoninc monitor). Accordingly, denim garment manufacturers may be interested in producing according to consumer needs (Card, Moore, & Ankeny, 2006). Denim fabric is recognized as the most popular and most dissatisfied textile of the consumers. The same problem also can be seen in the Sri Lankan market too. Due to a lack of research carried out so far, this research will be benefitted to denim manufacturers in adding value to both denim wear designers and consumers for bridge three parties together. The objectives of the study is to understand the new developments of denim in the local market and explore the consumer awareness of new developments, exploring the properties of denim which has led the consumers to the dissatisfaction towards denim garments and exploring the factors affecting the consumer preference of youth on purchasing denim garments in Sri Lanka. Despite the popularity of denim jeans among the youth of Sri Lanka, the research seeks to reveal how designers identify consumers' wants and dislikes that are pertaining to denim garments in the context of the current market.

### 9.3. Literature review

Lin (2002) identified the segmentation of the market in order to identify its specific needs. Segmentation of marketing is based on consumer profiles considering the demographic, psychographic, geographic and behavioral factors of the consumers. (Kotler, 1997).

Figure 9.1. : Market segmentation of consumer

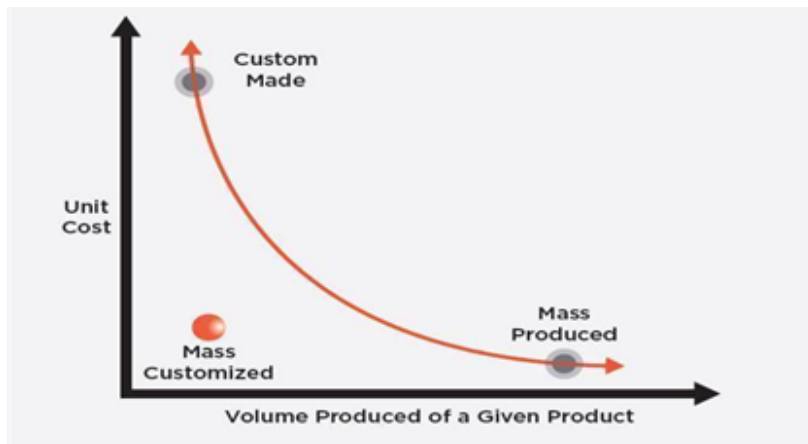


Today marketers do not engage in making broad demographic and psychographic profiles of consumers. Instead, they are looking for personalized marketing and mass customization (Wind & Rangaswamy, 2001).

### **Mass customization**

The garment industry is mass customization oriented which cares about the fit, functionality and aesthetic aspect of a garment that can be given to a low price (Molfino, 2009).

Figure 9.2: Position of mass customization on a volume and cost



According to the findings of Molfino, from the 90's to today, the production trend has been established as "mass customization". With the rise of the internet and other media, consumers have become prosumers; "consumers who are also producers" (Scammell, 2003). He stated that consumers are actively engaged in productions by their feedback and buying behaviors. For mass customization, producers should be well knowledgeable about consumers' expectations. According to Castelo matching of consumer expectations and characteristics of clothing has become a greater stress to garment firms. According to him, consumers consider the attributes of the garments before deciding to buy it. So, understanding what consumers look for when buying a garment is very much important (Castelo & Cabral, 2018).

### **Factors Affecting the Buying Behavior of Consumers**

Producers want to produce items that people are willing to buy and this technique is aimed for that purpose mainly (Sanad, 2016). Many scholars have identified the key factors affecting the purchase decision

of consumers and their behaviors (Sanad, 2016). Soloman (2013) has stated that consumer behavior is about what an individual or a group selects to purchase for satisfying their needs and desires. It has also been identified that consumer behavior and preference depend on three factors: Pre-purchase issues, purchase issues and post purchase issues (Soloman, 2013). Besides, consumer preference of a certain product will be mainly based on the satisfaction gained by comparing the expectation of the consumer before purchase and experience of consumer about performance after purchase (Antonio et al., 2016). According to the above definitions it can be understood that the preference of consumers is affected by pre-purchase factors and post purchase factors.

These factors or the considerations of the consumers have been divided into two as consumer dominated variables and market dominated variables (Sanad, 2016). Further he stated that the consumer dominated variables included the different factors like cultural, social, psychological, personal and environmental aspects. The market dominated variables include product characteristics, price, and the brand.

### **Consumer dominated factors**

Consumer dominated factors are known as, personal characteristics, cultural influences, psychological fields, social aspects, age, and environmental factors (Sanad, 2016). Furthermore, gender also influences the consumer buying decisions (Park, 1997). According to the previous studies personal characteristics are included mainly in an individual's behavior and knowledge which will lead them to a certain buying preference (Marcoux et., al 1997). Marcoux states that norms affect under the category of cultural influences and one's reference group and social status affect under social influences for consumers' buying decisions. But it has been already found that the direct experience of their own has been more trustworthy than family or peers' experiences. Attitudes are a major factor which comes under psychological characteristics of consumers (Dickson, 2000). According to Dickson (2000) the product criteria is more influential than consumer criteria when consumer preference is taken into consideration.

### **Product dominated factors**

Product dominated factors describe the characteristics of the product including the brand and the price in addition. Studies have proved that those product attributes have been divided into two namely as intrinsic and extrinsic cues (Rahman, 2012).

### **Intrinsic cues**

Rahman (2012) identified two intrinsic cues such as visual inputs and tactile inputs. He has stated that visual inputs or visual characteristics are appearance and aesthetic characteristics of a product. According to Sanad (Sanad, 2016) visual properties are the design and appearance of the product which has a great influence on consumers' preference. Rahman further explained that visual attributes such as colour, style and shape would arouse consumer emotions towards the product. It has been also researched that if a consumer got better experience in aesthetic observation of a product, they would pretend to further examine and purchase that product (Eckman, 1990). Tactile stimulation can be known as the sense of touch which is in contrast to vision, smell and hearing. Rahman (Rahman, 2011) stated, tactile feeling was highly influenced in relation to apparel purchases. Touching is one of the ways that can increase consumers' satisfaction towards a product evaluation (Peck, 2003). Tactile inputs are used to judge about the product attributes like hand feel. As an example, the consumers might look for the thickness, smoothness, stiffness or softness of the fabric (Rahman, 2012). It has been found that the consumers are unsatisfied with buying apparel products online as they could not feel the textile (Peck, 2003). Consumers use the method touch and feel to judge the physical and mechanical properties of a textile as well. The combining of past experience with the satisfaction of tactile inputs has highly influenced consumer preference (Jin, 2009). Easy caring, durability, comfort and performance are some of those characteristics' that consumers will consider (Sanad, 2016). Textile Today (2017) reported that consumers will judge the fabric through their past experiences for properties like stretch recovery, colour fastening and shrinking.

### **Extrinsic cues**

Extrinsic cues are lower level cues that can be changed without changing the physical product such as price, brand name, symbolic meaning and country of origin (Rahman, 2012). According to Rahman's findings the importance of brand name is challenged and questioned in today's market. Sanad (2016) has identified that country of origin is an important part of the overall product image. Country of origin has influenced both positively and negatively for consumer's decision-making processes (Ismail et al., 2012). According to their findings COO has played an important role along with the other attributes but as Gipson and Francis argued COO has lower influence when compared to other attributes. Though it has a lower influence, they have identified consumers who

looked for the country of origin of the brand to know whether the product was imported or made in their own country (Gipson, 1991). Other than those two attributes for fashion products, symbolic meaning has become highly important. It has been proved that designers can add value to the product and influence consumers in a unique way other than physical attributes (Upadhyay and Ambavale, 2013).

## **9.4. Materials and methods**

### **The Study Context**

The UN has described youth as persons between the ages of 15 and 24 years (UNDP Report, 2017). According to the data collected within Sri Lanka, Sri Lanka has a distributive population in various age ranges including a considerable amount of young people. According to the UN Reports and Department of Census and Statistics, Sri Lanka, the addition of both male and female youth population in 2017 is 4.64 million which occupies a 23.2% of the total population of the country (Department of Census and Statistics, 2017). 7.2% of that young population lives within the suburbs of Colombo, which directly affects the sales of the clothing in Colombo district. The research is enclosed with qualitative and quantitative research methods, as this approach provides greater insight into the problem and enhances the integrity of findings. First hand data were gathered based on 4 major denim manufacturers in Sri Lanka. These denim manufacturers are providing denim clothing to the popular fashion outlets among the focused groups situated in Colombo.

### **Methods**

In this study, there were 3 data collection methods utilized to collect the primary data, from the market observation, questionnaire survey and interviews. To identify the view of consumers, behavior of consumers when buying and the regular buying pattern of the consumer on denim apparel, a closed-ended questionnaire survey was conducted with a selection of 150 of the youth group living in Colombo suburb areas. Semi-structured interviews with fashion designers who work for most popular denim brands in Sri Lanka, in order to gain an understanding about the denim market in Sri Lanka and the new innovations in denim overcome the consumer problems identified in the past seasons by them. Along with those, a literature survey was carried out using the published research articles in order to find out how consumer analysis is done recently and the factors that are affecting the consumer buying decisions and preferences regarding denim garments. Moreover, the negative properties of denim textile that had led the consumers to

dissatisfaction was found out. The innovative developments of denim fabric in the world were referred to check those in the local market. As secondary research resources, journal articles, web articles and books were used. Reference on marketing strategy, sales and survey reports of brand A was done in order to get knowledge about denim consumers in Sri Lanka, their preferences in denim garments and their feedback on denim garments that are already available in the market.

### **Expert interviews**

Structured interviews were carried out with designers of well-known denim brands in Sri Lanka in order to identify how well they conduct consumer analysis and consumer feedback, considering new developments which are introduced, and type of products they focused on with denim textile.

Table 9.1: Selection of interviewees

Interviewee	Reason for selecting
Ladies / Gents Wear Designers – Brand A	Identified as a well-known denim brand which caters to the local market mainly focusing on denim garments.
Senior Designer – Brand B	Identified as a brand which caters to the local market with denim garments.
Denim Wear Designer – Brand C	Identified as a brand which is frequently adding denim garments to their product line.
Design Managers – Manufacturer D	Working for the popular denim brands.

### **Focus groups**

The sequence of shop visits was made to fashion outlets offering denim fashion apparel in the Colombo area during the month of August and October 2018. The purpose of the visit was to observe the available denim garments and search for youth consumer preferences for denim garments. Primary data was collected by in-depth observations carried out during the shop visits within Colombo suburbs to identify the availability of major denim brands in the Sri Lankan market, the product categories of denim and the new developments that have been released to the market over traditional denim in 2018. Moreover, consumer buying behavior and denim garment preference were also observed. The next, conducted a closed-ended questionnaire survey focused on identifying the perception of the consumers on denim fashion in the



market. The questionnaire consisted of demographic information and day- to-day shopping behavior. Under them their personal preferences for denim fashions on different factors and categories were analyzed. Colombo and its vicinity were considered ideal settings for capturing denim apparel fashion trend followers. It was assumed that the total population of youth age 15 and 24 years is 4,640,000 (Performance Report of the Department of Census and Statistics, 2017). Accordingly, there were 170,380 female youth and 163,700 male youth lived in Colombo and suburbs. Among them 150 both male 65 and female 85 consumers were given the questionnaire and nearly 100 respondents were answered. It is important to note that the sample size used in this analysis is consistent with the sample sizes previously used in other related studies (Rahman, 2012). The consumer survey was carried out using that quantitative questionnaire to find out the preference of denim garments, which negative qualities of denim have affected mostly on their problems, their knowledge about new developments, factors that mostly affect their purchasing decision and their future expectations on denim. The research was done under considering 6 Sri Lankan denim brands, namely brand A, B, C, D, E, and F.

### **9.5. Result & discussion**

Some of the innovative developments over traditional denim in the world could be visible in the local market. DWR denim by Brand A was observed in the market as a popular product. Spandex mixed denim and light weight denim (chambray) could be found in almost all the outlets under every brand. Though polyester and nylon mixed denim were found in small quantities, designers of local brands (Brand A and Brand C) stated that doing designs with those denims was not much pretended by them. Knitted denim was observed as skinny fit jeans and jeggings. Checked and striped patterned denim, which was washed down to several blue and grey shades could be visible mostly as top wear and looser jeans. As colored denims, dyed PFD was the most popular fabric while over dyed and tinted denim were found in small quantities.

Figure 9. 3: New developments of denim in the local market

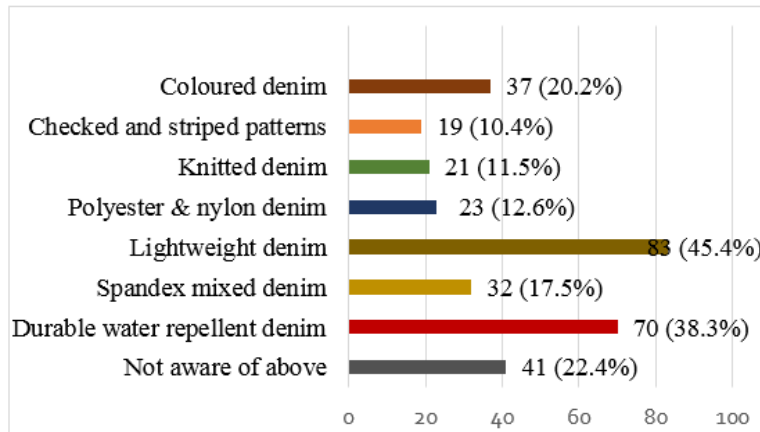


Figure 9.3 shows the awareness level of consumers about the new denim developments available in the market. The highest number of consumers were aware about light weight denim with a percentage of 45.4% and the least number of consumers were aware about checked and striped patterned denim with a percentage of 10.4%. DWR denim was the second most known development holding 38.3% of consumers. Colored denim was known by 20.2% of consumers while spandex mixed denim was known by 17.5% of consumers. The awareness of consumers for polyester and nylon mixed denim was 12.6% and the percentage for knitted denim was 11.5%. 22.4% of consumers were not aware about any of those developments in the market.

