Development and Delivery of Livelihoodbased e-Service for ASEAN Women

Lao PDR

 $\label{eq:continuous_problem} Report \ by \ Lao \ Team$ $Phothong \ Siliphong^1,$ $Latdaphone \ Phengsavanh^2 \ and \ Souphan \ Saysanid^3$

August, 2014

¹ Social Development Specialist

² Research Assistant

³ Research Assistant

Contents

Section 3.1 Development Context	3
3.1.1 Social Economic Context	3
3.1.2. Poverty	4
3.1.3 Economic participation	5
3.1.4 Gender and Governance	8
3.1.5 Gender and Health	8
3.1.6. Gender and Business Sector	9
3.1.7. Gender in Education	10
3.1.8 Gender in ICT	11
Section 3.2 Current Status of e-Services	14
3.2.1 Current Status of e-Services	14
3.2.3. Lao Telecommunication Policy	17
3.3.5 Human Resources in ICT field	19
Section 3.3 Country Specific (Potential) Demand for e-Services	21
Section 3.4 Future Directions of e-Services	23
Annex: Case studies of current e-service in Government agencies in Lao PDR	26
References	34

Chapter3. Country-wise Analysis

Section 3.1 Development Context

3.1.1 Social Economic Context

During 2011-2013, gross domestic product (GDP) grew at an annual average rate of 8.2%. It is estimated that growth over the first 3 years of the 7th National Socio-Economic Development Plan (NSEDP) 2011-2015 averaged 13.7% in the industrial sector, 8.6% in the services sector and 2.9% in the agriculture and forestry sector. In 2011, Lao PDR moved up from its lower income status to a lower-middle income economy and a gross domestic product (GDP) per capita reaches US\$ 1,450 in 2013. It is forecasted that economic growth will slow down to 7.6% in 2014, reflecting the Thai economy's poor performance in the first half of the year and mainly as a result of the decline in mining output (MPI, 2013).

The agriculture-forestry sector contributes 25.5% of GDP. The production of cash crops and livestock has expanded. The industrial sector contributes 30.3% of GDP. Almost 50% of the growth in the industrial sector can be attributed to the foreign investments in the natural resource sector. The services sector has seen considerable growth, with an annual growth rate of 8.6% and contributed 44.2% of GDP. Road and air transportation infrastructure has been improved and new infrastructure built thereby allowing provision of better transport services. Financial institutions, banks, trade networks, tourism, enterprises and markets have also developed and the creation of the Lao Stock Market has facilitated the mobilization of funds as well as partial privatization (MPI, 2013).

Table 1. Basic indicators

Indicator			Data		
Basic Information					
1. Country name	Brunei	Cambodia	Indonesia	Laos	Malaysia
2. Area (km²)				236,800	
3. National population				6,776,400	
4. Rural population				4,472,424	
5. Key Economic Sector(s)				Service, Industry, Agriculture	
6. Industry (%)				30.3	
6-1. Agriculture (%)				25.5	
6-2. Fisheries (%)				3.5	
6-3. Livestock industry (%)				5	

6-4. Other sector (%)	44.2
7. GDP per capita	1,450
8. Employment (%)	77
8-1. Employment - Urban (%)	75
8-2. Employment - Rural (%)	74
Gender	
1. Education (% of female)	
1-1. Primary education (% of female)	91
1-2. Secondary education (% of female)	88
1-3. Higher education (% of female)	87
2. Literacy (% of female)	76
3. Labor Force Participation (% of female)	77.6
3-1. Labor force in agriculture (% of female)	78
3-2. Labor force in fisheries (% of female)	0.1
3-3. Labor force in livestock industry (% of female)	0.2
3-4. Labor force in other sector (% of female)	21.9
ICT	
1. Telephone lines (%)	2.45
1-1. Telephone lines - Urban (%)	-
1-2. Telephone lines - Rural (%)	-
2. Cell phone subscriptions (%)	66.1
2-1. Cell phone subscriptions - Urban (%)	65
2-2. Cell phone subscriptions - Rural (%)	32
3. Internet use (%)	12.5
3-1. Internet use - Urban (%)	-
3-2. Internet use - Rural (%)	-
3-3. Internet use - Women (%)	8.6
4. Households with internet access	-
4-1. Households with internet access - Urban (%)	-
4-2. Households with internet access - Rural (%)	-
5. Telecenter	114
5-1. The number of telecenters - Urban	-
5-2. The number of telecenters - Rural	-

3.1.2. Poverty

The national poverty rate in Lao has declined steadily, having dropped from 46.0% in 1993 to 23.2% in 2013 (MPI, 2014). The overall assessment is that Lao PDR is well on track to achieving the poverty target. However, the Gini coefficient, a commonly used measure of inequality, marginally increased from 35.0% in 2018 to 36.2% in 2013. The poverty in Lao PDR is geographically concentrated. Nationally, an overwhelming majority of poor people reside in rural areas which accounted for 87.6% of all poor people in the country, despite only accounting for 71.2% of the population. Poverty

remains substantially higher in rural areas, at 28.6%, compared to 10.0% in urban areas. About 36% of the poor lived in the Central region. About 17% and 34 % of the poor live in the South and the North region respectively in 2013 (MPI, 2014).

Poverty is higher among minority (Non-Lao Tai) ethnic groups with the exception of the Chine-Tibet ethnic group. The poverty rate is highest among the Mon-Khmer and Hmong-LuMien Headed households with a poverty rate of 42.3% and 39.8% respectively.

Poverty is higher among households headed by persons with lower levels of education, a disproportionate share of them ethnic minorities, and those whose primary employment is in agriculture or are unemployed. Education is strongly correlated to poverty. People living in households headed by a person with little or no formal education have the highest poverty headcount rate (41.7%), while poverty is lowest among households headed by highly educated people (3.7%)⁴.

Lao women are poorer than Lao men in term of time poverty and working burden. The Lao Expenditure and Consumption Survey (LECS) V shows the time use per day and person classified by gender. It points out that women sleep slightly less than men, 8.6 hours for women and 8.8 hours for men. The same situation prevails for eating, drinking and self-care, 2.6 hours for women and 2.7 hours for men. Women used 1.8 hours for household work while men spend only 0.3 hour. The rest of the time is mostly spent on work, 3.9 hours per day for men and 4.7 hours per day for women. The effects of this domestic burden on women's economic opportunities are damaging and predictable but often neglected in policies aimed at increasing female participation in productive paid employment. First, the time burden of rural women's domestic unpaid work and the lack of substitutability of female labour in household work by men serve to limit women's choices with regards to accessing paid employment. Second, female time poverty contributes to unequal education outcomes which, in turn, hinder women from competing with men for more skilled, better paid jobs.

