

Computer Literacy Statistics – 2016 (Annual)

Department of Census and Statistics

Sri Lanka

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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.

Timely and accurate information on use of 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 can be used to assess digital divide.

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 conducted in 2004, 2006/07, 2009 and from 2014 onward a survey module is attached to Sri Lanka Labour Force Survey. From 2014 onward two separate bulletins are published on Computer Literacy. This bulletin reveals the major findings of the survey conducted in the year 2016. For the analysis of the computer literacy survey a nationally distributed sample of 25,750 households and persons of aged 5 – 69 years were enumerated. Other than the indicators published in first six months bulletin, some district level information are published in this annual bulletin

Household computer ownership

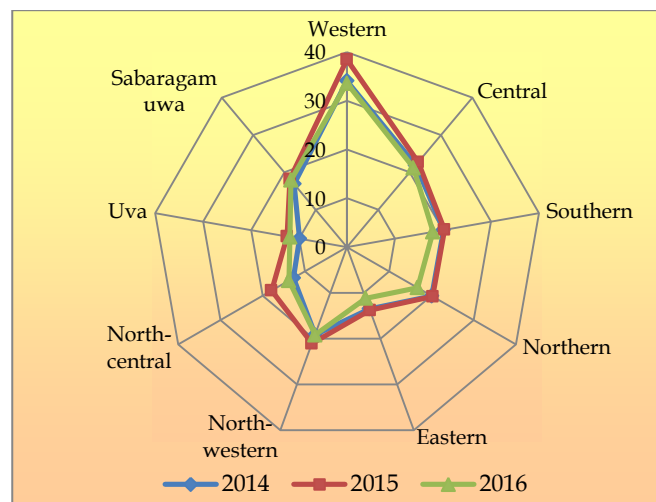
If a desktop or laptop is available at a household then that household is considered as a computer owned household. Table 1 shows the percentage distribution of computer owned households by Sector and Province. In 2016, at least one computer is available in 21.6 percent of households in the country. That is about one out of every five households owns either a desktop or a laptop computer. This percentage is 35.4 percent in Urban sector and Rural and Estate sector show 19.6 percent and 6.1 percent respectively. The highest availability is in the Western province (33.6%) while the lowest availability is reported from the Eastern (11.2%).

Table 1: Percentage of computer owned households by sector, province and Survey year

Sector/ Province	Desktop (%)				Desktop or Laptop (%)			
	2009	2014	2015	2016	2009	2014	2015	2016
Sri Lanka	10.6	15.7	14.9	12.1	11.4	22.2	24.4	21.6
Urban	23.6	23.6	21.9	17.6	26.3	37.3	41.5	35.4
Rural	9.2	14.7	14.1	11.4	9.8	20.0	22.0	19.6
Estate	3.1	3.7	3.0	4.1	3.3	4.8	4.5	6.1
Province								
Western	19.0	23.3	22.7	18.3	20.7	34.1	38.5	33.6
Central	9.7	16.7	15.0	12.4	10.4	21.9	22.7	21.2
Southern	6.6	15.0	12.6	10.8	7.2	20.1	20.3	17.9
Northern	N.A.	11.1	8.8	6.5	N.A.	20.1	20.3	16.7
Eastern	5.8	8.9	8.1	5.8	5.9	13.5	13.8	11.2
North-western	6.9	13.5	12.9	9.7	7.1	19.2	21.1	19.2
North-central	6.1	9.3	11.1	8.7	6.8	12.7	17.9	13.8
Uva	4.6	8.0	8.8	8.2	4.9	9.9	12.5	11.9
Sabaragamuwa	7.3	13.6	13.3	11.7	7.5	16.9	18.2	17.9

N.A. - not available

Figure 1: Percentage of Desktop or Laptop computer owned households by Province



The percentage of households with a computer has declined in 2016 compared to 2015. This may be due to the changes occurred in usage patterns, such as a result of arising usage smart phones and tablet computers.