Figure 9.4: Dissatisfaction level of consumers

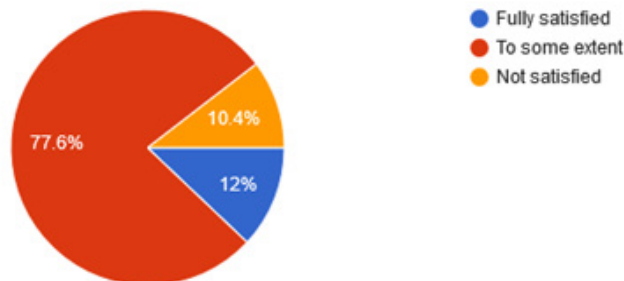


Figure 9.4 shows the dissatisfaction level of consumers about the bought denim garments. The highest number of consumers at a percentage of 77.6% had stated that they were satisfied only to some extent with

their denim garments. Furthermore, 12% of consumers were fully satisfied while 10.4% of consumers were not satisfied about their denim garments.

Figure 9.5: Denim properties and consumers dissatisfaction

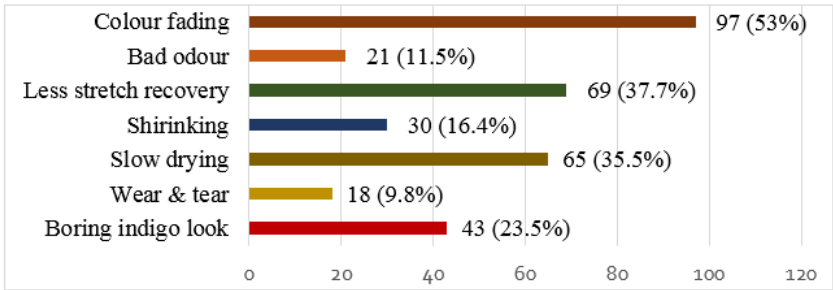


Figure 9.5 shows properties of denim which has led the consumers to dissatisfaction after purchasing and using the denim garments. Denim has some unique properties which have created mostly caring and wearing problems. Fading/ colour fastening, bad odor, stretch recovery, shrinking, not drying quickly, wear and tear, colour being boring with the indigo are the properties revealed by the literature survey. 53% of consumers were dissatisfied about colour fastening of the fabric. There were about 9.8% of consumers who thought the negative quality as tearing the fabric. 37.7% of consumers had considered about less stretch recovery while 35.5% of consumers mentioned that they couldn't dry their denim garments when it got wet. 23.5% of consumers were bored with the same indigo look. 16.4% of consumers were worried about shrinking and 11.5% of consumers stated that they were dissatisfied because of the bad odor.

Figure 9.6: Consumer request new developments

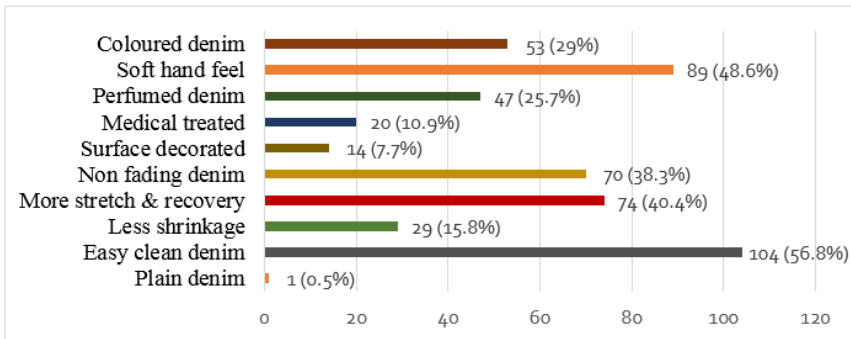


Figure 9.6 shows innovative developments that are requested by consumers depending on the concerns they have. There were 56.8% of consumers requesting denim that can be cleaned easily and only one (0.5%) consumer had specially mentioned about simply and decently decorated denim. 48.6% of consumers were waiting for denim with soft hand feel while 40.4% of consumers looked for denim with more stretch recovery. 38.3% of consumers requested non-fading denim. Different coloured denim had been requested by 29% of consumers while 25.7% was looking for perfumed denim. 15.8% of consumers and 10.9% of consumers expected less shrinking and medical treated denim respectively. Surface decorated denim had been requested only by 7.7% of consumers.

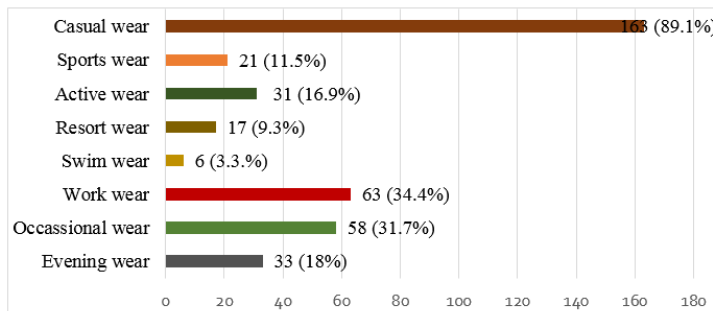


Figure 9.7 describes the expected product categories by the consumers according to the wearing requirement of them. 89.1% of consumers were expecting denim casual wear while only 3.3% of consumers were happy to see denim swim wear in the market. 34.4% of consumers looked for denim work wear and 31.7% of consumers preferred denim occasional wear. 18% and 16.9% of consumers preferred denim evening wear and denim activewear respectively. Sportswear was requested by 11.5% of consumers while resort wear had a popularity of 9.3% of consumers.

Figure 9.8: Convenience of finding denim garment in the market

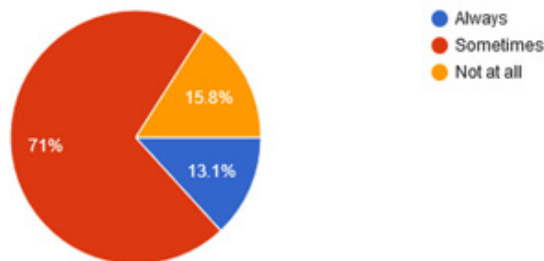


Figure 9.8 shows the level of measuring the convenience of finding the required denim garment in the market. 71% of consumers revealed that they could find their required denim garments in the market. 15.8% of consumers stated that they could find required denim garments not at all while 13.1% of consumers could always find their required denim garments in the local market.

Figure 9.9: Most popular types of denim garments

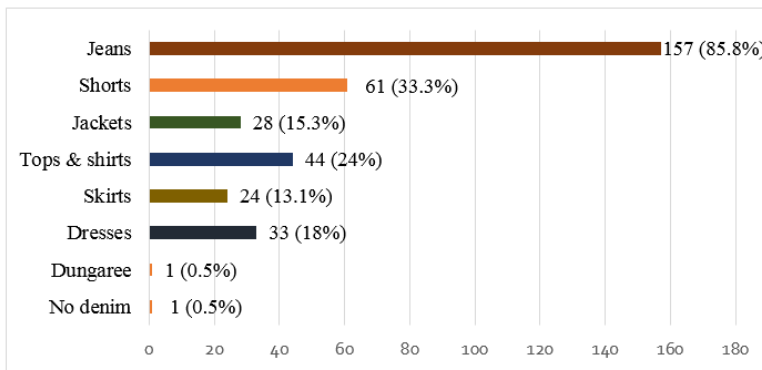


Figure 9.9 explains the most popular denim garments types of youth in Sri Lanka. Jeans were the most preferred denim garment of 85.8% of consumers. Shorts were preferred by 33.3% of consumers while denim tops and shirts were preferred by 24% of consumers. 18% and 15.3% of consumers stated that they preferred denim dresses and jackets respectively. 13.1% of consumers preferred denim skirts while only one consumer (0.5%) liked dungarees. One consumer had stated that nothing would be preferred specially.

Product dominated factors play a pivotal role in measuring the consumer preference for denim garments. Among the visual factors are colour of the fabric, surface decoration including embroidery, embellishments, printing, quilting, wash techniques and dry processes including acid washes, stone washes, bleaching, tinting, ripping and grinding techniques concerned. At the same time visual qualities of the garments such as good looking, specific style, and shape of the garment are also identified as important characteristics. Besides, consumers seek tactile features when purchasing denim garments. They seek comfortability through the inherent qualities of denim fabrics such as stretch ability and weight. Furthermore, extrinsic cues like price, brand, environmental friendliness, and symbolic meaning affected the consumer motivation for buying denim garments.

Figure 9.10: Product dominated factors

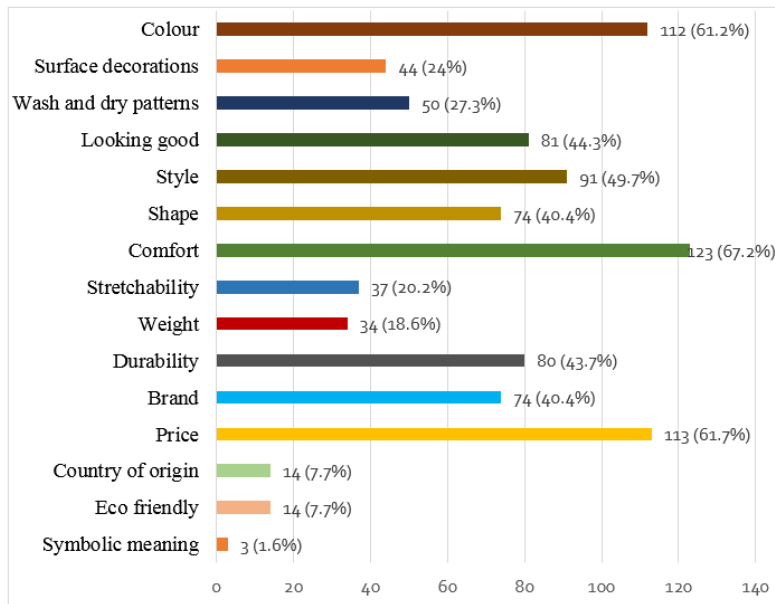


Figure 9.10 shows the product dominated factors affecting the buying preference of consumers. It should be noted that all the consumers are not considering all the factors when they purchase denim garments. Comfort is the most alluring factor identified by the denim consumer. 61.7% of consumers were worried about the price and 61.2% of consumers considered the colour of the garment. Among them, 49.7% of consumers looked for the style and 44.3% of consumers checked whether the garment was looking good. 43.7% of consumers considered the durability while 40.4% of consumers considered the shape and the brand. 27.3% of consumers concerned the wash pattern and dry processes while 24% of consumers looked for the surface decoration. 20.2% of consumers considered the stretch ability and 18.6% of consumers considered the weight of the fabric. Both country of origin and environmental friendliness acquired the attention of 7.7% of consumers while symbolic meaning acquired the lowest attention and that is about 1.6%.

## 9.6. Analysis

The study revealed that 22.4% of consumers are not aware of any of the innovative developments in the denim market. Only DWR and light weight denim have become popular. The awareness of consumers about the innovations are very low. A very small percentage of consumers are

fully satisfied with their denim garments. Colour fading has become the top most problem and less stretch recovery and not drying quickly also have come next even though there are spandex mixed and DWR denim in the market. It has been identified that some problems have already been solved but consumers have not updated the situation. Even though there are some innovations in the market, soft hand feel, easy clean and more stretch recovery are also requested.

Most of the consumers stated that they do not find the needed denim garments very often. Most of the consumers said that they considered the comfort and the colour. Consumers were much worried about the visual and tactile factors of the garment. Except price, other extrinsic cues were not much considered by the consumers when buying denim garments.

### **9.7. Conclusion and Recommendation**

It has been revealed that most of the consumers are dissatisfied with their denim garments because they have not chosen the exact garment they needed, due to the unawareness. So, the producers and retailers must increase the awareness of the consumers to uplift their knowledge on the denim market and purchase suitable garments.

Consumers also complained about the inability to find the denim garments according to their preference in the market. Many consumers worried more about visual and tactile features collaborating with the price. Therefore, designers can be focused more on identified factors in the process of designing. In between the process of designing, the designers can do many developments by mixing and matching ideas into one garment.

According to the distributed closed ended questionnaire, only product dominated factors were measured in a statistical manner.

### **9.8. Suggestions**

The denim garment industry is geared toward mass customization, combining fit, utility, and attractive design at a low cost. Higher prices are generally associated with products that demand superior and tailored physical dimensions and functional requirements. As a result, clothing producers should include fashion designers in the aesthetic design of their items in order to maximize product value and user satisfaction (Molfino et al, 2009).

Clothing producers must also explain to customers that what is being offered is the best at the lowest price in order to create a good balance of style, fabric quality, and price in their view. When targeting denim apparel buyers, primarily women, their communication initiatives should focus on these features.

Further research is needed to be carried out analyzing the product dominated factors with consumer dominated factors to bridge the denim consumer and the designer in a methodical manner.