3.1.3 Economic participation

Lao women have one of the highest labour force participation rates in the region, and remarkably, male and female rates are almost equal. Female labor force participation⁵ was 76.3%, slightly less than men (78.9%) in 2011. The latest LECS V estimated the female labor force participation rate⁶ at 77.6%, slightly higher than men at 73.9 % in 2012/2013. The labor market in Lao PDR is highly informalized and agriculture-based. Within the total female workforce of 1.5 million, 1.1 million

-

⁴ University degree

⁵ % of female population ages 15+

^{6 %} of female population ages 10+

women or 72.3 % are engaged in the agriculture and fishery sectors as their main activity and most of this work is in small-holder, family-run agricultural production. The proportion of household participate in waged labor has increased from 14% in 2007-2008 to 17.8% in 2012/2013(LECS V, 2014).

Table 2. Labor force participation and unemployment rate in Lao PDR					
	2010	2011	2012		
Labor force participation rate for ages 15-24, female (%)	69.1	68.8	68.5		
Labor force participation rate for ages 15-24, male (%)	58.8	58.7	58.7		
Labor force participation rate for ages 15-24, total (%)	63.9	63.7	63.6		
Labor force participation rate, female (% of female population ages 15-64)	80.1	80.1	80		
Labor force participation rate, male (% of male population ages 15-64)	80.7	80.8	80.9		
Labor force participation rate, total (% of total population ages 15-64)	80.4	80.4	80.5		
Labor force participation rate, female (% of female population ages 15+)	76.4	76.4	76.3		
Labor force participation rate, male (% of male population ages 15+)	78.7	78.8	78.9		
Labor force participation rate, total (% of total population ages 15+)	77.5	77.6	77.6		
Unemployment, youth female (% of female labor force ages 15-24)	2.5	2.5	2.5		
Unemployment, youth male (% of male labor force ages 15-24)	4	4.1	4		
Unemployment, youth total (% of total labor force ages 15-24)	3.2	3.2	3.2		
Unemployment, female (% of female labor force)	1.1	1.1	1.1		
Unemployment, male (% of male labor force)	1.6	1.6	1.6		
Unemployment, total (% of total labor force)	1.4	1.4	1.3		
Source: World Bank, 2013					

Amongst service workers or shop & market sales workers, 63 % are women whilst 37 % are men. This is also a vulnerable sector, with a significant proportion of the workforce either self-employed or engaged in unpaid work for the family. A far greater proportion of unpaid family workers (65 %) are women as opposed to men (35 %).

Women spend most of their time working in agriculture, followed by retail and hospitality, handicraft and services. In 2012/13, 72.9% of all hours worked by women were in agriculture including forestry and fishing; 12.3% were spent working in own business work including wholesale, retail, hotel and restaurants; 2.8% were spent in textile and leather production. Generally there is no significant difference of time spending for agricultural work between women and men.

Table 3. Percentage of total hours wo	Table 3. Percentage of total hours worked by women in different sectors in 2013					
	Women	Men	Total			
Agriculture, forestry, fishing	72.9	71.7	72.3			
Mining	0.2	0.5	0.4			
Food processing, beverage, tobacco	1.2	0.9	1.0			
Textile, leather production	2.8	0.3	1.5			
Wood, paper, chemicals, plastics	2.2	3.3	2.8			
Production of equipment, motor	0.1	0.5	0.3			
Electricity, water	0.1	0.3	0.2			
Construction	0.6	5.1	2.9			
Wholesale, retail, hotel and	12.3	5.4	8.8			
Transport	0.2	1.8	1.0			
Other services	7.3	10.3	8.8			
Total	100.0	100.0	100.0			
Source: LECS V, 2014						

On average, women and girls work more hours per day than men and boys. LECS V data shows that income generating activities plus household work occupies female household members for 5.7 hours per day compared to 5 hours for male household members. However, their work is more likely to be unpaid domestic labor while 'men's work' is more likely to be income generating. The vast majority of the Lao workforce - both female and male - is 'self-employed'; however there are significant gender differences in how this work is valued. On average, women and girls work more hours per day men and boys.

Table 4. Time use on main activities by sex, hours per day						
Activity	Female	Male	All			
Income generating activities	3.9	4.7	4.3			
Work as employed	0.6	1.1	0.5			
Own business work	0.9	0.6	0.6			
Agricultural work	1.8	2.1	2.2			
Collecting firewood/fetching water	0.2	0.1	0.3			
Hunting/fishing	0.1	0.6	0.4			
Construction	0.0	0.1	0.1			
Handicraft	0.3	0.1	0.2			
Household work	1.8	0.3	1.5			
School	0.9	1.1	1.0			
Sleeping, eating, leisure time	15.4	16.2	15.5			
Travel, others	1.2	1.2	1.6			
Total	24	24	24			
Source: LECS V, 2014						

Overall, the male workforce is better educated than is the female workforce. About 33 % of the male workforces have completed secondary education, compared to 25 % of the female workforce. About 28 % of the female workforces are uneducated, compared to 17 % of the male workforce. Some 6 % and 7 % of employed men respectively have tertiary and technical school education, compared to 3% and 5 % of employed women (LECS V, 2014).

3.1.4 Gender and Governance

Lao PDR has amongst the highest proportions of women in national parliaments in the region. Twenty five % of female parliamentarians are women. It is clear that some progress has been made on women's participation in central government in 2014. Out of 84 ministers and ministerial equivalent positions, 12 ministers or 14% are females. Five females (8%) are members of the central party committee. Out of 105 vice ministers and equivalent positions, 21 or 16.6% filled by women. In all Government departments at the ministerial level, there are 71 female directors general out of 366 directors general (or 19%). Out of 760 vice directors general, 186 persons or 24% are women.

However, these achievements are not mirrored at the sub-national level, where significant gender gaps persist. At the provincial level, there are no female governors and only 3 female vice-governors out of 43. At district and village levels, women's representation is very low. For example, according to the statistics from the Government's Office in 2014, there were only 145 female village chiefs from the total of 8,651 villages (2%), while deputy female village chiefs were 1200 out of 16,786 post holders accounting for only 7.0% (NCAW, 2013).

3.1.5 Gender and Health

Despite positive trends in maternal and reproductive health service indicators, the country's progress towards this goal is not on track. The country still has one of the highest maternal mortality ratios in the region, although the ratio has declined from 405 in 2005 to 357 per 100,000 live births in 2013. Age-specific mortality rates for women and men age 15-49 for the seven-year period preceding the survey (2005-2011) indicate that the level of adult mortality was slightly higher among men (3.1 deaths per 1,000 population) than among women (2.3 deaths per 1,000 population) (MoH, 2012).