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, province and survey year

Sector/Province	Computer literacy rate (%)			
	2009	2014	2015	2016
Sri Lanka	20.3	24.9	27.1	27.6
Sector				
Urban	31.1	36.1	39.2	39.2
Rural	19.3	23.4	25.5	26.1
Estate	8.4	7.0	9.0	10.4
Province				
Western	27.7	35.6	38.4	38.1
Central	18.0	23.4	25.9	26.3
Southern	19.8	24.8	27.3	27.4
Northern	N.A.	16.8	19.4	21.1
Eastern	12.9	14.4	13.2	14.8
North Western	16.5	23.3	25.3	27.1
North Central	14.1	16.6	21.7	21.7
Uva	14.7	15.6	17.8	18.3
Sabaragamuwa	19.1	21.7	22.1	24.0

N.A. - not available

Percentage of Computer Literate population (Computer Literacy) over the survey periods has been gradually increasing. Overall Computer Literacy reported in 2016 for Sri Lanka is 27.6 percent. The survey results show an increase of 7.3 percentage points from 2009 to 2016. Urban sector shows the highest computer literacy rate (39.2%) among residential sectors. Computer literacy rate for Rural and Estate sectors are 26.1 percent and 10.4 percent respectively.

Among the provinces the highest level of computer literacy is reported from the Western province (38.1%) though a very small decline is observed compared to 2015, which is statistically insignificant. The lowest computer literacy is reported from the Eastern province. Computer literacy by district level shows the existing differences among districts and further shows the prevailing digital divide (Table 2.1).

Table 2.1: Computer literacy rate by district - 2016

District	Literacy Rate	District	Literacy Rate
All Island	27.6	Mulativu	14.3
Colombo	44.1	Kilinochchi	18.1
Gampaha	34.7	Batticaloa	17.0
Kalutara	33.2	Ampara	13.9
Kandy	31.2	Trincomalee	13.3
Matale	30.0	Kurunegala	26.8
Nuwara Eliya	14.7	Puttalam	27.7
Galle	27.0	Anuradhapura	22.4
Matara	28.9	Polonnaruwa	20.1
Hambantota	26.1	Badulla	17.2
Jaffna	23.0	Monaragala	20.2
Mannar	11.1	Ratnapura	24.4
Vavunia	26.4	Kegalle	23.5

Table 3: Computer literacy rate by Gender, Age, Level of education, and Language literacy - 2014, 2015 & 2016

Gender, Age group, Educational attainment and Language literacy	Computer literacy rate (%)		
	2014	2015	2016
Sri Lanka	24.9	27.1	27.6
By Sex			
Male	26.6	29.1	29.5
Female	23.3	25.3	26.0
By Age group(years)			
5 - 9	12.4	14.4	13.7
10 - 14	35.8	39.8	37.6
15 - 19	54.3	58.7	62.5
20 - 24	49.6	53.8	54.3
25 - 29	40.6	43.5	43.8
30 - 34	29.3	31.3	33.5
35 - 39	23.1	25.0	26.7
40 - 49	15.3	17.2	19.4
50 - 59	9.6	10.5	9.8
60 - 69	5.2	6.1	5.9
By Educational attainment			
No schooling	1.1	2.1	1.8
Below grade 6	9.4	10.5	10.3
Grade 6-10	16.2	18.3	19.1
G.C.E (O/L)	39.4	42.0	42.6
G.C.E. (A/L) and above	67.6	70.0	70.0
By Language literacy			
Sinhala	30.3	33.1	33.4
Tamil	24.3	26.9	27.2
English	67.3	69.5	72.5

As given in Table 3 the Computer literacy among males (29.5%) is higher than that of females (26.0%) in 2016. Young youths (aged 15 – 19 years) show the highest computer literacy rate (62.5%) among all other age groups. The computer literacy rate has increased over the period and the same pattern can be seen in all disaggregated levels in Table 3.

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 (70.0%). Also computer literacy is higher among those who are literate in English language (72.5%).

Figure 2: Distribution of computer literacy rate by Educational attainment and Language literacy – 2014, 2015 & 2016

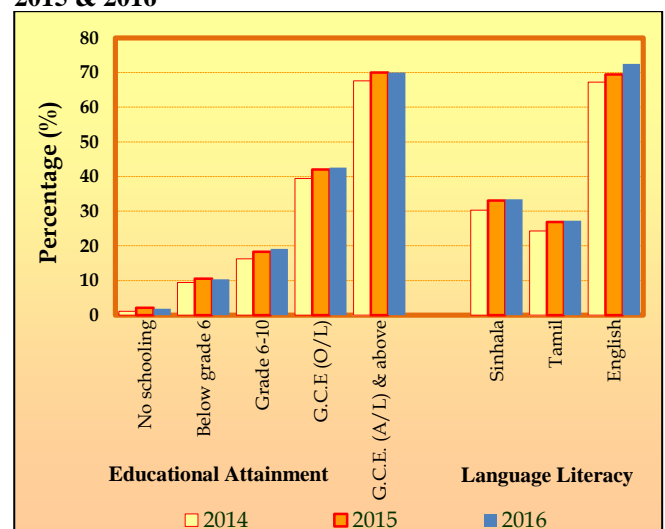


Table 4: Computer literacy among computer aware employed population (aged 15 – 69 years) by Occupation – 2014, 2015 & 2016