## References

- Ahmed, N. (2016). Cotton denim fabrics market: challenges and opportunities. *Pakistan Textile Journal*.
- Antonio Iazzi, Demetris Vrontis, Oronzo Trio & Yioula Melanthiou. (2016). Consumer preference, satisfaction, and intentional behavior: Investigating consumer attitudes for branded or unbranded products. *Nicosia. Journal of Transnational Management*, 21(2), 84-98.  
<https://doi.org/10.1080/15475778.2016.1167000>
- Card, A., Moore, M.A. and Ankeny, M. (2006), "Garment washed jeans: impact of laundings on physical properties", *International Journal of Clothing Science and Technology*, Vol. 18 No. 1, pp. 43-52.  
<https://doi.org/10.1108/09556220610637503>
- Castelo, J. S. F., & Cabral, J. E. D. O. (2018). Consumers in a social network: the perception of clothing quality per gender. *Revista Brasileira de Gestão de Negócios*, 20, 22-36.  
<https://doi.org/10.7819/rbgn.v20i1.3684>
- Cotton Incorporated Lifestyle Monitor Survey. (nd). Denim is growing: Different Markets, Different Opportunities.  
<https://lifestylemonitor.cottoninc.com/denim-is-growing/>
- Clouse, Michelle. (2018). Predicting U.S adolescents' purchasing of denim jeans using quality attributes, behavioral characteristics, and sociodemographic (Publication No. 12-2018) [Master of Science dissertation, Utah State University Logan, Utah]. <https://ptj.com.pk/?s=Cotton+denim+fabrics+market%3A+challenges+and+opportunities> <https://www.textiletoday.com.bd/r-evolution-denim-trends-technologies-processes-aw-201819/>
- Department of Census and Statistics, Sri Lanka. (2017). Population Report. <http://www.statistics.gov.lk/Population/StaticalInformation/CPH2011>



- Dickson, M. A. (2000). Personal Values, Beliefs, Knowledge, and Attitudes relating to intentions to purchase apparel from socially responsible businesses. *Clothing and Textiles Research Journal*, 18(1), 2000, pp.19-30.  
[https://doi.org/10.1300/J046v09n04\\_02](https://doi.org/10.1300/J046v09n04_02)
- Eckman, M., Damhorst, M. L., & Kadolph, S. J. (1990). Toward a model of the in-store purchase decision process: Consumer use of criteria for evaluating women's apparel. *Clothing and Textiles Research Journal*, 8(2), 13-22.
- Indiaretailing Bureau. (2015, January 07). Denim Market in India. <https://www.indiaretailing.com/2015/01/07/fashion/denim-market-in-india/>
- Gipson, K., & Francis, S. K. (1991). The effect of country of origin on purchase behaviour: an intercept study. *Journal of Consumer Studies & Home Economics*, 15(1), 33-44.  
<https://doi.org/10.1111/j.1470-431.1991.tb00646.x>
- Ismail, Z., Masood, S., & Tawab, Z. M. (2012). Factors affecting consumer preference of international brands over local brands. In 2nd international conference on social science and humanity (Vol. 31, No. 12, pp. 54-59).
- Jin Yong Park, J. S. (2009). Comparison of Chinese and Indian consumers' evaluative criteria when selecting denim jeans. North Carolina: Department of Consumer, Apparel and Retail Studies, The University of North Carolina at Greensboro. *Journal of Fashion Marketing and Management: An International Journal*.  
<https://doi.org/10.1108/13612021011025492>
- Kotler, P., & Turner, R. E. (1997). *Marketing management: Analysis, planning, implementation, and control* (Vol. 9). Upper Saddle River, NJ: Prentice hall.
- Lans,(2018, June 10). 'Evolved market, global style trends redefine denim in India. <https://indianexpress.com/article/lifestyle/fashion/evolved-market-global-style-trends-redefine-denim-in-india-5211659/>
- Lifestyle cottoninc monitor(nd)In with the Old,In with the New: Consumers Embrace Denim's Innovation and Heritage. <https://lifestylemonitor.cottoninc.com/in-with-the-old-in-with-the-new/>
- Lin, C. F.(2002), "Segmenting customer brand preference: demographic or psychographic", *Journal of Product & Brand Management*, Vol. 11 Iss 4 pp. 249 – 268.<http://dx.doi.org/10.1108/10610420210435443>
- Marcoux, J. S., Filiatrault, P., & Cheron, E. (1997). The attitudes underlying

- preferences of young urban educated Polish consumers towards products made in western countries. *Journal of International Consumer Marketing*, 9(4), 5-29.  
[https://doi.org/10.1300/Jo46v09no4\\_02](https://doi.org/10.1300/Jo46v09no4_02)
- Memon, N. A. (2018). Cotton denim fabrics market: challenges and opportunities. *Pakistan Textile Journal*, 67(6), 50-50.
- Miller, D., & Woodward, S. (2007). Manifesto for a study of denim. *Social Anthropology*, 15(3), 335-351.  
[doi/pdf/10.1111/j.0964-0282.2007.00024.x](https://doi.org/10.1111/j.0964-0282.2007.00024.x)
- Molfinio, R; Zoppi, M.; Montorsi, R. (2009). Garment manufacturing plant design and concepts. In L. Walter, K. George-Alexander, & S. Carosio. *Transforming clothing production into a demand-driven, knowledge-based, high-tech industry* (pp. 41-51). London: Springer-Verlag.
- Park, K. (1997), "Fashion usage behavior: Differences by product type", *Journal of Fashion Marketing and Management*, Vol. 1 No. 3, pp. 215-222.  
<https://doi.org/10.1108/ebo22500>
- Peck, J., & Childers, T. L. (2003). To have and to hold: The influence of haptic information on product judgments. *Journal of Marketing*, 67(2), 35-48.  
<http://www.jstor.org/stable/30040521>.
- Rahman, O. (2011). Understanding consumers' perceptions and buying behaviours: Implications for Denim Jeans Design. *Journal of Textile and Apparel, Technology and Management*, 7(1).
- Rahman, O. (2012). The influence of visual and tactile inputs on denim jeans evaluation. *International Journal of Design*, 6(1), 11-25.
- Sanad, R. A. (2016). Consumer Attitude and Purchase Decision Towards Textile and Apparel Products. Demietta: Department of Textile Printing, Dyeing and Finishing.16-30
- Scammell, Margaret (2003) Citizen consumers: towards a new marketing of politics? In: Corner, John and Pels, Dick, (eds.) *Media and the Restyling of Politics: Consumerism, Celebrity and Cynicism*. SAGE Publishing, London, UK, pp. 117-137. ISBN 978-0761949213
- Shah, Binjal,(2018, May 21).Your Story How Ahmedabad-based Arvind Ltd is solving the water crisis in India, one pair of jeans at a time.  
<https://yourstory.com/2018/05/ahmedabad-based-arvind-ltd-solving-water-crisis-india-one-pair-jeans-time/amp>

Soloman, M. R. (2013). *Consumer Bahvior. Buying, Having, and Being*, Tenth.6-22

ISBN-13: 978-0134129938

Textile Today: An Innovation Hub Bangladesh.(2017, May 14). 'R-Evolution' in denim trends technologies and processes for AW 2018/19

UNDP, Sri Lanka.(2017),Unlocking the Potential of Youth. <https://www.un.org/youthenvoy/2016/01/unlocking-the-potential-of-youth-undp-in-sri-lanka/#:~:text=Youth%20make%20up%20almost%20a,for%20the%20'wrong'%20reasons.>

Upadhyay, D., & Ambavale, R. (2013). A study on preference with reference to denim jeans in female segment in Ahmedabad City. *International Journal of Management and Social Sciences Research (IJMSSR)*. 2( 4), 153-159.

YOUTH\_Definition\_2013-1-23.docx

<https://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-definition.pdf>

Wind, J., & Rangaswamy, A. (2001). Customerization: The next revolution in mass customization. *Journal of interactive marketing*, 15(1), 13-32.

## CHAPTER10

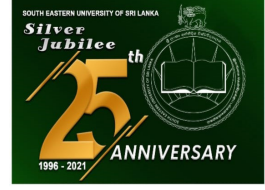
### இந்துமதம் வலியுறுத்தும் பால்சமத்துவம் : திருநாவுக்கரசர் திருப்ப- திகங்களை மையப்படுத்திய ஆய்வு

ந. சுபராஜ்

மொழித்துறை

தென்கிழக்குப் பல்கலைக்கழகம்

subaraj84@seu.ac.lk



#### ஆய்வுச் சுருக்கம்

பெண்மையை போற்றும் நெறிகளில் இந்துசமயம் தனித்துவமானது. இந்துமத மூல நூல்கள் இக்கருத்தினை தெளிவுபட எடுத்துக்காட்டுகின்றன. இவற்றுள் தமிழ் மூல நூல்களில் ஒன்றான தேவாரத் திருப்பதிகங்கள் பக்தியை மையப் பொருளாக கொள்கின்ற போதிலும் பெண்மையைப் போற்றி அதனூடாக பால்சமத்துவத்தை வெளிப்படுத்துகின்றன. தேவாரத்திருப்பதிகங்களில் பால்சமத்துவத்தை அதிகம் வலியுறுத்துவதாக திருநாவுக்கரசரின் திருப்பதிகங்கள் காணப்படுகின்றன. பல்லவர்கால பக்தியிலக்கியங்களில் அப்பர் சுவாமிகளின் தேவாரங்கள் முதன்மை பெறுகின்றன. அப்பர் சுவாமிகள் வாழ்ந்த காலச்சூழல் தமிழ் நாட்டை சமணசமயம் செல்வாக்கு செலுத்திய காலமாகும். அறத்தினை அடிப்படையாகக் கொண்டு தமிழகத்தில் காலான்றியவர்கள் சமணர்கள். இதற்கு மாற்றீடாகவும் இதனை வெல்லும் வகையிலும் வைதிக போராளிகளால் கொண்டு வரப்பட்ட உணர்ச்சியே பக்தியாகும். அப்பர் சுவாமிகளும் தனது பாடல்களில் பக்தியை ஆழமாக வெளிப்படுத்தியிருக்கின்றார். இதைத் தவிர சமணர்களின் கொள்கைகளை பலவீனமடையச் செய்ய பல உத்திகளையும் அப்பர் சுவாமிகள் கையாண்டார். சமணர்கள் பெண்களுக்கு முக்கியத்துவம் அளிப்பதில்லை. பெண்ணாகப் பிறந்தவர்களுக்கு முத்தியில்லை என்று கூறுபவர்கள். இக்கருத்துக்கள் பெண்கள் மத்தியில் விமர்சனத்திற்குட்பட்டிருந்த வேளையில் அப்பர் சுவாமிகள் பெண்களுக்கு முக்கியத்துவம் கொடுத்து தன் பாடல்களில் கருத்துக்களை வெளியிட்டதோடு அதற்கு மேல் ஒரு படி சென்று பால் சமத்துவம் பற்றியும் பாடியிருந்தார். அவற்றை அடையாளப்படுத்திக் காட்டுவதே இவ்வாய்வின் நோக்கமாகும். பக்தி உணர்ச்சி வெளிப்பாடுகளுக்கு மத்தியில் பால் சமத்துவத்தை அப்பர் சுவாமிகள் பேச வேண்டிய காரணங்கள் என்ன என்பது ஆய்வின் பிரச்சினையாக உள்ளது. அப்பர் சுவாமிகளின் தேவாரங்கள் ஆய்வின் முதனிலைத் தரவுகளாக கொள்ளப்படுகின்ற அதேவேளை அப்பர் சுவாமிகளின் தேவாரம் மற்றும் பால் சமத்துவம் தொடர்பாக வெளிவந்த நூல்கள், கட்டுரைகள் என்பன இரண்டாம் நிலைத் தரவுகளாக கொள்ளப்படுகின்றன. இவற்றினூடாக, அப்பர் சுவாமிகள் பக்தியை சமணர்களை வெல்ல எடுத்த ஆயுமாக பயன் படுத்தியதோடு அவர்களின் கொள்கைகளை நுணுக்கமாக பலவீனப்படுத்த பெண்ணியல் வாதத்தினையும் கையில் எடுத்திருக்கின்றார் என்பதை ஆய்வின் முடிவாக எதிர்பார்க்கலாம்.

திறவுச் சொற்கள்: அப்பர் சுவாமிகள், தேவாரத் திருப்பதிகங்கள், பால் சமத்துவம்

### 10.1. அறிமுகம்

இந்துமத பக்தியிலக்கியங்களில் அப்பர் சுவாமிகளின் தேவாரங்களுக்கென தனியிடம் உண்டு. அவரால் பாடப்பட்ட திருப்பாடல்கள் “பதிகங்கள்” எனும் இலக்கிய அமைப்புக்குட்பட்டு அமைந்துள்ளன. அப்பர் சுவாமிகளால் பாடப்பட்ட பதிகங்கள் 312 உம், திருப்பாடல்கள் 3064 உம் கிடைக்கப் பெற்றுள்ளன. இருப்பினும் பதிகங்கள் 313 உம், திருப்பாடல்கள் 3065 அல்லது 3066 எனக் கூறுவோருமுள்ளார். ஒரு பாடல் இரு இடங்களில் வந்தமையும், ஒரு தலத்திற்கான பதிகம் 20 திருப்பாடல்களில் வந்தமையுமே இம்மாறுபாட்டிற்கான காரணங்களாகும்.

அப்பர் சுவாமிகளது பாடல்களின் பல இடங்களில் அடிமுடி தேடியமை, சிவன் இராமனுக்கு அருளியமை போன்ற வடமொழிப் புராணச் செய்திகளின் செல்வாக்கைக் காணமுடிகின்றது. கணபதி, வேலன் ஆகியோர் பற்றியுங் குறிப்பிடும் அப்பர் சுவாமிகள் அவர்களை சிவனின் புத்திரர்களாக காட்டிச் செல்கின்றார். இவ்வாறான உறவு முறைகளை வெளிக்காட்டு அப்பர் தனது பாடல்களில் ஆண் - பெண் சமத்துவத்தையும் வெளிப்படுத்தி நிற்கின்றார்.

### 10.2 ஆய்வின் நோக்கம்

சமணர்கள் பெண்கள் தொடர்பான கருத்துக்கள் பெண்கள் மத்தியில் விமர்சனத்திற்குட்பட்டிருந்த வேளையில் அப்பர் சுவாமிகள் பெண்களுக்கு முக்கியத்துவம் கொடுத்து தன் பாடல்களில் கருத்துக்களை வெளியிட்டதோடு அதற்கு மேல் ஒரு படி சென்று பால் சமத்துவம் பற்றியும் பாடியிருந்தார். அவற்றை அடையாளப்படுத்திக் காட்டுவதே இவ்வாய்வின் நோக்கமாகும்.

### 10.3 ஆய்வுப் பிரச்சினை

**பக்தி உணர்ச்சி** வெளிப்பாடுகளுக்கு மத்தியில் பால் சமத்துவத்தை அப்பர் சுவாமிகள் பேச வேண்டிய காரணங்கள் என்ன என்பது ஆய்வின் பிரச்சினையாக உள்ளது.

### 10.4 ஆய்வு முறையியல்

அப்பர் சுவாமிகளின் தேவாரங்கள் ஆய்வின் முதலிலைத் தரவுகளாக கொள்ளப்படுகின்ற அதேவேளை அப்பர் சுவாமிகளின் தேவாரம் மற்றும் பால் சமத்துவம் தொடர்பாக வெளிவந்த நூல்கள், கட்டுரைகள் என்பன இரண்டாம் நிலைத் தரவுகளாக கொள்ளப்படுகின்றன. இதில் பகுப்பாய்வு முறை பயன்படுத்தப்படுகின்றது.