Over 90 % of women and men have heard of a modern contraception method. Both women and men are more familiar with modern methods of contraception (94 % and 95 %, respectively) than with traditional methods (68 and 69 %, respectively). About 50 % of currently married women are using a method of contraception. The most popular method is the pill, used by 2 in 10 married women in Lao PDR. About 42 % of married women are using a modern method of family planning. About 38 % of births are delivered in a health facility, the majority in public sector facilities. Only 41 % of newborns

in the last two years received either a health check or post-natal care (PNC) visit within two days of delivery (MoH, 2012).

The total fertility rate (TFR) for Lao PDR for the three-year period preceding the survey (2009-2011) is 3.2 children per woman, and 3.6 and 2.2 in rural and urban areas, respectively. About 38 % of births in Lao PDR are delivered in a health facility, the majority in public sector facilities.

The result of the survey shows that about 10% of the populations suffered from a health problem during the last 4 weeks. The 2012/2013 survey shows that in general, the share of women and men suffering from long term sickness is slightly different: women 2.3% and men 1.9%. Women face particular challenges in accessing care given restrictions on their mobility due to social norms, domestic duties, as well as costs and difficulties of transportation. About 52 % of the population lived in villages within 10 km of a hospital while 62.5 % were within 10 km of a health center in 2013 (LECS V, 2014).

3.1.6. Gender and Business Sector

According to the Enterprise Survey 2011, about 43.4% of enterprises were owned or managed by women. The gender gap becomes most apparent with medium and large-sized enterprises, where women own only about one-quarter and one-fifth of businesses respectively. The finding that businesses owned by women are generally smaller than those by men –that proportion of male owners increases with enterprise size –is consistent with previous years' surveys. Women do comprise a much larger share of the ownership of large firms in 2011 (19%) than in 2005 (4.8%).

Consistent with women owning a greater proportion of small and micro-sized enterprises, whose owners tend to have a lower education level, than men, male business owners are on average twice as likely to have attained higher education than female business owners (39.3% vs. 18.7%) in Enterprise Survey 2011.

Comparing computer use by enterprise size reveals the finding that larger businesses are much more likely to use computers. In all survey years, 100% of large-size enterprises have been using computers; nearly 9 in 10 medium-sized enterprises use computers. With small enterprises, that figure drops to around half; and fewer than one in seven micro-enterprises use a computer to conduct business (GIZ 2009, 2012). Comparing computer use among sampled enterprises across the four Enterprise Surveys shows a small but consistent increase in the aggregate percentage of enterprises

using computers. Across all firm size categories in Enterprise Surveys 2011 (with the exception of large enterprises, where computer was already 100%), computer use rose slightly, albeit by no more than 5% in any category. The largest increase was in small-size enterprises from 47% in 2009 to 52% in 2011; the first time it has risen above 50%. 90% of medium-size enterprises now utilize computers, while fewer than one in seven (13%) of micro enterprises utilize computers.

The condition of physical infrastructure (including roads, water, telecom and internet) was perceived by many businesses to be a constraint, although to a lesser degree than energy and telecom prices. About half of micro, small, and medium sized enterprises found poor infrastructure to be a constraint, while relatively fewer large enterprises considered it to be a constraint. Telecommunications infrastructure problems: 27% of small and 40% of the medium.

3.1.7. Gender in Education

Gender gaps persist at all levels of education and these disparities are worse amongst certain groups: in poorer districts, rural areas and amongst non-Lao Tai ethnic groups. The literacy rate for women (76%) remains lower than for men (90.7%) in Lao PDR reflecting a legacy of gender bias in access to education. This gap wider among the poor, among whom the female literacy rate is 58.7% compared to a male literacy rate of 81.7%. Literacy is thus lowest among females in poor households (LECS V, 2014).

According to LSIS 2012, 69 % of young women (age 15 – 24) and 77 % of young men are literate in Lao PDR. Among both women and men (age 15 – 24), the literacy is highest in the Central region at 76 % among young women and 79 % among young men, and lowest in the South at 55 % among women and 70 % among men. The primary school completion rate for all of Lao PDR is 94 %. The completion rate among boys (101%) is higher than that of girls (88 %). The Gender Parity Index (GPI) for both primary and secondary school is close to 1.00, indicating no difference in the attendance of girls and boys at primary and secondary schools.

		Male	Female
	Lao PDR	77.4%	68.7%
	Urban	92.0%	90.6%
Residence	Rural with road	73.3%	61.5%
	Rural without road	55.5%	41.4%
	Ages 15-19	79.0%	72.3%
Age	Ages 20-24	75.3%	64.3%
	Lao-Tai	83.9%	81.6%
	Mon-Khmer	62.8%	45.3%
Ethnic group	Hmong-Mien	81.2%	48.6%
- 1	Chinese-Tibetan	43.1%	30.1%

3.1.8 Gender in ICT

In 2006, the survey of 126 913 economic unit shows that the use of information technology (IT) in the operation of the economic unit is still very limited, only 3 910 economic units or 3 % of total units use computer. Moreover, only a small number of firms use the Internet. For instance, 0.9 % of total economic units use the Internet and other 0.3 percent has their own websites (MPI, 2007).

According to LECS V 2013, the promotions of households with a TV increased from 60.2% to 75.5 %. The ability to communicate has also improved significantly, with 76% of households owning a mobile phone in 2012/2013. About 56.1% of poor households owned a mobile phone. About 7.5% and 1.3% of all households and poor households owned a computer respectively.

Only 13 % of women in Lao PDR read a newspaper at least once a week. One in three women listen to the radio at least once a week, while as many as three quarters of women watch television at least once a week. Five % of women age 15-49 do not have regular exposure to any of the three media, and only 7 % are exposed to all the three types of media at least once a week (LECS V, 2014).

Larger proportions of women are exposed to all the media types in urban areas (15 %) than in rural areas (3 %). Exposure of women to all the three mass media is higher in the Central region (9 %) than in the Southern (5 %) and Northern region (4 %). The percentage of women exposed to all three media types on a weekly basis is highest among women in Lao-Tai headed households (9 %). The most common type of media to which all ethno-linguistic groups are regularly exposed is television

(viewed regularly by 40-88 % of women of different ethno-linguistic households), followed by radio.

Men report a slightly higher level of exposure to newspaper and radio than women. About 18 % of men read a newspaper or magazine at least once a week and 42 % listen to the radio at least once a week. On a par with women, three quarters of men watch television on a weekly basis. About 9 % of men do not have regular exposure to any of the three media, while 10 % are exposed to all the three types of media at least once a week.

According to Lao Social Indicator Survey (LSIS) 2011, only 15-24 year old women and men were asked questions on computer and internet use. About 17 % of 15-24 year-old women have ever used a computer, 14 % had used a computer within the previous year and 11 % had used a computer at least once a week during the previous month. About 9 % of women age 15-24 had ever used the internet, while 8 % had used the internet within the previous year. Only 6 % of young women used the internet as frequently as once a week or more during the previous month.

