# **Computer Literacy Statistics – 2017** (First six months) Department of Census and Statistics Sri Lanka



January - June - 2017

The birth of the Information Age which is also known as Computer Age, is associated with the Digital Revolution, just as the Industrial Revolution marked the birth of the Industrial Age. The Digital and Information and Communication Technology (ICT) revolutions are twin revolutions. The rapid developments in ICT have greatly contributed in enhancing human living standards worldwide. The advanced capability of this technology facilitates with extremely efficient collaboration and access to correct, consistent and effective information, which is fundamental to manage the quality in total. In developed world, most of the key economically effective environments are increasingly ICT dominant and therefore, investing on ICT developments in the 21st century has become a compulsory requirement for a country to survive.

Timely and accurate information on ICT itself is essential for justification and proper direction of the Government efforts, private sector investments, to study the changing pattern of the demand for internet services and for continuous progress monitoring on ICT achievements.

For this computer literacy data can contribute immensely to an understanding of the demand and supply of skills in the global, knowledge based economy. Also statistics on the availability of a computer/laptop in households and usage of internet and email that exist between demographic and geographic groups provides more insight for the scattering of ICT facilities.

To cater the relevant data needs, the Department of Census and Statistics (DCS) has conducted several surveys on computer literacy in Sri Lanka. The surveys were in 2004, 2006/07, 2009, 2014, 2015, 2016 and latest is in 2017. This bulletin exposes the major findings of the first six months starting from January to June in 2017. More detailed report will be available with the full year dataset. For the current analysis of the computer literacy survey a nationally distributed sample of 12,875 households with persons aged 5 - 69 years were enumerated.

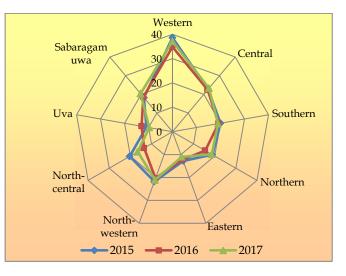
# Household computer ownership

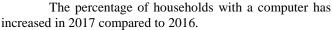
If a desktop or laptop is available at a household then that household is considered as a computer owned household. The Table 1 shows the percentage distribution of computer owned households by Sector/ Province levels. In 1<sup>st</sup> half of 2017, at least one computer is available in 23.5% of households in the country. That is more than one out of every five households owns either a desktop or a laptop computer. This percentage is 39.9% in Urban Sector. The Rural and Estate Sectors show 21.0% and 5.1% respectively. The highest availability is in the Western province (37.1%) while the lowest availability is reported from the Uva province (9.7%).

# Table 1: Percentage of computer owned households by Sector and Province - 2015 to 2017 (during $1^{st} 6$ months)

Sector/	D	esktop (%	b) Desktop or		op or Lapte	r Laptop (%)	
Province	2015	2016	2017	2015	2016	2017	
Sri Lanka	15.3	13.1	12.5	24.4	22.5	23.5	
Urban	23.0	19.6	19.9	41.5	35.3	39.9	
Rural	14.4	12.2	11.5	21.9	20.7	21.0	
Estate	4.1	5.0	3.5	5.6	6.4	5.1	
Province							
Western	23.3	19.6	19.5	38.6	34.8	37.1	
Central	15.9	13.9	11.6	22.7	22.4	23.3	
Southern	13.2	11.9	10.0	20.0	19.2	19.0	
Northern	8.5	6.9	5.9	18.9	15.5	18.6	
Eastern	8.1	6.0	6.2	12.8	12.2	11.0	
North-western	13.8	10.0	11.5	21.8	20.4	21.1	
North-central	12.9	8.9	9.2	20.3	13.5	16.5	
Uva	6.9	9.2	6.8	10.9	12.9	9.7	
Sabaragamuwa	12.9	12.9	13.1	18.2	18.6	20.4	

These figures are to be treated with caution as the corresponding CV (Coefficient of variation) values are high. Figure 1: Percentage of Desktop or Laptop computer owned households by Province (during  $1^{st} 6$  months)





#### **Computer literacy**

**Definition for Computer literacy:** A person (aged 5-69) is considered as a computer literate person if he/she could use computer on his/her own. For example, even if a 5 years old child can play a computer game then he/she is considered as a computer literate person.

**Definition for computer literacy rate:** Computer Literate population expressed as a percentage to the total population, (aged 5 - 69 years) within the respective domain.