### பால் சமத்துவம்

நிலப்பிரபுத்துவத் தொடக்க காலத்தில் பெண்கள் ஆண்களின் உடைமைப் பொருளாகக் கொள்ளப்பட்டனர். சமுதாயம் வளர வளர பெண் வீட்டுக்கே

உரியவளானாள். சமுதாய அமைப்பில் சமயத் தாக்கமே பெண்களுக்கு இடப்பட்ட முதல் தளை. சமத்துவத்தில் சமயமானது பெரும் ஆதிக்கத்தைச் செலுத்தியது. மதக் கோட்பாடுகள் பெண் பின்தள்ளப்பட வழிகோலாய் அமைந்தன. மதங்களில் பெண்களின் கடமை தர்மமாக்கப்பட்டது. அடுத்து வந்த காலங்களில் முக்கியமாக வேதகாலத்தில் பெண்கள் கல்வி கற்றனர் என்பதற்குச் சான்றுகள் உள்ளன. பின்னர் புராண இதிகாச காலத்தில் பெண் தன் சகல உரிமைகளையும் இழந்த நிலையில் “கணவனே கண்கண்ட தெய்வம்” என வாழவேண்டிய நிலையும் தர்மபத்தினியாக விளங்க வேண்டுமெனவும் கற்பொழுக்கம் பேணி நடக்க வேண்டுமெனவும் வலியுறுத்தப்பட்டது.

சமுதாயத்தில் இத்தகைய நிலைப்பாடுகளை மாற்றியமைப்பதில் சிந்தனையாளர்கள் கருத்துக்கள் முக்கிய பங்கினை வகிக்கின்றன.

தத்துவம் என்பது “உள்பொருளின் தன்மை பற்றிய அறிவுமுதல் ஆராய்ச்சி” ஆகும். சிவசக்தி தத்துவம் என்பது “சிவமும் சக்தியும் ஒன்று. சிவமின்றி சக்தியில்லை, சக்தியின்றி சிவமில்லை, பிரபஞ்சத்தின் இருப்பாற்றல் (Static Force) சிவம், இயங்காற்றல் (Dynamic Force) சக்தி, உலகத்தின் படைப்புக்கு இறைவன் நிமித்த காரணமாக இருக்க சக்தி துணைக்காரணமாக இருக்கின்றன” போன்ற விடயங்களை உள்ளடக்கியது. சிவம் சக்தி எனப்படும் ஆற்றலின் மூலம் உலகினைத் தோற்றி ஒடுக்குவதால் சக்தி என்பது உலக உற்பத்திக் கொள்கையைப் பொறுத்தவரையில் சிவனது ஆற்றலாகக் கருதப்படும். அதேபோன்று உயிர்கட்கு மீட்சியளிக்கும் பாங்கிலே இறைவனின் அருள் என்பதாகவும் தன்னியல்பினால் ஞானம் எனப்படும் பேரறிவாகவும் கொள்ளப்படும். சிவமும் சக்தியும் பிரிப்பின்றி அத்துவிதமாய் கலந்து நிற்கும் நிலையில் அது திருவருளாக விளங்கும் என்பதைக் காட்டுகின்றது. சைவசித்தாந்தத்திலே இது பற்றி ஆழமாகப் பேசப்படுகின்றது.

### **அப்பர் சுவாமிகளின் பாடல்களில் பால் சமத்துவம்**

தன்னையே நோக்கி நிற்கும் பரசிவம் அந்நிலையினின்றும் நீங்கி உலகத்தை நோக்குங்கால் தனது சிறப்பியல்புகளில் ஒன்றாகிய பெருங்கருணை காரணமாக உயிர்களின் பொருட்டு பல்வேறு நிலைகளை உடையதாய் இருக்கும். இந்த நிலைகளே பதியின் தடத்த நிலைகளாகும். இவை யாவும் பதியின் அனந்த சக்தியாகிய அளவில்லாத ஆற்றலால் வருவனவாதலின் பதியின் தடத்தநிலைகள் யாவும் அதன் சக்தியினால் ஆவனவாகும். இதனால் சொருபநிலையில் பதி “சிவம்” என்றும், தடத்த நிலையில் “சக்தி” என்றும் அழைக்கப்படும். சொருபநிலையில் சக்தி செயற்படாது அடங்கியிருத்தலால் பதி “சிவம்” என ஒன்றையாக இருக்கும். சக்தி செயற்படும் தடத்தநிலையில் சிவம் அதனோடு அச்செயலையெல்லாம் உடன் இயைந்து இயற்றி நின்றலால்

சிவமும் சக்தியும் இரண்டாய் - அம்மை அப்பனாய் - மாதொரு பாகனாய்  
தோற்றம் அளிக்கும். இந்நிலை அப்பர் சுவாமிகளின் பாடல்களின் பல  
இடங்களில் வெளிப்படுகின்றன.

“இடமால் தழுவிய பாகம்”10

“மாப்பிணை தழுவிய மாதொர் பாகத்தன்”11

“கோல்வளைக்கை மாதராள் பாகன்”12

“நங்கையைப் பாகமும் நயப்பர்”13

“நெறியறு குழலுமை பாகமாக”14

“காரிகை பாகமாக”15

“அரிவையோர் பாகர்”16

“பாதியாம் உமைதன்னோடும்

பாகமாய் நின்று எந்தை”17

“வளரிலா மங்கைப் பாகம்”18

“மைஞ்சூலம் அனைய கண்ணாள் பங்கன்”19

ஆனால் சிவசக்தி தத்துவத்தை சிவன் மாதொரு பாகனாய் காட்சியளிப்பதை  
குறிப்பிடுவதோடு மாத்திரம் நிறுத்தி விடமுடியாது. சிவசக்தி தத்துவம்  
மிக ஆழமானது. சொருபநிலையில் பதி “பரசிவம்” என நிற்குங்கால்  
அதன் சக்தி பராசக்தி என வழங்கப்பெறும். அது உயிர்களின் அறிவை  
விளக்கி நிற்கும் அறிவு வடிவமானது. அந்த அறிவே சக்தியின் சொருபம்.  
பதி உலகத்தை நோக்குங்கால் மேற்குறிப்பிட்ட பராசக்தியில் ஒரு  
சிறுகூறு உலகத்தைத் தொழிற்படுத்த முற்படும். அதனை “ஆதிசக்தி”  
என வழங்குவர். இது, சிவம் தோன்றாது உலகமே தோன்றுமாறு  
பிறப்பு இறப்புக்களில் செலுத்தி நின்றலால் “திரோதனா சக்தி” எனவும்  
வழங்குவர்.

இத்திரோதனா சக்தி உலகத்தை தொழிற்படுத்த வேண்டும் என  
இச்சித்தலால் அது இச்சாசக்தி எனப்பெயர் பெறுகின்றது. அதற்குரிய  
வழிகளை அறிதலால் “ஞானசக்தி” எனவும் அழைக்கப்பெறுகின்றது.  
அவ்வழியே தொழிற்படுத்த நின்றலால் “கிரியா சக்தி” என்ற  
பெயரையும் பெறுகின்றது. சிவத்தின் சக்தி இவ்வாறு பஞ்ச சக்திகளாக  
விரிவடைகின்றது. இச்சக்திகளின் மேலும் பல உட்கூறுகளை சிவசக்தி  
தத்துவம் விபரிக்கின்றது.

“ஓன்றாய் இச்சா ஞானக்

கிரியை யொன்றொரு முன்றாகி

நின்றிடும் சக்தி: இச்சை

உயிர்கருள் நேசமாகும்

நன்றெல்லாம் ஞானசக்தி

யால்நயந்தறிவன் நாதன்

அன்றருட் கிரியை தன்னால்

ஆக்குவன் அகிலமெல்லாம்”20

“நங்கையினால் நாம் அனைத்தும்  
செய்தாற்போல் நாடனைத்தும்  
நங்கையினால் செய்தளிக்கும் நாயகனும்”21

“எத்திறம் நின்றான் ஈசன்  
அத்திறம் அவளும் நிற்பாள்” 22

“சிவம்சத்தி தன்னை ஈன்றும்  
சத்திதான் சிவத்தை ஈன்றும்”23

அப்பர்சுவாமிகளின் திருப்பாடல்களில் சக்திதத்துவத்தின் இத்தகைய ஆழமான கூறுகளை காணமுடியவில்லை. பஞ்சசக்திகள் பற்றியும் அவர் குறிப்பிடவில்லை. சிவனின் பாகமாக உமை இருக்கின்றாள் என்பதனை பெரும்பாலான இடங்களில் சுட்டிக்காட்டும் அப்பர்சுவாமிகள் பிரபஞ்ச படைப்பிற்கோ, உயிர்களின் இயக்கத்திற்கோ சக்தி துணையாக நின்றாள் என்பதனை எந்தவொரு இடத்திலும் வெளிப்படுத்தவில்லை. ஆனால்,  
“மாயமெல்லாம் முற்ற விட்டிருள்  
நீங்க மலைமகட்கே  
நேய நிலாவ இருந்தான்”24

எனவரும் சில இடங்களில் கூட அவர் ஆன்மாக்களின் இருளை நீக்குவதற்காக சக்தியுடன் இணைந்திருந்தார் என குறிப்பிடவில்லை. இங்கு சிவத்தின் சக்தி (Energy) எனக் காட்டுவதை விட சிவனின் மனைவியென சக்தியை அவர் இனங் காட்டியுள்ளார்.  
“உற்றான் உமையவட்கு அன்பன்”25  
“சூடினார் கங்கையாளைக்  
சூடிய துழனி கேட்டங்கு  
ஊடினாள் நங்கையாளும்”26

சிவசக்திதத்துவம் சிவத்தின் இயங்காற்றலாக சக்தியை குறிப்பிடும். ஆனால் அப்பர்சுவாமிகள் சக்தியை அஞ்சும் இயல்புடையவளாகவும் அவளது அச்சத்தை போக்குவராக சிவன் இருக்கின்றார் என்பதனையும் பல இடங்களில் குறிப்பிடுகின்றார். பகைவர்கள் அனுப்பிய யானைக்கு உமையஞ்ச உமாபதி அஞ்சாது அதனை அடக்கினார் என்பதனை,  
“யாழின் மொழியவள் அஞ்ச  
அஞ்சாது அருவரை போன்ற  
வேழம் உரித்த நிலையும்”27

எனும் பாடலில் வெளிப்படுத்தியுள்ளார் அப்பர்சுவாமிகள். அப்பர் சுவாமிகளின் இச்சிந்தனை அவரது இலக்கியநய வெளிப்பாட்டின் சிறப்புக்கு ஆதாரமாக அமைவதாக இருந்தாலும் சிவசக்தி தத்துவத்தின் தார்ப்பரியத்தை வெளிப்படுத்தியதாக அமையவில்லை. இதுபோல்,



உயிரற்ற மலைக்கு அஞ்சுவளாக உமையைக் காட்டும் நாவுக்கரசர் சிவன் அம்மலையை அடக்கி அவளின் அச்சத்தைப் போக்குபவராக காட்டப்படுகின்றார். சிவனை உச்சஸ்தானத்தில் வைக்கும் அப்பர்சுவாமிகள் ஏனோ சக்தியை அந்நிலையில் வைத்துப்பார்க்கவில்லை. அசைந்து மலைகளைக் கண்டு உமை நடுங்கியபோது சிவன் அவற்றை அடக்கினார் எனுஞ் செய்தியினை அப்பர் சுவாமிகள் ஓர் இடத்தில் வெளிப்படுத்துகின்றார்.

“நரம்பெழு கைகள் பிடித்து  
நங்கை நடுங்க மலையை  
உரங்களெல்லாம் கொண்டு எடுத்தான்”28

இதுபோன்று சக்தியின் பேராற்றலை நாவுக்கரசர் வெளிப்படுத்த முற்படவில்லை என்பதை அவரது பல பாடல்கள் வெளிப்படுத்தி நிற்கின்றன. சிவனின் உருவத்திலே பாம்பு, கங்கை, பிறை ஆகியவற்றைப் போல சக்தியும் ஒரு வஸ்துவே என அப்பர் சுவாமிகளின் பாடலொன்று வெளிப்படுத்துகின்றது. சிவனின் தோளில் புரளும் பாம்பைக் கண்டு பெண்ணாகிய சக்தி அஞ்சுகின்றாள், ஆனால் பாம்போ சக்தியை மயில் எனக் கருதி அஞ்சுகின்றது. (மயிலை பெண்ணுக்கு உவமிப்பது மரபு). அதேவேளை பிறையானது பாம்பைக் கண்டு அஞ்சுகின்றது என அப்பர் சுவாமிகள் தன் பாடலொன்றில் விபரிக்கின்றார். இலக்கியச் சுவையை நிரம்பத்தரும் இச்செய்யுள் சிவசக்தித் தத்துவத்தின் அடிப்படைக்கு முரணாகவும் அமைந்துவிட்டது.

“கிடந்தபாம்பு அருகுகண்டு அரிவை பேதுறக்  
கிடந்தபாம்பு அவளையோர் மயில் என்று ஐயுறக்  
கிடந்தநீர்ச் சடைமிசைப் பிறையும் ஏங்கவே  
கிடந்துதான் நகுதலைக் கெடில வாணரே”29

இதுபோன்று உமையவளின் பயத்தின் தன்மையை பல இடங்களில் அப்பர்சுவாமிகள் வெளிப்படுத்தியிருக்கின்றார்.

சிவனின் செயலுக்கு பயப்படல்:

“உமையவள் நடுங்க அன்று  
அத்தியின் உரிவை போர்த்தார்”30

இராவணனுக்கு பயப்படுதல்:

“மாலினாள் அணங்கை அஞ்ச  
மதில்இலங்கைக்கு மன்னன்”31

எனவே அப்பர் சுவாமிகளின் சிவசக்தி தத்துவம் சைவசித்தாந்தம் போன்றோ, ஏனைய தேவார முதலிகள் போன்றோ அமையவில்லை. சம்பந்தர், சுந்தரர் காட்டும் சிவசக்திச்சிந்தனை சைவசித்தாந்தத்தை ஒத்தது. உலகப்படைப்பினதும், உயிர்களின் இயக்கத்தினதும் சிவத்தின் துணைக்காரணமாக அவர்கள் சக்தியை குறிப்பிட்டுள்ளனர்.

“ஓர் உரு ஆயினை மானாங்காரத்து  
ஈர் இயல்பாய்”<sup>32</sup>

இருப்பினும் சித்தாந்தத்தின் அத்துவிதக் கொள்கையின் பண்பினை இவரது பாடல்கள் தெளிவுபடுத்துகின்றன. சிவசக்தி தத்துவத்தின் பிரிக்கமுடியாத பண்பினை அவர் காட்டியுள்ளார். இதனூடாக நான்கு ஆச்சிரமங்களில் ஒன்றான இல்லற தர்மத்தை வற்புறுத்தியுள்ளார்.