While use of a computer or the internet is fairly low across most of the country, about half of young women in Vientiane capital had used a computer in the previous year and one third had used the internet in the previous year. As expected, both computer and internet use increase steadily with increasing education level and increasing wealth quintile. Less than 1 % of women with primary education reported using a computer during the last year, compared with 79 % of women with higher education. Use of computer in the previous year climbed from less than 1 % among women in the two lowest wealth quintiles to 45 % among women in the highest. Use of the internet in the previous year rises from less than 1 % in the lowest wealth quintile to 26 % among young women in the richest.

Similar proportions of young men as young women had used a computer and the internet during the previous year. Sixteen % of 15-24 year-old men had used a computer and 9 % had used the internet during the previous year.

Differentials by background characteristics among young men are similar to those observed among young women. Use of computers and the internet is most common in Vientiane Capital, and also rises steadily with increasing education level and wealth quintile. Less than 1 % of young men in the poorest households had used the internet during the previous year, compared with 36 % among young men in the richest households. While use of computers and the internet is limited to a minority of the population, a significantly higher proportion of young men of Lao-Tai headed households had used computers (22 %) or accessed the internet (14 %) in the 12 months prior to the survey than young men

of other ethno-linguistic groups (LSIS, 2012).

According to the ICT survey of the Lao Women's Union in 2013, more men than women use the internet: 11.1% of all women are online, compared with 16.5% of all men. Women face real barriers to internet usages including less access to computer, low education, and high internet price. Lack of knowledge on how to use the computer is a hindering factor to use the internet as cited by 48.7 % of the female respondents and 35.6% of the male respondents respectively (LWU, 2013).

Section 3.2 Current Status of e-Services

3.2.1 Current Status of e-Services

Lao PDR has made significant progress in strengthening its telecommunication infrastructure. Communication and transport, and post and telecommunication play an important role in generating revenues and critically support other sectors to grow. On average, the sector's value added has increased by 7.8% per year and its contribution to GDP is approximately 4.6%. The sector is significantly dominated by mobile telecommunications. Cell phone density and internet access in Lao PDR are low compared to the more advanced ASEAN member countries. In 2014, the number of mobile subscribers reaches 4,374,466 or about 66% of Laotians have a cell phone.

Table 6. ICT Access in Lao PDR						
	2010	2011	2012	2013	As of May 2014	
Mobile cellular subscriptions	4003395	5480851	4300000	4481395	4374466	
Mobile cellular subscriptions (per 100	62.5	84	64.7	66.1	66	
people)						
Telephone lines	103102	107643	450000	678657	701738	
Telephone lines (per 100 people)	1.6	1.6	6.7	10	11	
Fixed broadband Internet subscribers (per	0.08	0.09	0.11	0.13	1.7	
100 people)						
Internet users (per 100 people)	7	9	10.7	11	12.5	
Source: World Bank, 2013; MPT, 2014						

The Vientiane Capital has most mobile phone density accounting for 183% subscribers compared to its total population. Saravane province has less density with only 36% subscribers. Table 7 indicates the number of mobile subscribers in June 2014.

	Table 7. Number of mobile subscribers by province in 2014						
Code	Province	Number of district	Number of subscribers	%			
01	Vientiane Capital	9	1,481,651	183			
02	Phongsaly	7	71,716	39			
03	Luangnamtha	5	99,960	57			
04	Oudomxay	7	126,178	39			
05	Bokeo	5	85,667	48			
06	Luangprabang	12	227,550	48			
07	Huaphanh	9	133,881	39			
08	Xayabury	11	188,241	47			
09	Xiengkhuang	8	159,653	55			
10	Vientiane	13	196,735	38			
11	Borikhamxay	7	157,535	54			
12	Khammuane	10	240,704	60			
13	Savannakhet	15	513,384	54			
14	Saravane	8	139,891	36			
15	Sekong	4	62,970	59			
16	Champasack	10	401,843	59			
17	Attapeu	5	86,907	64			
	Total	145	4,374,466	66			
Source.	Ministry of Post and	Telecommunications, 2	2014				

Land lines account for 701,738 and by early 2014 fixed-line teledensity was still low at around eleven telephones per 100 people, with limited growth occurring in that segment of the market, over the last decade. Table 8 shows a number of fixed line subscribers by province in 2014.

Table 8. Number of fixed line Subscribers by province in 2014

Code	Province	Number of	Number of	%
		District	Subscribers	
01	Vientiane Capital	9	229,556	28
02	Phongsaly	7	17,657	10
03	Luangnamtha	5	16,714	10
04	Oudomxay	7	24,713	8
05	Bokeo	5	11,885	7
06	Luangprabang	12	41,136	9
07	Huaphanh	9	31,190	9
08	Xayabury	11	33,246	8
09	Xiengkhuang	8	32,120	11
10	Vientiane	13	43,713	8
11	Borikhamxay	7	22,423	8
12	Khammuane	10	26,783	7
13	Savannakhet	15	73,060	8
14	Saravane	8	24,541	6
15	Sekong	4	11,512	11
16	Champasack	10	50,647	7
17	Attapeu	5	10,841	8
	Total	145	701,738	11
Source	: Ministry of Post and Tel	lecommunicati	ons, 2014	

Internet prices in Lao PDR have dropped every year from 2008 to 2014. The price per month for a speed of unlimited 1 Mbps had dropped to U\$35 in 2014. Service providers are competing harder on price for data service because they are not able to do this with voice services as the government has imposed tougher regulation on those services. The internet price could have been reduced further as a result of competition in the market, but the subscriber growth rate has not increased at the level that service providers would have expected.

The number of internet users is growing quickly reaches 707,871, and the penetration rate for internet access is 12.5 percent in 2014. However, if we compare with the nearby countries, internet development in Lao PDR is still slow. The main causes of this slow development include a lack of consumer purchasing power, lack of IT knowledge, lack of content in Lao language, and high cost to subscribe. According to the Internet World Stat (IWS), there are more than 255,880 Lao people subscribing to Facebook accounts as at the end of 2012, representing a Facebook user penetration of 3.9. A fixed broadband

internet subscriber in Laos is last measured at 115,147 in 2014. Table 9 shows the number of fixed broadband internet subscribers.