Table 2: Computer literacy rate by sector and province –2016 & 2017 (during 1st 6 months)

Sector/Province	Computer lite	eracy rate (%)
Sector/Province	2016	2017
Sri Lanka	27.5	28.3
Sector		
Urban	38.5	41.1
Rural	26.1	26.5
Estate	9.9	9.5
Province		
Western	38.5	38.6
Central	26.0	30.2
Southern	27.2	29.1
Northern	19.9	15.1
Eastern	13.4	13.7
North Western	27.3	28.3
North Central	21.6	20.9
Uva	18.5	15.5
Sabaragamuwa	23.4	26.8

N.A. - not available

Overall Computer Literacy reported in 1st half of 2017 for Sri Lanka is 28.3%. The survey results show an increase of 0.8 percentage points from 2016 (1st half) to 2017 (1st half).

The Urban sector shows the highest computer literacy rate (41.1%) among residential sectors. Computer literacy rate for Rural and Estate sectors are 26.5% and 9.5% respectively. Among the provinces the highest level of computer literacy is reported from the Western province (38.6%) while the lowest percentage is reported from the Eastern province. The computer literacy rate among districts show variations ranging from 6.7% (Kilinochchi) to 48.9% (Colombo) and shows the still prevailing digital divide (Table 2.1).

 Table 2.1: Computer literacy rate by district – 2017

 (during 1<sup>st</sup> 6 months)

District	Literacy Rate	District	Literacy Rate
All Island	28.3	Mulativu	12.7
Colombo	48.9	Kilinochchi	6.7
Gampaha	33.4	Batticaloa	12.3
Kalutara	29.4	Ampara	15.0
Kandy	36.3	Trincomalee	13.5
Matale	28.2	Kurunegala	29.3
Nuwara Eliya	20.1	Puttalam	26.3
Galle	31.7	Anuradhapura	20.6
Matara	23.6	Polonnaruwa	21.6
Hambantota	31.8	Badulla	16.5
Jaffna	17.4	Monaragala	13.6
Mannar	11.5	Ratnapura	25.6
Vavunia	16.7	Kegalle	28.4

Table 3: Computer literacy rate by Gender, Age, Level of<br/>education, and Language literacy - 2016 & 2017 (during 1st<br/>6 months)

Gender, Age group,	Computer lite	racy rate (%)
Educational attainment and	2016	2017
Language literacy	2010	2017
Sri Lanka	27.5	28.3
By Sex		
Male	29.3	30.7
Female	26.0	26.1
By Age group(years)		
5 - 9	14.1	14.8
10 - 14	36.4	41.7
15 - 19	60.6	60.7
20 - 24	53.2	55.1
25 - 29	43.9	45.8
30 - 34	33.5	33.4
35 - 39	27.0	25.1
40 - 49	19.4	19.9
50 - 59	10.0	11.0
60 - 69	6.4	6.3
By Educational attainment		
No schooling	1.9	1.4
Below grade 6	9.9	10.8
Grade 6-10	18.8	19.2
G.C.E (O/L)	41.7	42.4
G.C.E. (A/L) and above	71.3	71.2
By Language literacy		
Sinhala	33.5	35.0
Tamil	26.2	27.2
English	72.5	71.1

These figures are to be treated with caution as the corresponding CV (Coefficient of variation) values are high.

As given in Table 3 the Computer literacy among male (30.7%) is higher than that of female (26.1%) in 1st half of 2017. Young youths (aged 15 – 19 years) show the highest computer literacy rate (60.7%) among all other age groups. Age 50 years and above groups show low computer literacy rates.

The survey results reveal that higher the level of education has higher the computer literacy. The group with A/L or above level of education shows the highest computer literacy rate (71.2%). Also computer literacy is higher among those who are literate in English language (71.1%).

Figure 2: Distribution of computer literacy rate by Educational attainment and Language literacy -2016 & 2017 (during 1<sup>st</sup> 6 months)

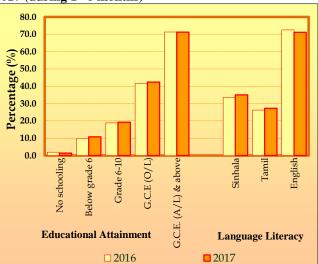


Table 4: Computer literacy among computer awareemployed population (aged 15 - 69 years) by Occupation -2016 & 2017 (during  $1^{st} 6$  months)

Occupation group	Computer (%	•
o companion Bronk	2016	2017
Sri Lanka	64.8	62.1
Managers, Senior Officials and Legislators	76.1	73.1
Professionals	90.3	87.5
Technicians and Associate Professionals	88.7	86.8
Clerks and Clerical support workers	91.5	90.0
Services and Sales workers	60.1	57.4
Skilled Agricultura1, Forestry and Fishery workers	22.3	22.8
Craft and Related Trades workers	43.4	40.4
Plant and Machine operators and Assemblers	53.3	46.3
Elementary occupations	27.3	25.9
Armed Forces Occupations & unidentified occupations	86.6	75.4

These figures are to be treated with caution as the corresponding CV (Coefficient of variation) values are high.