“உமையாள் காதன் மணவாளன்”<sup>33</sup>

“கொழும்பவளச் செங்கனிவாய்க் காமக்கோட்டி  
கொங்கையினை அமர்பொழுது கோலங்கொண்ட  
தழும்பளவே வரைமார்பில்”<sup>34</sup>

“வரையுடைய மகள்தவஞ் செய் மணாளன்”<sup>35</sup>

கணவனும் மனைவியும் ஈருடல் ஒருயிராக வாழவேண்டும் என்பதனை,

“உருவிரண்டும் ஒன்றோடு ஒன்று ஒவ்வாவடி  
உருவென்று உணரப்படாதவ்விடி”<sup>36</sup>

## 10.5. முடிவுரை

இல்லறவாழ்விலே கணவனும் மனைவியும் ஒருமித்து இயங்க வேண்டும். ஒற்றுமைப்பட்ட இல்லறதர்மம் உயர்வான இலட்சியங்களையும் சிறந்த மழலைச் செல்வங்களையும் உருவாக்குவதாக அமைய வேண்டும். குழந்தைகட்கு தலைவர்களாக விளங்குபவர்கள் தாய்தந்தையராவர். உலக வாழ்வில் ஆணும் பெண்ணும் சமமானவர், இவர்களில் ஏற்றத்தாழ்வு இல்லை, இதனை அறியாமல் வீணை சண்டையிட்டு வாழ வேண்டாம் என்பதனை தெரிக்கவே இறைவன் தையல் பாகமானான். அப்பர்சுவாமிகளும் உலகமாகிய குடும்பத்திற்கும், உயிர்களாகிய குழந்தைகளுக்கும் தாய்தந்தையராக விளங்கும் பண்பினால் சிவசக்தி என்று தத்துவநிலையில் இறைவன் பல வடிவங்களில் உள்ளான் என்பதனையே தனது திருப்பாடல்களில் வெளிப்படுத்தியுள்ளார்.

இருப்பினும் சைவசித்தாந்தம் கூறுகின்ற சிவசக்தி தத்துவத்தின் முழு வடிவத்தையும் அவர் தன் திருப்பதிகங்களில் கூறியிருக்கவில்லை. சக்தியின் இயங்காற்றல் (Dynamic Force) தன்மையை கேள்விக்குறியாக்கியிருக்கின்றார். அப்பர்சுவாமிகள் போன்ற அக்கால சமயநெறியாளர்கள் சைவத்தின் சிறப்பை உச்சநிலையில் கொண்டு செல்ல கையாண்ட உத்திகளுள் ஒன்றாக அகச்சமயங்களை கீழ்நிலையில் வைத்து பேசுவதும் இருந்து வந்தது. வைணவமே இதனால் அதிக தாக்கத்திற்குள்ளானது. அதுபோல் ஒவ்வொரு மதமும் பிற மதங்களை கண்டனத்திற்குள்ளாக்கின. கருத்துமோதல் அதிகமாக இருந்த பல்லவர் காலத்தில் அப்பர்சுவாமிகள் சிவசமயத்தை மேன்மைப்படுத்த நினைத்தமையே சிவசக்தி தத்துவத்தின் அடிப்படையை அவர் பாடாமைக்கான காரணமெனலாம்.

பெண்மையை போற்றும் நெறிகளில் இந்துசமயம் தனித்துவமானது. இந்துமத மூல நூல்கள் இக்கருத்தினை தெளிவுபட எடுத்துக்காட்டுகின்றன. இவற்றுள் தமிழ் மூல நூல்களில் ஒன்றான தேவாரத் திருப்பதிகங்கள் பக்தியை மையப் பொருளாக கொள்கின்ற போதிலும் பெண்மையைப் போற்றி அதனூடாக பால்சமத்துவத்தை வெளிப்படுத்துகின்றன. தேவாரத்திருப்பதிகங்களில் பால்சமத்துவத்தை அதிகம் வலியுறுத்துவதாக திருநாவுக்கரசரின் திருப்பதிகங்கள் காணப்படுகின்றன.

### அடிக்குறிப்புகள்

சிவப்பதி.இல.15

கலைவாணி இராமநாதன், இந்திய மெய்யியற் சிந்தனையில் வேதாந்தம்  
- சித்தாந்தம் கூறும் கடவுட்கொள்கை, இலங்கை, 2011, ப.134

மே.கு.நூ., ப.135

சர்வ.ஞா.ஆக.,பதி.இல.பா.எ.8

கலைவாணி இராமநாதன், இந்திய மெய்யியற் சிந்தனையில் வேதாந்தம்  
- சித்தாந்தம் கூறும் கடவுட்கொள்கை, இலங்கை, 2011, ப.142

சிவ.சித்தி., 6.2.239

திருவருட்., பதிமுதுநிலை,2

தாயு.பாடல்கள், எந்நாட்கண்ணி, பா.எ.18.

பட்பாடல்கள், பகுதி 11, அருட்புலம்பல், பா.எ.10.

அப்பர் தேவாரம், திருவதிகை.4

மே.கு.நூ., நமசிவாய.10

மே.கு.நூ., திருவதிகை.6

மே.கு.நூ., திருவதிகை.6

மே.கு.நூ., திருவதிகை.8

மே.கு.நூ., திருவதிகை.1

மே.கு.நூ., திருவதிகை.6

மே.கு.நூ., திருவதிகை.7

மே.கு.நூ., திருவதிகை.4

மே.கு.நூ., திருவதிகை.6

சி.சித்தி.1.63

திருக்களிறு : 78

சிவ.சித்தி., சுப.75

சிவ.சித்தி., சுப.77

அப்பர் தேவாரம், திருப்பாதிரி.4

மே.கு.நூ., திருப்பாதிரி.2

மே.கு.நூ., திருவதிகை.2

மே.கு.நூ., திருவதிகை.9

மே.கு.நூ., திருவதிகை.10

மே.கு.நூ., திருவதிகை.8

மே.கு.நூ., திருவதிகை.5

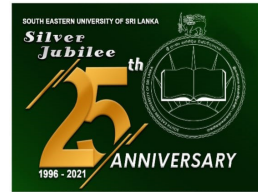
மே.கு.நா., திருக்கழிப்பாலை.10  
சம்.தேவா.1.128  
அப்பர் தேவாரம், திருவதிகை.9  
மே.கு.நா., திருவதிகை.10  
மே.கு.நா., திருநாரையூர்.5  
மே.கு.நா., திருவதிகை.6

## CHAPTER 11

### Participatory Approach for Community Development: Conceptual Analysis

**Riswan, M**

PhD Research Scholar (Commonwealth Fellow),  
Department of Sociology,  
University of Kerala &  
Senior Lecturer  
Department of Sociology  
South Eastern University of Sri Lanka.



**Bushra Beegom, R.K.**

Assistant Professor,  
Department of Sociology, University of Kerala,  
Kariavattom Campus,  
Thiruvananthapuram,  
Kerala, India.

#### Abstract

*The community development is a long term process that focused on improving life standard of the community. The participatory approach often promote local people to involve in decision making that affect their personal and communal lives. This paper discussed on the concept of community participation and its significance for the community development. The participatory approaches have been adopted in the development projects since 1960s and 1970s, as a useful and appropriate mechanism to achieve development goals in a successful and sustainable manner. This is basically constructed as conceptual paper using secondary sources of research article, theoretical papers, reports, chapter, books and electronic data. The study denoted that participatory approach is a tool for empowering local community, poor and marginalized, and take them to the mainstream of the development schemes. The analysis of the papers stressed that local people are direct beneficiaries of all projects, rather than that of professionals or outsiders. It revealed that the PRA and RRA are also suitable models for applying within the community to improve the skills of local people and enable them to empower in decision making. The paper suggested to invite greater participation of local community in all types of development initiatives implemented by the government or donor agencies, to achieve real objective of the projects.*

**Keywords:** Community, development, participatory approach, RRA, PRA

### **11.1 Introduction**

Community participation is very wider concept that is often uncertain. The terms 'community' and 'participation' are need to be analyzed separately to get clear understanding. The term community often refers a group of people who share common interest to achieve their individual and communal goals. Also, a community defines as a group of persons who live together in their own settlements or place where individuals meet each other directly to share a common interest (Maser, 1997). The term participation refers a process in which people are enable to involve and actively take part to make decision on preparing and formulating policies, and planning and implementing such policies, and providing services to the community to make change on their lives (Gomez & Nakat, 2002).

Community participation may denotes some other process like community action, consultation, and community empowerment that lead the community to achieve various goals toward their betterment. Participation refers the engagement of citizens in the decision making process during initiation of development plans (Maser, 1997). Oakely (1991) defines the term participation as joining process of rural community with current social, economic and physical resources in order to achieve the goals of community development plans and schemes. Paul (1987) stresses that participation is the changeable and a self-transformational method and learning by practice (Oakely, 1991 & Paul, 1987; cited in Dinbabo, 2003).

The 'community development' is a process, program, and an approach which has been recognized for about last five decades. Over the years, the concept of community development has understood, adopted and exercised by the development experts in many countries including underdeveloped and or developing nations (Sanders, 1958: Cited in. Rahim & Asanarulkhadi, 2010). Generally, the community development defines as a way to help local people to upgrade their lives. This concept was developed in Australia, United States and Africa early 1960s, and then community development adapted as a branch of 'integrated rural development' in 1970s and 1980s, which promoted by the World Bank and other UN agencies. The Indian government has initiated community based development program in 1952, the focus of this program was on community enhancement in the rural sectors (Siddiqui, 1997).

Community development is a practical activity that allows people to facilitate their participation in the proposed projects (Maser, 1997). It is also encourage people within their own environment to involve successfully in the decision making process, when government allow community participation (Abott, 1995). Community development is a unique concept and a new paradigm in the development phenomena. This new strategy of development often associated with participatory procedures to ensure greater association of local community in the process of the decision making. It always improve a practical knowledge and skills of local people to involve in the development initiatives (Maser, 1997 & Hawken, 1983). This above conceptualization has given basic idea of numerous matters like community, development, participation, community participation, participatory development and community development etc. This paper has been very particular on conceptual review of participatory approach in relation with community development.

### **1.2. Participatory Approach: Previous Works**

In the recent past, the approach of community participation has broadly been used in the debate of community improvement plans. Frances Cleaver (1999) argues that the community participation is a tool to reach better outcome from development projects, and it is an approach to improve capacity of local people to uplift their lives, promote social change among poor or marginalized communities (Cleaver, 1999). Beside, Dinbabo (2003) presents the relationship and consequences of various concepts like Development, Participatory Approaches and Community Development. Robert Chambers (1993) in his 'Participatory Development', argues the professionalism of development theory. Similarly, Chambers critiques that the development projects in earlier dominated by professionals like engineers, economists etc. it was created bias amongst rural poor, but a new professionalism and new paradigm of participatory approach begins with people, it adopting poor rather than blueprint of the project (Chambers, 1993). Numerous studies denotes that participatory approach enable poorest and marginalized people to engage in the development projects. Alike, community participation is a useful approach or an appropriate strategy to empower local community on decision making and aware them to realize their value to the project (Ako, 2017; Eylers & Foster, 1998; Thomas, 1994; Chambers, 1994). Participatory Rural Appraisal (PRA) has been discussed by various scholars and professionals, also Rapid Rural Appraisal (RRA) has been promoted by the experts, these participatory methods were recognized

to adopt and exercise in the development process specifically in rural areas as well as in urban sectors whenever required (Chambers 1983; 1993; 1994; & 1985; El-Gack, 2007; Long, 2001 and Thomas-Slyter, 2009). Through these all literatures, it can be observed that participatory approach is highly recognized and promoted by the experts and professionals in various levels. Therefore this study attempts to discuss the relevance and significance of community involvement in the development practice, for the purpose of contributing in the existing knowledge.

### **11.3. Objective**

The key objective of this conceptual paper is to appraise the use of participatory approach in the community development plans, based on the conceptual as well as theoretical analysis. The other objective is to assess the major participatory models exercised in the process of community development initiatives.

### **11.4. Methodology**

To achieve the aforesaid two objectives, this conceptual paper manifold with various literatures and theoretical contribution which already made by the scholars and theorists. This is basically a qualitative work with the collection and interpretation of secondary sources such as research article, systematic literature review papers, theoretical and conceptual papers from published materials available in both texts format and electronic web-sources. As it is a pure qualitative study, filed based survey or primary or and quantitative data were not employed in this work. The concept of participation, community, participatory approach and community development were explored and systematically presented in this paper. The analysis, arguments and discussions were also presented in an interpretative way using conceptual and theoretical evidences from previous studies conducted by the theorists and researchers.

### **11.5. Result and Discussion**

The main intention of this paper is to understand the participatory approach in the community development. This inquiry outlines the theoretical contribution made by the scholars and experts in the field for the purpose of discourse the significance of participatory or community based development. According to the neo-liberal view, community participation may requires institutional support for financial savings, self-help and productive outcome of the project (Mayo & Craig 1995). Community participation in community development was targeted



to ensure cost reduction in the government sector and increase the efficiency of the projects. Brohman (1996) points that population participation has often stressed to fill the requirement when government has no willingness or ability to do so (Brohman, 1996; cited in: El-Gack, 2007).

Community participation has developed as a key model in all types of development projects, and it acknowledged by the World Bank in order to ensure the social changes, because development plans cannot be succeed and sustained only by the professional or expert participating in the process in developing as well as in developed nations (World Bank, 1996). The participatory approach permits development activities to be interlinked with local people as part of the development process without any domination from outsiders or development experts or agencies (Rahim, 1994). This approach is also an important method which allows local community and rural people to enable their own participation in the development process, rather than that of technological involvement in the development process (Thomas, 1994).

The target of community participation is to empower people, enhance their abilities and skills in order to interact with development process and take their own decision on their requirements (Theron, 2005). This empowerment aims to motivate local communities to involve and priorities their development needs and ensure their fullest corporation on the development initiatives. Theron argues that 'if participation is doing by the community participatory intervention should lead to the change of an existing reality to a situation in the future which is likely better' (Nekwaya, 2007). We are professionals or development practitioners or social workers, or a student, and we are very interested to involve with local communities. Many development plans claim to adopt the concept of community participation, which is not only explain policy making process in the development intervention, but also it is required all stakeholders to ensure the accountability of the projects. Community participation is an approach to improve effectiveness of entire programs while community taking their part to understand the value and cohesiveness, and realize the benefits of working together for a common goal.