	Table 9. Fixed broa			
Code	Province	Number of	No. of subscribers	%
		District		
01	Vientiane Capital	9	52,292	6.4
02	Phongsaly	7	5,349	2.9
03	Luangnamtha	5	2,981	1.7
04	Oudomxay	7	7,102	2.2
05	Bokeo	5	2,988	1.7
06	Luangprabang	12	5,898	1.3
07	Huaphanh	9	3,573	1.0
08	Xayabury	11	3,661	0.9
09	Xiengkhuang	8	3,921	1.4
10	Vientiane	13	4,513	0.9
11	Borikhamxay	7	4,138	1.4
12	Khammuane	10	2,730	0.7
13	Savannakhet	15	6,003	0.6
14	Saravane	8	1,373	0.3
15	Sekong	4	2,113	2.0
16	Champasack	10	5,330	0.8
17	Attapeu	5	1,182	0.9
	Total	145	115,147	1.7

3.2.3. Lao Telecommunication Policy

In October 2007, the National Authority of Posts and Telecommunications (NAPT) devised from the Ministry of Communication, Transportation, Post and Construction (MCTPC). In June 2011, the National Authority of Posts and Telecommunications (NAPT) became the Ministry of Posts and Telecommunications (MPT/http://www.mpt.gov.la) to administer the ICT sector. The e-government center was also transferred from the NAST to be operating under the MPT.

The Government of the Lao PDR (GoL) recognizes the ICT as an increasingly crucial tool for achieving socio-economic development, aims to bring the country into the information age by increasing general access to ICT with the provision of modern telecommunications infrastructure and

computer networks; by fostering enterprise and industry; promoting research and development in the fields of ICT; and by developing the necessary human resources and institutional capacities.

The Ministry of Post and Telecommunication is responsible for the day-to-day regulation of post, telecommunications and ICT sector including licensing, the regulation of frequency spectrum, numbering and electronic addressing, technical regulation and unlawful use of telecommunications networks. According to the ICT Law in 2011, State promotes the following ICT programme:

- 1) The state encourages both domestic and foreign individuals, legal entities or organizations to invest in the construction, development and extension of telecommunication networks according to the types and term telecommunication business license.
- 2) The state promotes telecommunications service provider to fairly complete in the operation of telecommunication service.
- 3) Telecommunication Principles Telecommunications shall be complied with the following principles: Ensuring quality in front of the law, non-discrimination, independence of the telecommunication authority from telecommunication service providers in accordance with the law; Ensuring objectively, timely and transparently the assignment and utilization of telecommunication resources, make publicly available of allocated radio frequencies allocated for any specific use by the Government; Ensuring the confidence of the state, the official the privacy of individuals, the confidence of legal entities or organizations, and ensuring transparency and justice; Ensuring compliance with technical standards, interconnection with regional and international telecommunication networks, quick and good quality of service; and protecting legitimate rights and benefits of telecommunication service providers and users.

Law on Development and Protection of Women. The Article 24 defines trafficking in women and children as the recruitment, hiding, moving, transportation, transfer, harboring or receipt of women, within or across national borders, by means of deception, the giving or receiving of bribes, threats, the use of force or forms of coercion, abduction, debt bondage or by other means, for forced labor, prostitution, publishing pornography and what is in contradiction to fine national culture or the removal of various body parts or for other unlawful purposes.

Law on the Protection of the Rights and Interests of Children. The Article 86 imposes a penalty of imprisonment for between one and three years plus a fine of between two and six million kip for anyone who produces, distributes, disseminates, imports, exports, displays or sells magazines, photographs, films, videos, VCDs, DVDs and other items of child pornography.

The National Education System Reform Strategy (NESRS) 2006 - 2015 puts educational development

at the heart of human resource development. The ESDF consists of a set of policy priorities and targets, spanning three priority areas: Equity and Expansion of Access; Governance, Accountability and Performance; Quality, Relevance and Efficiency. Within the quality area, the Ministry of Education and Sport (MoES) aims to develop the curriculum in accordance with international standards and introduction IT into the lower and upper secondary education levels. By 2015, secondary schools are envisaged to have been supplied with teaching and learning materials for IT. The Ministry of Education and Sport (MoES) issued the Notification to ensure the application of ICT to supplements and administer the Ministry of Education five main programmes: 1) Pre-school and General Education Programme, 2) Non-formal Education Programme, 3) Teacher Training Programme, 4) Vocational and Higher Education Programme, and 5) Administration and Management Programme.

In the rural and remote areas, the GOL will pilot telecentre programmes to ensure opportunities for ICT-enabled learning for those most underserved and without readily access to education. To promote the transfer of technical knowledge and expertise, the Lao diaspora shall be encourage to return to assist in human resource development. To ensure growth with equity (reduce disparities related to gender, ethnicity, location and returnee status), the Lao Government will support and facilitate the application of ICT for the development of participatory social networks (civil society, academia, general public, government and the private sector); focusing on the environment, health, gender, and youth.

The National Health Information System Strategic Plan 2009-2015 ensures adequate logistic supports and supplies to the Health Management Information System (HMIS) including ICT equipment at district levels as well as putting maintenance procedures in place for sustainability.

3.3.5 Human Resources in ICT field

In 2014, there is 800 Government staff (306 women and 494 men) in ICT sector. At the central level, 404 staff is working in the Ministry of Post and Telecommunications. The majority of staff hold a bachelor degree (408), followed by high diploma (298). In general, male have higher education level than female. For example, 75% of male staff holds a master degree while 24.5% of female staff does.

Table 10. A. Government s	staff in Post an	d Telecor	nmunicati	ons Sector	by central	and local level
Level	Women	%	Men	%	Total	%
Ministerial level	149	36.9	255	63.1	404	100.0
Provincial and district	157	39.6	239	60.4	396	100.0
Total	306	38.3	494	61.8	800	100.0
Table 10. B. Government s	staff in Post an	d Telecor	nmunicati	ons Sector	by education	onal level
PhD	1	33.3	2	66.7	3	100.0
Master Degree	13	24.5	40	75.5	53	100.0
Bachelor Degree	151	37.0	257	63.0	408	100.0
High diploma	130	45.0	159	55.0	289	100.0
Middle level	9	20.9	34	79.1	43	100.0
Primary level	2	50.0	2	50.0	4	100.0
Total	306	38.3	494	61.8	800	100.0
Sources: Ministry of Posts a	nd Telecommui	nications,	2014			

Provided with the current situation of Lao labor market where ICT human resource are still not sufficient, it could be said that, in general, there exists the demand for foreign skilled workers and this would be even higher when the industry developed, unless Lao ICT human resource could fill the gap.

According to a 2006 economic census, there were 3,688 employees working in ICT field. This number is strikingly low, constituting only 1.1 % of the total workforce in Laos. Numbers of total IT professionals were estimated at 4,439 in 2012. The number will climb to 5,493 by the end of 2014. Out of which about 1/4 are working in the service provider side.

The number IT staff within service provider companies has accounted for about 36 percent of total employees in 2012. Comparing the figure with the previous year's survey (2011), we can see an increase of 6 percent. Around 1/3 of IT professionals working for the service providers are females. Foreign IT workers account for 4 of total IT workers in the service providers. Salary continues to grow, but not evenly, across each job function. Database and website related staff is getting paid better, reflecting the increasing demand in these tasks.