Occupation group	Computer literacy (%)		
	2014	2015	2016
Sri Lanka	51.0	52.0	64.8
Managers, Senior Officials and Legislators	72.6	70.8	75.3
Professionals	81.0	83.9	89.3
Technicians and Associate Professionals	80.7	82.9	87.8
Clerks and Clerical support workers	88.5	88.7	92.3
Services and Sales workers	46.3	50.9	59.9
Skilled Agricultural, Forestry and Fishery workers	20.0	18.1	24.7
Craft and Related Trades workers	36.1	36.6	46.1
Plant and Machine operators and Assemblers	34.0	38.7	51.6
Elementary occupations	22.7	22.4	27.3
Armed Forces Occupations & unidentified occupations	68.6	60.9	86.7

Computer literacy among the employed population who are aware of computer in Sri Lanka is around 64.8 % in 2016 and the positions such as Senior officials and Managers (75.3%), Professionals (89.3%), Technical and Associate professionals (87.8%), Clerks and Clerical support workers (92.3%) and Armed Forces Occupations & unidentified occupations (86.7%) have higher computer literacy rates. Also, even among the individuals engage in elementary occupations 27.3 percent are computer literate. All groups show an increase in literacy over the survey years.

Table 5: Computer literacy among unemployed population (aged 15 – 69 years) by age group – 2014, 2015 & 2016

Age group (years)	Computer literate population Literate (%)		
	2014	2015	2016
Sri Lanka	69.5	72.6	59.6
15 - 19	66.3	58.2	52.5
20 - 24	76.0	80.7	70.0
25 - 29	74.5	78.9	66.7
30 - 39	63.9	62.5	51.7
40 - 69	36.9	54.5	24.2

Among the unemployed, aged (20-24) group shows highest computer literate population percentage (70.0%). Annual results reveal that among unemployed many have at least some ICT skills. Even among the group aged 40-69 every one out of four is computer literate (24.2%) in 2016.

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 – 2016

Gender, Sector, Age group	Computer Literacy	Digital Literacy
Sri Lanka	27.6	33.8
By Sex		
Male	29.5	36.7
Female	26.0	31.2
Sector		
Urban	39.2	49.1
Rural	26.1	31.6
Estate	10.4	13.1
By Age group(years)		
5 - 9	13.7	16.7
10 - 14	37.6	41.6
15 - 19	62.5	68.3
20 - 24	54.3	63.5
25 - 29	43.8	54.9
30 - 34	33.5	44.5
35 - 39	26.7	35.9
40 - 49	19.4	26.1
50 - 59	9.8	13.8
60 - 69	5.9	8.1

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 or Private institutions. The training received through Government training centres are comparatively low (5.6%), however in the Rural sector this percentage is about 5.1% and higher than the other two sectors.

Table 7: Percentage distribution of Computer literate household population (aged 5 – 69 years) by sources of receiving computer knowledge* and sector – 2016

Source of computer training multiple	Total (%)	Residential sector (%)		
		Urban	Rural	Estate
Private training course	26.0	24.9	26.6	15.9
School/University	44.0	43.9	43.6	61.5
Govt. training centres	4.8	3.6	5.1	3.9
Employment activities	16.3	22.6	14.5	4.3
Work place	7.0	11.0	5.8	3.0
Family members	24.9	26.6	24.6	9.4
Friends/ Relatives	25.8	23.0	26.6	25.9
Self	27.5	28.8	27.4	15.1
Other	3.7	2.2	4.1	9.0

* 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 16.1 percent of the population aged 5 to 69 years use the internet facility at least once during twelve months in 2016. 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-mail using household population (aged 5 – 69 years) by District – 2014, 2015 & 2016