Community participation can enrich the development process and provide opportunity for people to gain knowledge and experience. According to the discussion, it is found that the overall objective of community participation is to empower and facilitate poor people living in the world (Kelly, 2001). This participatory mechanism specifies a dynamic role to the community, leading to control over decision while consultation taken up with information sharing (Fraser, 2005). Community participation could be used to build network, corporation and interaction among local people, and the rapport could be maintained between beneficiaries and agencies of projects so that delays are reduced, the real goal of the project is achieved, overall shortcomings are mitigated, and all financial problems are minimized.

Community participation has accompanied with various participatory development methods. Generally, these participatory methods have been observed as a means by which inclusion of poor or marginalized people who can involve to achieve their empowerment and development (Chambers, 1994). Those participatory approaches include participatory action research (PAR), participatory poverty assessment (PPA), environmental impact assessment (EIA), social impact assessment (SIA), rapid rural appraisal (RRA), participatory rural appraisal (PRA) and gender analysis (El-Gack, 2007).

Particularly the PRA has concerned more attention and it is considered as a key strategy of participatory model which encourages people to plan, monitor and evaluate the project (Mosse, 1998). The technique of PRA has been adopted by numerous development agencies (Long, 2001). Chambers defines PRA as 'a family of approach and strategy to allow rural people to share, enhance, and analyze their knowledge of life and condition, to plan and to act'. Chambers argues that PRA can remove the dominance of outside expert or development professional, and can easily empower the marginalized poorest, and the PRA has more participatory and democratic values for effective adaptation with organizations (Chambers, 1994).

The PRA helps the community to transform and accelerate social changes, and solve the problems that they face especially in the rural sectors in developing countries. PRA focuses on strengthening local communities, increasing awareness, providing opportunity to raise their voice, promoting responsibility, transparency and accountability, empowering local people, and mobilizing them to meet their goals determined by the community.

PRA is a driving force or a methodology which promoted in 1970s by Robert Chambers through various writings and publications. Similarly RRA (Rapid Rural Appraisal) also first encouraged by the Chambers in 1970s (Thomas-Slayter, 2009), hence, as participatory approaches, the PRA and RRA having more connectivity for the purpose of achieving community development.

The PRA exercises in most developing countries which undoubtedly applies in rural sectors, because 50% of the global people are living in rural segments, and these communities are living under extreme poverty line which figured out at 75% all over the world (IFAD, 2001). Thus, PRA focuses mostly on rural areas and possibly adopt key strategies for using in the urban sectors. The both RRA and PRA often promote the life standard of people and help to empower them in rural as well as in urban settings (Thomas-Slayter, 2009).

Participatory approaches encourage rural people to involve in the development plans and policy making process. Basically the concept of participatory strategy enhance community engagement in the decision making process that effect their live, and empower local communities to take part in all spheres of development intervention (Ako, 2017). In the early 1960s, the development agencies acknowledged that failure of development initiatives were found as a result of poor participation of local people, especially in developing countries (Rahnema, 1992). An alternative approaches encouraged and recognized 'people-centered' or 'people-oriented' model in the development initiatives, which invites to put people as agent, creator and or play their own role in central position (Brohman, 1996). This approach globally recognized amongst many participatory theorists who developed tools and knowledge to assist in applying the approach in the practical field (Mathur, 1995 & Gerrit, 1997).

Participation is often provide equal opportunity to all people to involve in decisions that affect their lives and welfare (Burke, 1968). Also the participation is focused on providing ways for the people to get trained and empowered themselves to work together, and enable them for understanding how development and problem solving methods required community involvement. The governments and international donors or development agencies involved in the development phenomena that showing us they are actively engaging community development projects rather than that of real beneficiaries. Therefore, the real impacts of

participatory approach on community development and who are the real beneficiaries of a project, are still unknown (Eylers and Foster, 1998). So, the government or donor agencies should create a suitable mechanism to adopt participatory model in all spheres of development plans, and to ensure the participation of actual beneficiaries in the projects, so that it can be achieved the intended objectives of the programs.

The concept of participatory approach has been recognized to apply for promoting community welfare and development initiatives. The sense of community ownership and responsibility may lead for decision making of the local people when the government implement any development projects including water supply, agricultural extension, irrigation, solid waste management, rain water harvesting, rural development, health and sanitation projects and so on. The participatory method may apply when project are designed and prepared, so that community participation can be taken into account to identify or assess the positive and negative impacts related to the planned projects. And the local people can learn from each other and improve their knowledge and skills with mutual respect and responsibility of each other. To mitigate social dilemmas, the community participation was identified as a key tool to make the projects in a successful and sustainable manner. The Participatory Rural Appraisal (PRA) was found as a smart application to obtain community engagement in the projects like water and sanitation and so on. This participatory model permitted local people to involve in the projects executed in their communities and to ensure the ownership of the projects.

## **11.6 Conclusion**

Many theorists and development experts criticized that several limitations have been faced in the development framework in early decades. Adoption of participatory approach became as alternative mechanism in the development agenda. Before many decades, the development initiatives were allowed mainstream or outside professionals to involve in decision making of all stages of the projects. The local people, especially poorest were marginalized and excluded from this initiatives and project implementations. The World Bank claimed that social indicators have not been adopted with the development activities over the decades, however, this participatory approach in terms of community participation could be an ideal and effective model for ensuring the sustainability of any development process. So, basically it is identified that major reason for failure of development projects, particularly in developing countries was lack of engagement of rural

people and local communities even though they are the direct and real beneficiaries.

The concept of community engagement accord the participation of group of people in decision making process that affect and improve their lives. People do not interest to be engaged in decision making, but each individuals have an opportunity to take part. This participatory mechanism is an essential model for a representative and democratic value to the people in decision making, which benefitting them for enhancing their welfare and healthy lives. This participation gives the way to network the people in terms of building social capital with trust, norms, reciprocity, return credibility and legitimacy for both people and the governments. It is necessary to educate people to find a new way to make decision actively in all phases of development initiatives to understand their values, apply their knowledge and play their role toward decision making that moderate their present and future development.

## **References**

- Abott, J. (1995). Community Participation and Its Relationship to Community Development. *Community Development Journal*. 30: (2); 158-169. Oxford University Press.
- Ako, J.N. (2017). A Study of Community and Citizen Participation in Development and Policymaking in Stockholm, Värmdo and Bortkyrka Municipalities in Sweden. Sweden. Malmö University. Retrieved August 24, 2020 from: <http://muep.mau.se/bitstream/handle/2043/24434/Ndip-JA-DP18.pdf?sequence=1>
- Brohman, J. (1996). *Popular Movement: Rethinking the Theory and Practice of Development*. Oxford. Blackwell Publishers.
- Chambers, R. (1993). *Challenging the Professionals: Frontiers for Rural Development*. London. Intermediate Technology Publications.
- Chambers, R. (1994). The Origin and Practice of Participatory Rural Appraisal. *World Development*: 22(7); 953-969.
- Chambers, R. (1983). *Rural Development: Putting the Last First*. Longman. New York. Longman.
- Chambers, R. (1985). 'Shortcut and Participatory Methods for Gaining Social Information for Project'. In: Cernea M.M. [eds.] *Putting People First: Sociological Variables in Rural Development*. A World Bank Publication. Oxford University Press.

- Cleaver, F. (1999). Paradoxes of Participation: Questioning Participatory Approaches to Development. *Journal of International Development*. John Wiley & Sons Ltd. 11: 597-612.
- Dinbabo, M.F. (2003). *Development Theories, Participatory Approaches and Community Development*. Bellville: Institute for Social Development, University of the Western Cape. [ResearchGate:]. Available at: <https://www.researchgate.net/publication/319316323>.
- El-Gack, N.E. (2007). *Participatory Approaches to Development: An Analysis of the Experiences of Development Projects in Sudan*. New Zealand. Massey University. Retrieved August 22, 2020 from: [https://mro.massey.ac.nz/bitstream/handle/10179/1455/02\\_whole.pdf?sequence=2&isAllowed=y](https://mro.massey.ac.nz/bitstream/handle/10179/1455/02_whole.pdf?sequence=2&isAllowed=y)
- Fraser, H. (2005). Four different approaches to community participation. *Oxford University Press. Community Development Journal*: 40(3); 286-300. DOI: doi:10.1093/cdj/bsio37.
- Gerrit, H. (1997). *Participatory Action Research and Peoples' Participation*. Sustainable Development Department. Food and Agricultural Organization (FAO). United Nations. Posted May 1997. Retrieved August 24, 2020, from: <http://158.132.155.107/posh97/private/research/methods-action-research/participatory.pdf>.
- Gomez, J.D. and Nakat, A.C. (2002). Community Participation in Water and Sanitation. *Water International*. 27: (3). 343-353. DOI: 10.1080/02508060208687014
- Hawken, P. (1983). *The Next Economy*. New York. Ballantine Books Publishers.
- IFAD. (2001). *Rural Development Report. Fostering inclusive rural transformation. Investing in Rural People*.
- Kelly, D. (2001). 'Community Participation in Rogaland Management'. In: Dana Kelly (2001). *A Report for the Rural Industries Research and Development Corporation*. Kingston. RIRDC (Rural Industries Research and Development Corporation) Publication.
- Maser, C. (1997). *Sustainable Community Development, Principles and Concepts*. USA. St. Lucie Press.
- Mathur, H. M. (1995). 'The Role of Social Actors in Promoting Participatory Development at Local Level: A view from India'. In: H. Schneider and M. Libercier (Eds). *Participatory Development from Advocacy to Action*. Paris: OECD. 153-170.
- Mayo, M. and Craig, G. (1995). 'Community Participation and Empowerment:

- The Human Face of Structural Adjustment or Tools for Democratic Transformation?' In: M. Mayo and G. Craig (Eds.). *Community Empowerment: A Reader in Participation and Development*. London and New York. Jersey. Zed Books Ltd.
- Nekwaya, J.H. (2007). *Assessing Community Participation in Development Planning and Service Delivery: A Case Study of the Omusaty Regional Council*. SUNSchoalr Research Repository. Library and Information Services. Stellenbosch University. Available at: <https://scholar.sun.ac.za/handle/10019.1/1974>.
- Rahim M.S. and Asnarulkhadi, A. (2010). *Community Development through Community Capacity Building: A Social Science Perspective*. *Journal of American Science*. 2010:6(2). 62-69. Marsland Press.
- Rahim, S.A. (1994). 'Participatory Development Communication as a Dialogical Process'. In: S. A. White, K. S. Nair and J. Ascroft (Eds). *Participatory Communication Working for Change and Development*. New Delhi. Thousand Oaks and London. Sage Publications. 117-137.
- Rahnema, M. (1992). 'Participation'. In: W. Sachs (Eds.). *The Development Dictionary*. London. Zed-Books Ltd. 116-131.
- Siddiqui, H.Y. (1997). *Working with communities: An introduction to community work*. New Delhi: Hira Publications.
- Theron F. (2005). 'Public Participation as Micro Level Development Strategy'. In: *Public participation in South Africa: A Development Management perspective*. Cape Town, South Africa. JL van Schaik Publishers.
- Thomas, P. (1994). 'Participatory Development Communication: Philosophical Premises'. In: S. A. White, K. S. Naire and J. Ascroft (Eds). *Participatory Communication: Working for Change and Development*. New Delhi. Oaks and London. Sage Publications. 49-59.
- Thomas-Slayter, B. (2009). 'Participatory Approaches to Community Change: Building Cooperation through Dialogue and Negotiation Using Participatory Rural Appraisal'. In: Joseph de Rivera (Eds.). *Handbook on Building Cultures of Peace*. LLC. Springer Science and Business Media.

## CHAPTER 12

### ROLE OF LOCAL GOVERNMENT IN SOLID WASTE MANAGEMENT: SPECIAL REFERENCE IN YATIYANTHOTA PRADESIYA SABHA

**Rifka Farwin**

Department of Sociology,  
South Eastern University of Sri Lanka.  
rifkafarwin777@gmail.com

**Lumna, N**

Department of Sociology,  
South Eastern University of Sri Lanka.  
lumnanoohu@seu.ac.lk



#### Abstract

*The large scale of solid waste generation has been a critical issue in the world today. Thus, the conservation of natural resources as well as for protecting the environment with maintaining the quality of living standard can be achieved by the service of government authorities and managing waste in proper manner. Since Solid Waste Management (SWM) is a multifaceted task that incorporates a diverse set of shareholders and operations, Local Governments (LGs) are responsible for the proper SWM in Sri Lanka and the absence of a sound national policy in SWM has caused tremendous negative environmental consequences in contemporary society. Despite various programs being implemented by the LGs with the relevant authorities in managing solid waste and most of them have not been successful. One of the LG, namely Yatiyanthota Pradheshiya Sabha also facing these kind of improper SWM activities and because of that the Maththamagoda GS division which is authorized by it have not enjoying the facilities of SWM. Thus, the main purpose of this study is to analyse the problems and challenges faced by the Yatiyanthota LG in the implementation of proper SWM. This study is mainly based on qualitative and descriptive analysis. Both primary and secondary data were collected for the relevant study. Primary data were collected by unstructured interview with the Secretary of the Yatiyanthota Pradheshiya Sabha and one of the officer of the Pradheshiya Sabha who are responsible for implementation of SWM system and the secondary data were collected by the journals, articles, web sources and statistical data of Yatiyanthota divisional secretarial in order to analyse the problems and challenges at the implementation level. The SWM has not been successful and the authority facing numerous challenges at its implementation stage due to socio, economic and environmental conditions. They were significantly affecting the successful implementation of SWM in Maththamagoda area. Finally, the study proposes policy recommendations for mitigate the SWM issue in efficient and effective manner.*

**Keywords:** Solid Waste Management, Local Governments, Landfill



### **12.1. Introduction**

Every human beings are responsible for the protection of this environment and, in this means there are many authorities which moulding the people and make them realize their potential and accountability towards that, by the same time doing their responsibilities upon the people in the community. According to the United Cities and Local Governments (2008) the performance of LG significantly affects the quality of the people for whom LGs are responsible regarding basic public services, including town planning, provision of social and health services, education, water supply, business development and environmental management. Anyhow, the environmental management of LG is of high value for improving the quality of life of people through good environmental quality. For instance, the LGs in Thailand are important organization for promoting and conserving environmental quality because they are close to the people. However, some LGs in Thailand face environmental pollution, community waste and land use problems which in turn affect the quality of life of people (Penya et al, 2016). Although many LGs are attempting to develop their environmental management system, they face several problems that affects their environmental management performance (Gustafsson and Hjelm, 2005). Such as a lack of clarity of goals, inadequate management structure, inadequate access to information and conditions specific to developing countries.