Section 3.3 Country Specific (Potential) Demand for e-Services

Under the Initiative of Lao e-Government Action Plan in 2006, Government of Lao PDR has authorized the NAST to implement the Lao National e- Government Project. Followings are key achievements:

- 1) Provincial e-Government Service Center in 16 Provinces;
- 2) Construct three training rooms at e-Government Service Center;
- 3) 51 Teleconference room established;
- 4) IT equipment and network installation in Vientiane Capital (219 government organizations, 9 districts and 100 villages);
- 5) IT equipment and network installation in 16 provinces for 192 government officers. (16 Provincial Governor's offices, 16 provincial e-Government service centers, 9 departments and 1 district officer in 16 provinces)

As a consequence of this e-government project, Table 11 highlighted key areas of e-service in Government sector in Lao PDR.

Table 11. Key areas of e-service in Lao PDR				
Application Areas	Current e-Services Line Government age			
Laos e-Government System	 e-Document; e-Archive; e-Map; e-Registration; e-household book CMS, RTX, e-staff list, teleconfence, e-learning, and email All most ministries participate in the e-Government system. 	Government's Office		
Legal information access	 Online search for legal document Social complaints through hotline 	National Assembly		
Lao Agriculture Database	 Gender mainstreaming tool for agriculture promotion at the field activity, Guideline for agriculture production 	Ministry of Agriculture and Forestry		
Development Forum for sharing	- The forum consists of an internet discussion	Ministry of Agriculture and		
information about agriculture, rural	group	Forestry, supported by		
livelihoods and natural resource	- Online library. It provides gender reports in	Development Partners and Non-		
management in Laos.	many sectors	profit Association (NPA)		
National Statistics	- Provide gender statistics in socio-economics survey and census.	Ministry Planning and Investment		

Women's Health	Online Search for Sexual education Online Search / Archive for Maternal and	Ministry of Health
	Child Health	
Women's social welfare	- Online guideline for social security scheme for women and men in business sector	Ministry of Labor and Social Welfare
Gender Policy Planning and Monitoring	 Online gender policy and strategy archive Online Gender Statistics Archive 	Government's office and Lao Women's Union

Section 3.4 Future Directions of e-Services

Strategic Direction of the Lao Government (overall direction)

Currently, the Government of Lao PDR (GoL) had conducted the Midterm Evaluation (MTR) of the 7th National Socio Economic Development Plan (NSEDP) 2011-2015. The results of this MTR will be used as a reference and lesson learnt for formulation of the 8th NSEDP (2016-2020). The 8th NSEDP (2016-2020) is the means of implementing the final stage of the 2020 Strategy and the Resolutions of the 10th Party Congress with graduation from the Least Development Country status a key aim of government in this plan period. The 8th NSEDP 2016-2020 highlighted the following directions:

- 1) stimulating the non-resource sector and making the private sector a cornerstone of future development;
- 2) increasing the competitiveness of small and medium enterprises (SMEs) in order to be a foundation for the growth and employment as well as for poverty reduction;
- 3) developing entrepreneurs "technical and professional skills by strengthening marketing capacity, mobilizing financial resources for enterprises and businesses" and improving the business climate within the framework of maximizing the benefits of WTO membership and preparing for integration into ASEAN Economic Community; and
- 4) development of infrastructure for small and medium enterprises and human resources, enabling the people, farmers and entrepreneurs to access business, economic, social and cultural services.

Strategic Direction of the National Assembly

To enhance dialogue between the National Assembly and citizens, the following actions are proposed:

- to increase the accessibility and transparency of the NA and its units, including among others information on draft bills, improved mechanisms should be considered such as the NA website, hotline and petition system, sharing of summaries of plenary sessions and committee meetings for parliamentarians with interested public, background information about the work of the NA and its members through wider audiences, increased visits of NA members and constituents to rural areas;
- 2) to develop consultation procedures on using conventional and electronic communication instruments, like structured meetings (town-hall meetings), radio talk-shows, e-consultations on legislation and policy, and online discussions. The capacity building of female parliamentarians to use the ICT tools will be a priority;
- 3) Continue to improve laws and decrees on ICT. This will include a review of the existing laws

- related to ICT and revision of these legal documents.
- 4) The GOL aims to develop a comprehensive set of Cyber-Laws to govern activities on the Internet and information networks of Lao PDR. The GoL will begin with a set of cyber laws to encompass e-commerce/e-business, cybercrimes, consumer protection, and intellectual property rights.

Strategic Direction of the MPT and Key Ministries

To support the Government priorities from 2016-2020, the future direction of e-service are followings:

- 1) Fostering the information technology application in the government offices, in crucial economic sectors and large enterprises.
- 2) Reforming and automating of its internal processes of government departments and integrating of its applications across all tiers of administration for forming the back end system for implementation of E-Government Project.
- 3) Telecommunication and Internet development with the state of the art technology, wide broadband, high speed and quality. Until 2015 all provinces of the country will be connected by fiber cable, the remote areas connected to Internet by satellite, Internet user ratio reaches 15% of population.
- 4) Building hardware infrastructure for connecting to all ministries, departments, provinces, districts and villages.
- 5) Developing of citizens oriented applications for all government functions of the country having public interface.
- 6) Develop the new law to censor the social media by the end of 2014.
- 7) Expand telecommunication networks and services to rural areas aiming to cover 90% of the villages. Install 17,192 Km of fibre optic lines.
- 8) Attempt to expand mobile phone and fixed line connections to cover 80% of the total population.
- 9) Make available modern technologies in mail delivery, logistics, and payments of post services; for example, payments by credit cards, letters sent through e-mails, and financial services through E-post. Create an electronic postal service across the country.
- 10) Improve the telecenter-based tele-health services, especially improvement of health information dissemination for women at the local level.
- 11) Develop the Lao font for all types of electronic communication.
- 12) Introduce newer technologies in the educational sector, like ICT, to match with global educational standards.
- 13) Expend the distance learning programme of the ministry of Education and National

- University of Laos including improvement of e-learning for girl and ethnic people.
- 14) Increase the number of women receiving training in agricultural technologies, processing, handicraft and services to 20%.
- 15) Increase the number of women in modern professional courses. -Increase the proportion of women in the paid workforce to 40% all things being equal, women will be given priority when awarding jobs.

Strategic Direction of Women Machineries (LaoNCAW and LWU)

- 1) Appoint more women to high ranking posts (from district mayor upwards), to a target of 15%. This will also apply for the MPT.
- 2) Increase female members in the National Assembly to more than 30%. The female parliamentarians will also have representatives from ICT sector.
- 3) Improve the working procedure and plan of the office of the Commission for the Advancement of Women in the MPT.
- 4) Increase women's participation in planning and sectoral development policies.
- 5) Build opportunities for women and girls to access social services on an equal basis with men.