District	Household Population (age 5-69) Using					
	Internet (%)			E-mail (%)		
	2014	2015	2016	2014	2015	2016
Sri Lanka	10.4	12.1	16.4	8.2	8.9	9.0
Colombo	24.1	28.1	31.5	20.6	21.9	19.5
Gampaha	16.8	18.7	24.2	13.4	13.4	13.4
Kalutara	11.9	14.9	19.6	9.5	11.6	8.2
Kandy	10.1	11.7	17.6	8.1	9.7	11.8
Matale	4.6	8.2	17.5	3.8	5.8	6.9
Nuwara Eliya	5.3	4.4	7.8	4.1	3.8	4.3
Galle	8.0	10.5	11.4	6.3	6.9	8.9
Matara	8.2	8.3	13.1	5.9	6.3	6.6
Hambantota	5.8	5.9	11.1	3.9	3.7	5.4
Jaffna	13.8	15.8	17.3	9.1	10.1	8.4
Mannar	7.7	9.1	12.3	6.3	7.2	5.0
Vavunia	16.7	16.3	23.2	5.6	6.6	7.8
Mulativu	3.3	4.7	9.4	2.5	3.7	2.6
Kilinochchi	8.3	7.0	7.1	5.6	6.4	4.5
Batticaloa	7.2	9.9	13.1	5.3	7.2	6.7
Ampara	6.4	6.5	8.0	4.9	4.5	4.6
Trincomalee	6.4	5.6	5.2	5.0	5.1	4.4
Kurunegala	8.2	9.3	16.8	6.1	6.3	7.9
Puttalam	9.3	13.3	19.6	6.7	8.1	9.1
Anuradhapura	5.4	7.4	8.0	3.6	4.4	3.5
Polonnaruwa	5.3	4.7	9.8	4.2	3.6	4.3
Badulla	3.5	3.5	5.9	3.3	3.4	5.0
Monaragala	3.8	4.9	6.4	2.9	4.3	3.5
Ratnapura	4.8	5.9	13.2	3.8	4.7	5.7
Kegalle	5.7	7.0	10.9	4.6	5.0	6.4

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

Different usage patterns of internet usage can be observed among districts (Table 8). In 2016 Colombo district shows the highest percentage (31.5%) of population using internet while Trincomalee district shows the lowest percentage (5.2%).

The survey results reveal that 9.0 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 (19.5%). The lowest e-mail usage among the districts has reported from the Mulativu district (2.6%).

Table 9: Percentage distribution of Internet and E-mail using household population (aged 5 – 69 years) by age group – 2014, 2015 & 2016

Age group (years)	Household Population (age5-69)					
	Internet (%)			E-mail (%)		
	2014	2015	2016	2014	2015	2016
Sri Lanka	10.4	12.1	16.4	8.2	8.9	9.0
5 - 14	3.6	4.3	6.2	1.9	1.8	1.8
15 - 19	17.7	19.9	28.2	12.2	12.5	12.6
20 - 24	25.7	28.5	40.1	20.7	22.8	23.6
25 - 29	21.0	26.3	35.9	17.8	21.0	21.2
30 - 34	15.3	17.5	26.7	12.8	14.2	15.4
35 - 39	12.2	14.3	20.7	10.4	11.3	11.8
40 - 49	8.3	10.1	13.2	7.1	7.8	8.3
50 - 59	5.6	6.4	6.4	4.4	4.8	3.7
60 - 69	2.9	3.6	3.9	2.1	2.5	2.3

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 – 2016

Gender, Sector, Age group	Desktop/ Laptop	Smartphone	Tablet computer	Mobile phone
Sri Lanka	48.3	43.4	2.8	5.5
By Sex				
Male	46.8	44.9	2.7	5.6
Female	50.3	41.5	2.9	5.4
Sector				
Urban	52.3	41.1	3.0	3.6
Rural	46.7	44.3	2.7	6.3
Estate	42.8	47.3	1.3	8.6
By Age group (years)				
5 - 9	53.9	39.3	2.8	4.0
10 - 14	53.6	39.2	2.8	4.4
15 - 19	43.4	45.9	3.4	7.3
20 - 24	43.6	48.2	1.8	6.3
25 - 29	45.5	47.4	2.4	4.7
30 - 34	44.7	45.8	2.8	6.7
35 - 39	47.2	44.3	2.9	5.6
40 - 49	55.5	37.0	3.0	4.4
50 - 59	61.5	31.8	3.2	3.5
60 - 69	71.0	23.0	4.4	1.5

* Multiple choice answers

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

Figure 3: Percentage distribution of Internet and E-mail using household population (aged 5 – 69 years) by age group – 2016