In this way, SWM also considered as the huge challenge for the environmental. Waste management, thus, represents one of the main issues that have to be faced by mankind nowadays. Over the past few decades numerous cities have increased their efforts to find sustainable solution in the SWM problem. Particular focus was to develop integrated SWM strategies, including construction, operation and maintenance of sanitary landfills and the related problem (Ali, 2002). Furthermore, in Delhi's waste management system at least 150,000 waste pickers divert more than 25% of all waste generated into recyclables. This management system saves the municipal authorities substantial costs (UN-HABITAT, 2010).

For preventing any serious environmental health risks and treatment of these wastes management is strongly required. Vergara & Tchobanoglous (2012) reported that proper planning and control is required in order to prevent the negative impact of waste on the environment. As a result, Ghiani et al. (2014) added that, a proper organisation of SWM has become an essential task needed to safeguard the environment.

Beranek (1992) argues that the provision of an efficient SWM system is now as important as other essential amenities such as electricity, airports and highways.

Anyhow, SWM issue is the biggest challenge to the authorities of both small and large cities in developing countries. This is mainly due to the increasing generation of such solid waste and the burden posed on the municipal budget. In addition to the high costs, the SWM is associated lack of understanding over different factors that affect the entire handling system. Anyhow, the responsibility of SWM lies with the LG authorities. Because of the demographics changes, consumer behaviour, rapid urbanization and fast growing population municipalities in the developing countries and the decision makers are confronted with serious new challenges in SWM. Socio, cultural, economic, legal, political and environmental factors as well as the available resources are the main issues that affect the SWM in all countries (Blundell, 2003).

Several studies showed that collection, storage, transportation and final disposal of solid wastes are a major problem in urban cities and areas (Blundell, 2003). Cities in the East and North Africa as well as most developing countries are also facing the same serious problems related to SWM process. The main reason for these problems are attributed to the poor economy of these areas which accounts for the low achievement in SWM (Blundell, 2003). Most of these developing countries fail in the SWM issues due to the limited available resources and the competing priorities over their resources. Thus, the SWM is indeed one of the serious and major problems faced by many cities in the world.

SWM has become a critical issue in Sri Lanka. Number of initiatives has been taken by the authorities and several Governmental and Non-Governmental Organizations (NGOs) to implement integrated waste management practices and some of which have been successful such as the recycling centres at Negambo Municipality, composting project at Weligama Urban Council (UC) and a few bio gas plants are operating in the country. The success of these can be mainly attributed to the commitment of the authorities. For the last 20 years or so, government institutions have attempted to figure out the best waste management strategy for the country. While some policies and actions supported sanitary landfills and some initiatives were driven towards waste to energy projects. In the year of 2008, the Central Environmental Authority (CEA) initiated the program which is named as 'Pilisaru' to overcome

solid waste problems within 10 years with the goal of waste free Sri Lanka by 2018 (UNEP, 2012). However, lack of knowledgeable people and unified coherent strategy in the project handling that was not been successful even at the end of 2019.

Environmental Protection Agency (EPA) have list out the main activities in the waste management area are, drawing up and reviewing the National Hazardous Waste Management Plans and The Integrated Pollution Prevention and Control (IPPC) which mostly deal with the generation, recovery and disposal of waste, development of guidelines for the selection, management, operation and ending of the use of landfill sites, authorisation of waste imports and also maintenance of national waste database. The national Strategy for Solid Waste Management (NSSWM) put forth by the Ministry of Forestry and Environment in 2002 endorsing the need for integrated SWM provides the overall guidance for the management of the country's solid waste (Amarananda and Bandara, 2006).

In the past, the main cost involved with SWM was for the collection and transport of waste since the common practice of open dumping did not cost anything. It was not a concern because of the free availability of degraded land (Bandara et al, 2007). However, land scarcity is now a major problem faced by LGs and therefore finding land for disposal is becoming increasingly difficult. In some parts of the country even privately owned lands are used for open dumping in instances where landowners allow dumping on a payment to get their low lying lands filled up (Bandara et al, 2007). Majority of these dumps are left open where as a few apply a thin soil cover on top due to public opposition. This is the only protective measure taken. These dumps are used to dispose every kind of waste such as industrial waste, municipal solid waste, hospital and clinical waste and slaughterhouse waste altogether without any segregation. Some of the privately owned dump sites had been sold for construction purposes later on. In the central part of the island, most of the time waste is disposed along road embankments thus contaminating water streams at the bottom of the slope (Bandara and Hettiarachchi, 2003). The failure to address this escalating issue in a timely manner resulted in unsanitary eye sores in Karadiyana, Bluemendhal, Meethotamulla, Kolonnawa and the degradation of wetlands, coastline, rivers and other streams which become dumping sites for plastic and polythene waste and other mixed waste. With mountains of garbage accumulating at Bluemendhal and Meethotamulla.

The main reasons identified for these kind of improper SWM problems were the challenges faced by the LGs over the period (DailyFt, 2020). According to the area and the services given by the LGs will directly impact on the SWM. Unfortunately, these kind of challenges also faced by the Yatiyanthota Pradhesiya Sabha and because of that the Maththamagoda GS divisional area which is come under this LG have not enjoying the proper waste management facilities.

### **12.2. Research problem**

Even though, SWM is considered as serious environmental and social issue in the historical period, still there are so many places existing and have not enjoying the proper facilities in waste management. Number of management activities and frameworks have been implemented by the non-governmental organizations and governments' local authorities namely Municipal Council (MC), Urban Council (UC) and Pradhesiya Sabha over the period to control this issue all over Sri Lanka. But still the waste management system is not well managed in Maththamagoda GS Divisional area. Particular Yatiyanthota Pradhesiya Sabha facing many problems in order to provide the better waste management facilities. What are the problems behind that? Why Pradhesiya Sabha cannot give the proper waste management facilities?

### **12.3. Objective**

Main objective of this study is to investigate the challenges faced by the Yatiyanthota Pradhesiya Sabha on the implementation of proper SWM activities.

### **12.4. Literature review**

There were many researches carried out relevant to the SWM in various aspects and angles. In this way, Ahsan et al. (2014) carried out a study on 'Assessment of municipal solid waste management system in a developing country'. A six month field study was conducted to identify the solid waste management steps such as storage at source, separation, on site storage, collection, transportation, treatment, reuse, recycling and ultimate disposal. This study was represents a few basic steps of municipal solid waste management which practiced in the six major cities of Bangladesh, namely, Dhaka, Chittagong, Khulna, Rajshahi, Barisal and Sylhet. This study addresses the role of city authority to meet the demand of the city dwellers in solving this emerging socio, environmental issue and the initiatives taken by some non-governmental organizations and community based organizations.

Finally they concluded with the proper sustainable management concept for the urban areas of Bangladesh. Anyhow, this study may be the SWM system and the services of authorities but not related with Sri Lankan context.

Taiwo et al. (2010) carried out a research on 'Waste Disposal and Pollution Management in Urban Areas: A workable Remedy for the Environment in Developing Countries'. The researchers said that, both waste and the crude disposal techniques have created subtle and yet serious environmental pollution in many developing countries. These have seriously contributed to environmental pollution and ecological deterioration. The major reasons for these study were identified to be inadequate information and insufficient modern waste disposal facilities. This study has highlighted the use of simple, yet efficient waste disposal techniques and recommends the adequate supply and optimal utilization of trashcan and rubbish drums in private and public places. Thus, this study clears the waste disposal situations in developing country and particularly not consider about the Sri Lanka and the waste management phenomenon happening here.

Panya et al. (2016) carried out a research on 'The performance of the environmental management of local governments in Thailand'. Particular data were collected by using questionnaires with 385 LGs consisting of municipalities and sub district administration organizations which selected by multistage sampling and systematic random sampling country wide. The study evaluated the performance of the environmental management of LGs in Thailand and examined the relationship between specific management factors and output. The findings revealed that the performance of the LGs in Thailand was at a moderated level. So far the study may be related with the SWM and the role of LGs, thus it not coming under Sri Lankan contexts.

Kamaruddin and Omar carried out an article in 2011 which titled as 'Waste management and the role of waste administrators in Selangor, Malaysia'. The researchers conducted unstructured interviews with seven waste administrators and asked broad, open-ended questions. The study highlights the perceptions of waste administrators regarding their main roles and responsibilities, efforts in promoting recycling or waste minimisation and awareness to the problems or constraints that they face in the waste management activities. The main findings were, in Malaysia there is still low public participation in recycling, indifference

of the public towards waste minimisation effort and no clear guidelines on effective waste or administrators to conduct effective people based approach. Thus, this study find out the challenges behind the proper waste management in Malaysian community and the administrative in there, and not in Sri Lankan context and the authorities' in Sri Lanka.

Perera, K. L. S. (2003) have conducted a research study on the topic of 'An overview of the issue of solid waste management in Sri Lanka'. Data collection were done by the interview technique from the relevant people including Central Environmental Authority of Sri Lanka, Urban Councils members and mayors. The researcher pointed out the common practices in Sri Lanka on collecting residential, commercial and industrial waste and deposit this material in the outskirts of the cities and towns, disposal and illegal dumping on roadsides, vacant land or river/stream banks. Further, the variation of collection methods from place to place and highlight the main effects for the environment and health in the country because of these improper SWM system. However, the study was stated overall phenomenon of waste and its impacts on the Sri Lankan Context and did not considered a particular area or a particular waste management authority.

Kuruppuge, R. H., and Karunarathna, A. K (2014) have done a research titled 'Issues in management of municipal solid waste (MSW): Institutional capacity of Local Authorities in Sri Lanka'. Researchers selected LAs for the data collection with the aim of covering all provinces and districts which representing the demography and geography of the country. In addition secondary data were collected from the municipal authorities using a predesigned questionnaire obtaining details of administrative, financial and obtaining details of administrative, financial and technical inventors. All selected LAs represented Municipal Councils, Urban Councils and Pradhesiya Sabha. The major activities have included the performing field investigations to access the quantity of MSW composition and characteristics. Researchers found that, the present status of MSW management by LAs of Sri Lanka was assessed via a comprehensive survey to identify the lapses in legislations, management and implementation. The analysis showed that the amount of waste handled by most of LAs were less than 100 tonnes per day and more than 50% of LAs stood behind the 40 tonnes per day limit. This study has highlighted overall phenomenon of the LAs services in SWM process and not considered about the challenges which faced by the third lowest waste administrative authority of Sri Lanka which is Pradhesiya Sabha.

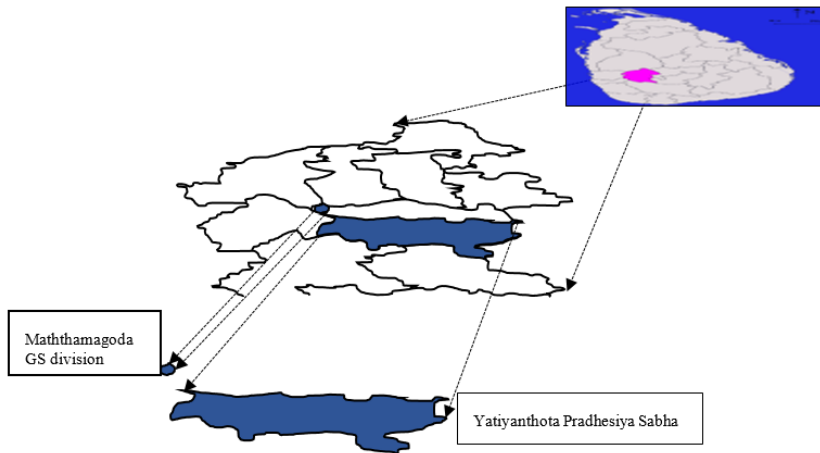
Vitharana, A. D (2016) have done a research on 'Solid Waste Management in Hambantota Municipal Council, Sri Lanka: Current Practices, Challenges and Prospects'. Researcher used a mixed methodology to gather information and they highlighted that, most of the Municipal council and Pradhesiya Sabha have been trying to sustainably manage these waste which is seem challenging. The inability to provide adequate SWM process has caused significant impact on socio, economy and environment in the area and the particular researcher found that lack of financial and technical support, the lack of public awareness, information and education, the lack of collaboration and public participation and the lack of legal instrument and policies were playing a major role in SWM process in Hambantota Municipal Council. However, this paper reviews the problems and challenges of SWM in Hambantota Municipal Council. But did not talked about other areas and also this was particularly about the problem that arise in the municipal solid waste on Sri Lanka and not about the challenges facing by the Pradhesiya Sabha.

However all these researchers may carried out the researches on the basis of SWM and the challenges faced by the LGs in developing countries, how the role of LGs role are vary in different countries including the Sri Lankan context and the municipal SWM issues facing by the Sri Lankan authorities, but there were no any researches done on particular with the challenges faced by the LAs in Sri Lanka and especially in the Maththamagoda areas' LA namely, Yatiyanthota Pradhesiya Sabha. So, this research have undertaken by the researcher in order to fill the gap.

### **12.5. Materials and Methods**

The Maththamagoda area was chosen for this study. It is located in Kegalle district, Sabaragamuwa province. The territory of Kegalle district comprises of 48 km from North to South and 32 km from East to West. From Kegalle to Colombo side approximately in 3 km distance Galigamuwa is located. From Galigamuwa there is a B127 road that go through from Ruwanwella to Awissawella. In between roughly 16 km from Galigamuwa, Maththamagoda area is situated. Maththamagoda is bounded on the North by Kegalle, on the east by Bulathkohupitiya, on the south by Ruwanwella and on the west by Warakapola. Kegalle district comprises 11 Divisional secretariat divisions and Yatiyanthota is one of that. It is further divided into 32 GS Divisions, Maththamagoda addressed as one of that and 108 is the number of Maththamagoda GS Division. In Kegalle district there are 12 local authorities include one urban council

and 11 Divisional councils (Pradhesiya Sabhas). Yatiyanthota Pradhesiya Sabha is considered as one of the local authority and is responsible for all the 32 GS Divisions of Yatiyanthota divisional secretariat.



**Figure 12. 1:** Map of the Maththamagoda area  
Source: Divisional Secretarial Report. (2019). Yatiyanthota.

This study is mainly based on qualitative and descriptive analysis. Both primary and secondary data were collected for the relevant study. Primary data were collected by unstructured interview with the Secretary of the Yatiyanthota Pradhesiya Sabha and one of the officer of the Pradhesiya Sabha who are responsible for implementation of SWM system and the secondary data were collected by the journals, articles, web sources and statistical data of Yatiyanthota divisional secretarial in order to analyse the problems and challenges at the implementation level.