Annex: Case studies of current e-service in Government agencies in Lao PDR

Current e-Service Status	Case 1	Case 2	Case 3
Basic Information			
e-Service Name	LWU	LaoNCAW	Social Security
Hosting Government Department or Ministry Name	Lao Women's Union	Government's Office	Social Security Organization, Ministry of Labor and Social Welfare
Website Address	http://laowomenunion.org.la	http://www.laoncaw.gov.la	http://www.ssolao.gov.la
Start Date	2012	2012	<u>2006</u>
Contents			
Is there e-Service providing women related issues (women's health, education, employment, sexual/domestic violence etc.) managed by ministry in charge of such issues?	Yes	Yes	Yes
What type of information/service the e-Service is providing currently?	Gender statistics on health, education, agriculture, business, sexual/domestic violence	Gender policy in all sectors including CEDAW, NSEDP, Laws, mechanisms, annual reports. The website provide information on health, education, agriculture, business, sexual/domestic violence	Provide all information related to social welfare including health care insurance, birth insurance
Does the e-Service provide women related information (such as women NGO directories etc.)?	No	No	Yes
Does the e-Service provide information about job and bidding opportunities?	No	No	Partly yes
Does the e-Service feature women talent pool registration?	No	No	No
Functions			
Dose the e-Service compile its user statistics?	Yes	Yes	Yes
Does the e-Service provide user guide (how to use the website)?	Yes	Yes	Yes
Does the e-Service provide e-newsletter service?	No	Yes	Yes
Does the e-Service provide audio and/or video files as well as documents?	Yes	Yes	Yes
Does the e-Service provide online forms/documents for downloading or electronic filing?	Yes	Yes	Yes
Does the e-service provide e-participation tools (feedback, polls, bulletin board, Q&A, Ombudsman, satisfaction survey etc.)?	Yes	Yes	Yes

Does the e-Service provide single window link	Yes	Yes	Yes
for online petition, citizen proposal and			
information disclosure request?			
Does the e-Service provide e-learning (audio,	No	Yes	Yes
video, document etc.)?			
Does the e-Service provide "Search" option	No	Yes	Yes
(to easily navigate and obtain information)?			
Does the e-Service provide contact directory	No	No	No
for corresponding department/person in charge			
of the menus/issues and web manager?			
Does the e-Service provide "Contact Us"	Yes	Yes	Yes
option where you can directly contact web			
manager or person in charge and ask			
questions?			
Does the e-Service provide security features	No	Yes	Yes
such as log in or pin access to protect your			
personal information?			
Does the e-Service provide mobile access	Yes	Yes	Yes
option? (Can you access the web service with			
your cell phone?)			
Does the e-Service provide information in	Yes (Lao and English)	Yes (Lao and English)	Yes (Lao and English)
multiple languages?			
Does the e-Service provide access option for	No	No	No
people with disabilities?			

Current e-Service Status	Case 4	Case 5	Case 6
Basic Information			
e-Service Name	Lao Government	National Assembly	Poverty Reduction Fund
Hosting Government Department or Ministry	Government's Office	National Assembly	Government's Office
Name			
Website Address	http://www.laogov.gov.la	http://www.na.gov.la/	http://www.prflaos.org
Start Date	2014 (official launch)	2010	2002
Contents			
Is there e-Service providing women related issues	Yes	Yes	YES
(women's health, education, employment,			
sexual/domestic violence etc.) managed by			
ministry in charge of such issues?			
What type of information/service the e-Service is	This website provides	This website provides	"PRF provides Library for gender and
providing currently?	information of Government	information of	social inclusion as fundamental
	strategy, laws, regulation.	Government strategy,	human rights in Lao, gender profile
	Some of these documents	laws, regulation. Some	report 2005, gender guidelines, VDO
	include gender and women	of these documents	of Domestic Violence, VDO of Girl
	information.	include gender and	and Boy, Concluding observations of
		women information.	CEDAW committee, Country Gender
			Assessment, Measuring the Impact of
			Community-Driven Development
			Projects on Gender, and GESI
			handbook for PRF district staffs.
Does the e-Service provide women related	No	No	Yes
information (such as women NGO directories			
etc.)?			
Does the e-Service provide information about job	No	No	Partly yes
and bidding opportunities?			
Does the e-Service feature women talent pool	No	No	No
registration?			
Functions			
Dose the e-Service compile its user statistics?	Yes	Yes	Yes
Does the e-Service provide user guide (how to use	Yes	Yes	Yes
	ies	ies	ies
the website)? Does the e-Service provide e-newsletter service?	No	Yes	Yes
Does the e-Service provide audio and/or video files	Yes	Yes	Yes
as well as documents?			
Does the e-Service provide online	Yes	Yes	Yes
forms/documents for downloading or electronic			
filing?			
Does the e-service provide e-participation tools	Yes	Yes	Yes
(feedback, polls, bulletin board, Q&A,			
Ombudsman, satisfaction survey etc.)?			

Does the e-Service provide single window link for	Yes	Yes	Yes
online petition, citizen proposal and information			
disclosure request?			
Does the e-Service provide e-learning (audio,	No	NO	Yes
video, document etc.)?			
Does the e-Service provide "Search" option (to	Yes	Yes	Yes
easily navigate and obtain information)?			
Does the e-Service provide contact directory for	No	No	No
corresponding department/person in charge of the			
menus/issues and web manager?			
Does the e-Service provide "Contact Us" option	Yes	Yes	Yes
where you can directly contact web manager or	103	103	Tes
person in charge and ask questions?			
person in charge and asir questions			
Does the e-Service provide security features such	Yes	Yes	Yes
as log in or pin access to protect your personal			
information?			
Does the e-Service provide mobile access option?	Yes	Yes	Yes
(Can you access the web service with your cell	ies	165	ies
phone?)			
	Vos (Los and English)	Vac (Lag and English)	Vec (Lee and English)
Does the e-Service provide information in multiple	Yes (Lao and English)	Yes (Lao and English)	Yes (Lao and English)
languages?			
Does the e-Service provide access option for	No	No	No
people with disabilities?			