Computer literacy among the employed population who are aware of computer in Sri Lanka is around 62.1% in 1<sup>st</sup> half of 2017 and the positions such as Senior officials and Managers (73.1%), Professionals (87.5%), Technical and Associate professionals (86.8%) and Clerks and Clerical support workers (90.0%) have higher computer literacy rates. Also, even among the individuals engage in elementary occupations 25.9 percent are computer literate.

Table 5: Computer literacy among unemployed population (aged 15 - 69 years) by age group -2016 & 2017 (during  $1^{st}$  6 months)

Age group (years)	nte population e (%)	
	2016 20	
Sri Lanka	59.6	55.6
15 - 19	54.7	54.7
20 - 24	70.2	68.1
25 - 29	67.0	64.2
30 - 39	55.2	36.8
40 - 69	16.4	27.1

These figures are to be treated with caution as the corresponding CV (Coefficient of variation) values are high.

Among the unemployed, aged (20-24) group shows highest computer literate population (68.1%). The survey results reveal that among unemployed, many of them have at least some ICT skills.

# **Digital literacy**

**Definition for Digital literacy:** A person (aged 5-69) is considered as a digital literate person if he/she could use computer, lap top, tablet or smartphone on his/her own. **Definition for Digital literacy rate:** Digital Literate population expressed as a percentage to the total population, (aged 5 - 69 years) within the respective domain. Table 6: Computer literacy rate and Digital literacy rate by Gender, Sector and Age groups -2017 (during  $1^{st}$  6 months)

Gender, Sector, Age group	Computer Literacy	Digital Literacy
Sri Lanka	28.3	38.7
By Sex		
Male	30.7	42.5
Female	26.1	35.2
Sector		
Urban	41.1	54.5
Rural	26.5	36.4
Estate	9.5	16.4
By Age group(years)		
5 - 9	14.8	21.5
10 - 14	41.7	48.7
15 - 19	60.7	71.4
20 - 24	55.1	71.1
25 - 29	45.8	64.5
30 - 34	33.4	52.1
35 - 39	25.1	40.5
40 - 49	19.9	31.6
50 - 59	11.0	16.5
60 - 69	6.3	9.1

When the digital literacy is considered one out of every three (aged 5 - 69) has digital literacy. Digital literacy is higher than computer literacy for all disaggregated levels, showing the drift from Personal Computer to Smartphones/Tablets.

## Source of computer training

Table 7 shows that the majority of those who are computer literate have received training from School/University. The training received through Government training centres are comparatively low (5.0%).

Table 7: Percentage distribution of Computer literate
household population (aged 5 - 69 years) by sources of
receiving computer knowledge* and sector - 2017(during
1 <sup>st</sup> 6 months)

Source of computer		Residential sector (%		
training multiple	Total (%)	Urban	Rural	Estate
Private training course	26.5	26.2	26.6	27.8
School/University	45.5	45.3	45.4	56.4
Govt. training centres	5.0	3.4	5.4	15.2
Employment activities	15.8	22.1	13.6	10.8
Work place	8.0	11.6	6.9	4.4
Family members	27.9	30.0	27.3	22.2
Friends/ Relatives	21.9	21.2	21.9	32.9
Self	29.6	33.5	28.4	21.1
Other	3.3	2.4	3.6	3.1

\* Multiple choice answers

These figures are to be treated with caution as the corresponding CV (Coefficient of variation) values are high.

### Internet and E-mail use

The Table 8 depicts that 21.3 percent of the population aged 5 to 69 years use the internet facility at least once during the last 12 months. The survey results further reveal that in the Urban sector, where the facilities are largely available, shows the highest usage of both e-mail and internet compared to other two sectors.