## 12.6. Results and Discussion

Yatiyanthota Pradhesiya Sabha is one of the LG and it was established to give the facilities for the people those who are living in the particular administrative area and Maththamagoda GS division is identified as one of that. Since provide the facilities for proper SWM is one of the main responsibility of the authority. Thus, the Yatiyanthota Pradhesiya Sabha has significant challenges within it and those were being a barrier to provide a necessary facilities for the people. From the unstructured interview with the Secretary of the Yatiyanthota Pradhesiya Sabha and one of the officer of the Pradhesiya Sabha those challenges and its nature were revealed.



## **12. 6.1 Social Challenges**

### **Lack of Human Resource**

Since, human resource is a key component in the management activities, thus the shortage in human resource leads to poor delivery and so many other factors. In the SWM practices human resource shortage leads to drop in the level of management, decline inefficiency and delay in the rate of work etc. This kind of situation also faced by the Yatiyanthota Pradhesiya Sabha.

Officer of the Yatiyanthota Pradhesiya Sabha said,

“Main issue is, shortage of staff to do that job that most people not like to engage with that job even giving the higher salary. People feel themselves that it is a bad and disrespect position to being and collecting the wastes from the premises. Because of they are not willing to participate in this, so the deficiencies in human resources were still exist. Presently we have few employees to manage and collect the wastes from the premises for the rest of the 31 GS Divisional areas. So seriously resource deficient in terms of skills, competencies and manpower were lack for us to do this responsibility correctly” (Interviewer 2).

### **Lack of Collaboratio and People’s Participation**

When employees working together and communicating with others help to produce something new or do something differently. It increase the speed of the works too. But in the Yatiyanthota Pradhesiya Sabha the authority faced lack of collaboration between people.

The Secretary of the Yatiyanthota Pradhesiya Sabha said,

“Collaboration between the Pradhesiya Sabha and the people are important for successful waste disposal practice. But it is little hard to being a collaborate conditions because of the inadequate community engagement. Pradhesiya Sabha cannot act in isolation to create a better environment, a relatively low level of people’s engagement is an evident in some points. Their involvement with the Pradhesiya Sabha is somewhat low. It was noted that many of the households of the Maththamagoda

area do not even know their local authority. This shows how remote the people are from the Pradhesiya Sabha and how poor their interaction with the Pradhesiya Sabha” (Interviewer 1).

### **Lack of Legal Instrument and Policies**

Legal policies are prominent to implement a proper management activities, lack or weak of legal policies pose a major threat to the society and they hindered the progress in attaining the proper targets. In that line,

The Secretary of the Yatiyanthota Pradhesiya Sabha said,

“There is a gap in environmental coverage of the waste disposal law, since there are no requirements for reduction, recycling or other alternative options. The people of the community is not well aware of the laws and regulations and therefore it is difficult to act with the legal instruments. Low recognition of the importance of waste issues and their potential with development has not been identified. It should be noted that the development of waste management policy has also been hampered and will remain as a problem because of the lack of adequate information and data” (Interviewer 1).

### **Lack of Awareness and Knowledge**

Generally, there are people with lack of awareness and knowledge regarding various aspects. On that poor knowledge on the proper waste management can be said as an initial phenomenon.

Officer of the Pradhesiya Sabha said,

“Lack of public awareness, information and environmental education are still exist in the society. Awareness among the people about the importance of proper solid waste disposal is generally not adequate in Maththamagoda. The lack of adequate information regarding the adverse impact of solid waste is a major barrier for a successful waste disposal process and causes low rate of people’s awareness. This is due to lack of environmental education which gives basic knowledge on the importance of solid waste disposal” (Interviewer 2).

Further the officer said that,

“The people’s willingness to separate waste and recycling of waste depends on their level of knowledge and availability of information. Reaching the community effectively with information regarding waste disposal was all that participants expect from authorities. Due to the lack of information and education on SWM and environmental issues has significant impact on the poor solid waste disposal practices by the people in Maththamagoda. The ongoing challenge in Maththamagoda area community as a whole remains to be the lack of awareness and public ignorance resulting in negative behaviours concerning the collection and disposal of waste. Behaviours such as carelessly throwing the garbage in the public street or in a near unused grasslands and generated waste is carelessly thrown away from the people as well as factories, they do not be aware about the negative impacts that come along with those behaviours and also that this practice has been a way of living for a very long time that many people do not really see as a ‘problem’ and that is a problem in itself “ (Interviewer 2).

In this line, it is crystal clear that, in Maththamagoda area the interaction between the people and Pradhesiya Sabha authority were very low and that lead to the poor social capital in there

### **Over Population**

The amount of individuals and families living in the Mathtamagoda area is too high when comparing with other GS divisions which coming under the Yatiyanthota Pradhesiya Sabha. It plays a major background reason in implementing the proper management activities by the Pradhesiya Sabha.

The Secretary of the Yatiyanthota Pradhesiya Sabha said,

“As Maththamagoda has 7211 individual with 1200 permanent houses and it is considered as the highest populated GS Division out of 32 GS Divisions. So, it is little harder for manage the wastes generated by the people because of the highest population” (Interviewer 1).

### **12.6.2 Economic challenges**

#### **Lack of Financial Resources and Assistance**

Financial resource is most initial facility in order to implement a proper management activities. It is a foremost thing to give an exact facility in all manner, unfortunately Yatiyanthota Pradhesiya Sabha facing inadequate financial strengths.

The Secretary of the Pradhesiya Sabha said,

“Due to lack of financial issues it is quit hard to send the vehicles for the Maththamagoda area. Because the fuel, driver and other facilities should be provided for the solid waste collection even twice for week, but it is being hard since the budget issue is existing within this authority and we were planned few months ago to give that responsibility to the Ruwanwella Pradhesiya Sabha which is near to the Maththamagoda area, but there were so many legal issues behind that so we ended up that decision” (Interviewer 1).

### **12.6.3 Environmental challenges**

#### **Slightly Apart from the Yatiyanthota Pradhesiya Sabha**

Geographically, Maththamagoda area is apart from other GS divisions which is come under the Yatiyanthota Pradhesiya Sabha and it is being a barrier to give a SWM facilities from the far away area.

The Secretary of the Yatiyanthota Pradhesiya Sabha said,

“Geographical location of the Maththamagoda GS Division is slightly apart from other GS Divisions that are coming under the Yatiyanthota Pradhesiya Sabha and it is a big deal to give the whole facilities for the area that is really far away” (Interviewer 1).

#### **Lack of Technical Support**

If there is a technical support, the service providers can easily implement some management activities with sustainable manner, but in the Yatiyanthota Pradhesiya Sabha it is a questionable problem and there are no facilities with technical support.

An officer of the Yatiyanthota Pradhesiya Sabha said,

“Technical support to provide its services to the community is important and especially to provide solid waste disposal services. Lack of technical support has cause the solid waste disposal process inefficient and ineffective. Thus the technical support from the beginning to the final phase is seems to be lack within our Pradhesiya Sabha, that may have so many reasons behind that, such as lack of knowledge on doing a proper recycle process and there are not even have basic facilities to maintain a proper waste coaction process and proper disposal process” (Interviewer 2).

### **Unavailability of Suitable Lands for Waste Disposal**

If the people could not find an appropriate location to put their solid waste, that there were an insufficient number of collection points or points are not sited appropriately or that collection points are not fixed.

An officer of the Yatiyanthota Pradhesiya Sabha said,

“Unfortunately there were no proper land facilities to dump the larger amount of the solid waste and most of the places are surrounded by the houses and industrial places. So that will be hard to handle to dispose the higher amount of the waste that will collected by the Maththamagoda area because there are is highly populated” (Interviewer 2)

### **Not Having an Adequate Vehicle Facilities**

There are no proper vehicles facilities in the Yatiyanthota Pradhesiya Sabha and not having an adequate vehicles even for the service providing places.

An officer of the Yatiyanthota Pradhesiya Sabha said,

“Inadequate collection trucks and proper vehicle facilities for collect the wastes are one of the issues that we have” (Interviewer 2).

Above stated socio, economic and environmental challenges are playing as a major barriers for the Yatiyanthota Pradhesiya Sabha in order to provide the proper SWM practices for the Maththamagoda area. The

process of collection, transport, treatment and disposal facilities of the waste management cannot be maintain properly because of the challenges and issues which exist within the LG in the area.

## **12. 7. Conclusion**

SWM is now a major environmental policy challenge throughout the world and one in which the role of LG is both interesting and important. LG must provide waste management services, which include waste removal, storage, collection, transport, treatment and disposal services. In Maththamagoda, the Pradhesiya Sabha authority facing many challenges in the process of SWM and that is the major background reason for the improper SWM activities. To mitigate this and to ensure the sustainable and effective SWM system in the Maththamagoda area the authorized LA should initiate some major activities, such as, ensure that the disposal and recovery of waste does not present a risk of water air soil plants and recovery of waste does not present a risk to water, air, soil, plants and animals, not allow waste disposal to constitute an unpleasant odours or to degrade places of special natural interest, prohibit the dumping or uncontrolled disposal of waste, establish an integrated and effective network of waste disposal plants, prepare waste management plans, ensure that those who store waste handle it properly, and ensure that waste treatment operations are licensed, require waste collectors to have special authorisation and to keep records, carry out inspections of companies involved in waste collection or disposal and finally undergo periodic inspections.

## **Reference**

- Amarananda, A. G., & Bandara, N. J. G. J. (2006). Factors governing an integrated solid waste management program: A case study at Nuwara-Eliya district secretariat division. International forestry and environment symposium. University of Jayewardenepura.
- Ali, A. (2002). Managing the scavengers as a resource. Appropriate Environmental and solid waste management and technologies for developing countries. Istanbul.
- Ahsan, A., Alamgir, M., El-Sergany, M. M., Shams, S., Rowshon, M.K., & Daud, N. N. N. (2014). Assessment of municipal solid waste management system in developing country. Chinese journal engineering, 2014. Retrieved from <http://dx.doi.org/10.1155/2014/561935>.
- Beranek, W. (1992). Solid waste management and economic development. Economic development review, 10(49).

- Bandara, N. J. G. J., Hettiarachchi, P., Wirasinghe, S. C., & Pilapitiya, S. (2007). Relation of waste generation and composition to socio-economic factors: A case study. *Environmental monitoring assessment*, 135, 31-39.
- Bandara, N. J. G. J., & Hettiarachchi, P. (2003). Environmental impacts associated with current waste disposal practices in a municipality in Sri Lanka: A case study. *Proceedings of the workshop on sustainable landfill management*, 19-27.
- Blundell, T. (2003). *Chemicals in products: Safer guarding the environment and human health 24th report*. Royal commission on environmental pollution. London: UK.
- DailyFT. (2020). Strategies towards the vision of 'clean country-green environment'. Retrieved from [www.ft.lk](http://www.ft.lk).
- Divisional Secretarial Report. (2019). Yatiyanthota.
- Ghiani, G., Lagana, D., Manni, E., Musmanno, R., & Vigo, D. (2014). Operations research in solid waste management: A survey of strategic and tactical issues. *Computers and operations research*, 44(4), 22-32. Retrieved from <https://doi.org/10.1016/j.wasman>.
- Gustafsson, S., & Hjelm, O. (2005). Development of the use of standardized environmental management systems (EMSs) in local authorities. *Corporate social responsibility and environmental management*, 12(3), 144-156. doi:10.1002/csr.80.
- Kuruppuge, R. H., & Karunarathna, A. K. (2014, January). Issues in management of municipal solid waste: Institutional capacity of local authorities in Sri Lanka. *Waste management & Resource utilisation*. Retrieved from <https://www.researchgate.net/publication/265737032>.
- Kathirvale, S., Yunus, M., Sopian, K., & Samsuddin, A. H. (2004). Energy potential from municipal solid waste in Malaysia. *Renewable Energy*, 29(4), 559-567.
- Kathib, I. A., Monou, M., Abdul, S. F., Hafez, Q. S., & Despo, K. (2010). Solid waste characterization, quantification and management practices in developing countries. A case study Nablus district: Palestine.
- Kamaruddin, S. W., & Omar, D. B. (2011). Waste management and the role of waste administrators in Selangor, Malaysia. *WIT Transaction on Ecology and the Environment*, 148. Retrieved from <https://www.researchgate.net/publication/271492479>.

- Liyala, C. M. (2011). Modernizing solid waste management at Municipal level: Institutional arrangements in urban centres of East Africa PhD Thesis. Environmental policy series. Wageningen University. The Netherlands.
- Panya, N., Poboorn, C., Phoochinda, W., & Teungfung, R. (2016). The performance of the environmental management of local governments in Thailand. *Kasetsart Journal of Social Science*, 39(2018), 33-41. Retrieved from <http://www.elsevier.com/locate/kjss>.
- Perera, K. L. S. (2003, December). An overview of the issue of solid waste management in Sri Lanka. Proceedings of the Third International Conference on Environment and Health, Chennai, India.
- Taiwo, A. M., Awomeso, J. A., Gbadebo, A. M., & Arimoro, A. O. (2010). Waste disposal and pollution management in urban areas: A workable remedy for the environment in developing countries. *American Journal of Environmental Sciences*, 6(1), 26-32. Retrieved from <https://www.researchgate.net/publication.49590034>.
- United Nations Environmental Programmes (UNEP). (2012). *Global Waste Management Outlook: Summery for decision makers*. Retrieved from <https://www.unenvironment.org>.
- UN-HABITAT. (2010). *Solid waste management in the world's cities*. Earth scan. London and Washington. DC.
- United Cities and Local Governments (2008). Final declaration of the congress of Jeju, the 'island of world peace' 'changing cities are driving our world'. Retrieved from <https://www.uclg.org>.
- Vergara, S. E., & Tchobanoglous, G. (2012). Municipal solid waste and the environment: A global perspective. *Environment and Resources*, 37(37), 277-309. Retrieved from <https://doi.org/10.11146/annurev-environ-050511-122532>.
- Vitharana, A. D. (2016). Solid waste management in Hambantota municipal council, Sri Lanka: Current practices, challenges and prospects. *International Journal of Scientific and Research Publications*, 6(3), 390-398. Retrieved from [www.ijsrp.org](http://www.ijsrp.org).