Current e-Service Status	Case 7	Case 8	Case 9
Basic Information			
e-Service Name	Lao44	Health Information	Education
Hosting Government Department or Ministry Name	Ministry of Agriculture and Forestry; National Agriculture and Forestry Extension Service (NAFES)	Ministry of Health	Ministry of Education
Website Address	WWW.lao44.org	http://www.moh.gov.la	http://www.moe.gov.la
Start Date	2006	2010	2006
Contents			
Is there e-Service providing women related issues (women's health, education, employment, sexual/domestic violence etc.) managed by ministry in charge of such issues?	YES	YES	YES
What type of information/service the e- Service is providing currently?	Provides gender mainstreaming tools, strategy for advancement of women and various gender reports in many sectors including education ,health, land, agriculture and etc.	Provides health information (child, maternity, women care) and some gender statistics in health sector	This website provides information on Lao education policy, strategy, decree and educational information by sexdisaggregated statistics.
Does the e-Service provide women related information (such as women NGO directories etc.)?	Yes	No	Yes
Does the e-Service provide information about job and bidding opportunities?	Partly yes	No	Partly yes
Does the e-Service feature women talent pool registration?	No	No	No
Functions			
Dose the e-Service compile its user statistics?	Yes	Yes	Yes
Does the e-Service provide user guide (how to use the website)?	Yes	Yes	Yes
Does the e-Service provide e-newsletter service?	Yes	No	Yes
Does the e-Service provide audio and/or video files as well as documents?	Yes	Yes	Yes
Does the e-Service provide online forms/documents for downloading or electronic filing?	Yes	Yes	Yes
Does the e-service provide e-participation tools (feedback, polls, bulletin board, Q&A, Ombudsman, satisfaction survey etc.)?	Yes	Yes	Yes
Does the e-Service provide single window link for online petition, citizen proposal and information disclosure request?	Yes	Yes	Yes

Does the e-Service provide e-learning	Yes	Yes	Yes
(audio, video, document etc.)?			
Does the e-Service provide "Search" option	Yes	Yes	Yes
(to easily navigate and obtain information)?			
Does the e-Service provide contact directory	No	No	No
for corresponding department/person in			
charge of the menus/issues and web			
manager?			
Does the e-Service provide "Contact Us"	Yes	Yes	Yes
option where you can directly contact web			
manager or person in charge and ask			
questions?			
Does the e-Service provide security features	Yes	Yes	Yes
such as log in or pin access to protect your			
personal information?			
Does the e-Service provide mobile access	Yes	Yes	Yes
option? (Can you access the web service			
with your cell phone?)			
Does the e-Service provide information in	No (only Lao Language)	Yes (Lao and English)	Yes (Lao and English)
multiple languages?			
Does the e-Service provide access option for	No	No	No
people with disabilities?			

Current e-Service Status	Case 10	Case 11	Case 12
Basic Information			
e-Service Name	Lao Decide Info	Lao Agriculture Database	LaoFAB
Hosting Government Department or Ministry Name	Ministry of Planning and Investment, Lao Statistics Bureau	Ministry of Agriculture and Forestry, National Agriculture and Forestry Research Institute (NAFRI)	Ministry of Agriculture and Forestry, National Agriculture and Forestry Research Institute (NAFRI)
Website Address	http://www.nsc.gov.la/	http://lad.nafri.org.la/index.php	www.laofab.org
Start Date	2005	1993	2006
Contents	2003	1773	2000
Is there e-Service providing women related issues (women's health, education, employment, sexual/domestic violence etc.) managed by ministry in charge of such issues?	Yes	Yes	YES
What type of information/service the e-Service is providing currently?	Gender statistics on health, education, agriculture, consumption, time use, business, sexual/domestic violence, employment and population.	The database includes research results, surveys, training and extension materials, working papers, as well as policy and strategy reports. The database consists of bibliographic information, abstracts and to a limited extent, full text digital files. Currently, the database has 3813 records with a total 1588 downloadable full text files. Gender related issues in agriculture, fishery, livestock, forestry,	LaoFAB is a forum for sharing information about agriculture, rural livelihoods and natural resource management in Laos. The forum consists of an internet discussion group and an online library. It provides gender tools and reports in many sectors.
Does the e-Service provide women related information (such as women NGO directories etc.)?	No	No	Yes
Does the e-Service provide information about job and bidding opportunities?	No	No	Partly yes
Does the e-Service feature women talent pool registration?	No	No	No
Functions	Yes/ No/ Others(Please specify)		
Dose the e-Service compile its user statistics?	Yes	Yes	Yes
Does the e-Service provide user guide (how to use the website)?	Yes	Yes	Yes
Does the e-Service provide e-	No	Yes	Yes

newsletter service?			
newstetter service.			
Does the e-Service provide audio	Yes	Yes	Yes
and/or video files as well as	103	103	103
documents?			
	37	V	V
Does the e-Service provide online	Yes	Yes	Yes
forms/documents for downloading or			
electronic filing?			
Does the e-service provide e-	Yes	Yes	Yes
participation tools (feedback, polls,			
bulletin board, Q&A, Ombudsman,			
satisfaction survey etc.)?			
Does the e-Service provide single	Yes	Yes	Yes
window link for online petition,			
citizen proposal and information			
disclosure request?			
Does the e-Service provide e-learning	Yes	Yes	Yes
(audio, video, document etc.)?			
Does the e-Service provide "Search"	Yes	Yes	Yes
option (to easily navigate and obtain			
information)?			
Does the e-Service provide contact	No	No	No
directory for corresponding			
department/person in charge of the			
menus/issues and web manager?			
Does the e-Service provide "Contact	Yes	Yes	Yes
Us" option where you can directly			
contact web manager or person in			
charge and ask questions?			
Does the e-Service provide security	Yes	Yes	Yes
features such as log in or pin access			
to protect your personal information?			
Does the e-Service provide mobile	Yes	Yes	Yes
access option? (Can you access the			
web service with your cell phone?)			
Does the e-Service provide	Yes (Lao and English)	Yes (Lao and English)	No (only English)
information in multiple languages?	100 (Eno una English)	200 (Euo una Engnon)	110 (omj English)
mormation in multiple languages!			
Does the e-Service provide access	No	No	No
option for people with disabilities?			

References

Lao Women's Union, Gender Resource Information and Development Center (2013), ICT survey.

Ministry of Planning and Investment, Department of International Cooperation (2013), *High Level Round Table Meeting*. Volume2. Vientiane.

Ministry of Planning and Investment, Lao Statistics Bureau (2014), Lao Expenditure and Consumption Survey V.

Ministry of Planning and Investment, Lao Statistics Bureau (2007), Economic Survey.

Ministry of Planning and Investment, Lao Statistics Bureau (2014), Lao Expenditure and Consumption Survey V.

Ministry of Health and Lao Statistics Bureau (2012), Lao Social Indicator Survey (LSIS)

Ministry of Post and Telecommunications (2014), Annual report 2013-2014.

National Assembly (2014), ICT Law. Vientiane Capital, Lao PDR.

National Commission for Advancement of Women, Annual Report (2013). *Annual report 2013*. Vientiane Capital, Lao PDR.

GIZ (2011), Enterprise Survey

Ministry of Education (2013), *Human Resource Development Report for Year 2013*. Vientiane Capital, Lao PDR.