Table 8: Percentage distribution of Internet and E-mailusing household population (aged 5 - 69 years) by District –2016 & 2017 (during  $1^{st} 6$  months)

District	Household Population (age 5-69) Using				
	Internet (%) E-mail (%)				
	2016	2016 2017		2017	
Sri Lanka	15.1	21.3	8.6	11.0	
Colombo	30.1	44.6	19.2	26.3	
Gampaha	22.2	27.2	12.2	15.1	
Kalutara	18.8	21.3	8.9	9.6	
Kandy	17.4	24.8	11.5	12.4	
Matale	15.4	16.7	5.1	8.4	
Nuwara Eliya	7.0	7.6	4.2	5.2	
Galle	11.8	21.3	8.2	11.7	
Matara	10.4	15.7	5.4	4.9	
Hambantota	9.4	13.3	5.4	7.4	
Jaffna	14.8	25.7	6.2	11.4	
Mannar	13.2	17.3	6.2	6.7	
Vavunia	22.7	30.7	9.6	6.6	
Mulativu	11.4	10.7	3.1	5.5	
Kilinochchi	5.7	10.5	4.6	4.0	
Batticaloa	13.4	15.6	7.0	7.4	
Ampara	6.4	16.2	3.3	10.4	
Trincomalee	3.3	13.2	3.7	9.5	
Kurunegala	15.8	20.3	8.1	9.5	
Puttalam	18.2	26.0	10.6	6.2	
Anuradhapura	3.6	12.2	2.3	5.4	
Polonnaruwa	9.4	10.9	5.5	3.9	
Badulla	4.6	4.9	4.2	5.2	
Monaragala	6.2	5.6	3.6	2.6	
Ratnapura	11.0	15.4	5.6	8.0	
Kegalle	10.3	16.4	6.0	8.5	

These figures are to be treated with caution as the corresponding CV (Coefficient of variation) values are high.

Different patterns of internet usage can be observed among districts (Table 8). In  $1^{st}$  half of 2017 Colombo district shows the highest percentage (44.6%) of population using internet while Badulla district shows the lowest percentage (4.9%).

The survey results reveal that 11.0 percent of the household population aged 5 - 69 years have used E-mail facility at least once during the last 12 months period. The highest e-mail usage is reported from the Colombo district (26.3%). The lowest e-mail usage among the districts has reported from the Monaragala district (2.6%).

Table 9: Percentage distribution of Internet and E-mail using household population (aged 5 - 69 years) by age group -2016 & 2017 (during  $1^{st} 6$  months)

Age group	Household Population (age 5-69)				
(years)	Internet (%)		E-mai	l (%)	
	2016	2016 2017		2017	
Sri Lanka	15.1	21.3	8.6	11.0	
5 - 14	5.5	8.9	1.6	2.1	
15 - 19	26.0	36.1	11.6	15.6	
20 - 24	36.7	51.9	22.8	29.2	
25 - 29	33.1	46.2	20.3	25.8	
30 - 34	24.2	33.8	14.4	18.7	
35 - 39	18.5	25.3	11.4	13.5	
40 - 49	12.2	17.8	8.1	9.9	
50 - 59	5.7	9.1	3.7	5.7	
60 - 69	4.4	4.9	2.8	3.0	

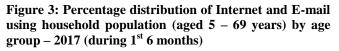
The Table 9 and Figure 3 show that persons in age group 20 - 24 indicate a higher internet and email usage compared to the persons in other age groups.

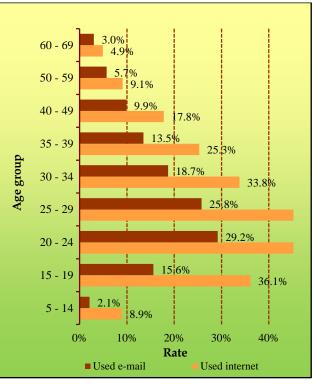
Table 10: Percentage distribution of device use to connect to internet/ email household population\* (aged 5 - 69 years) by Sex, Sector and Age group -2017 (during  $1^{st} 6$  months)

Gender, Sector, Age group	Desktop/ Laptop	Smartphone	Tablet computer	Mobile phone
Sri Lanka	38.1	56.9	2.1	2.9
By Sex				
Male	36.8	58.4	1.6	3.2
Female	39.8	55.0	2.7	2.5
Sector				
Urban	40.1	55.4	2.7	1.8
Rural	37.2	57.7	1.8	3.3
Estate	31.7	52.8	1.0	14.6
By Age				
group(years)				
5 - 9	41.2	48.0	8.7	2.2
10 - 14	43.4	52.1	2.3	2.1
15 - 19	36.7	58.1	1.2	4.0
20 - 24	35.0	60.2	1.5	3.3
25 - 29	34.9	60.2	2.0	2.9
30 - 34	32.3	61.8	2.0	3.9
35 - 39	35.8	59.4	2.5	2.2
40 - 49	42.5	53.2	2.0	2.3
50 - 59	50.8	45.4	2.4	1.4
60 - 69	55.6	39.1	4.6	0.6

\* Multiple choice answers

These figures are to be treated with caution as the corresponding CV (Coefficient of variation) values are high.





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