

Evaluating the Contribution of E-Government Services Achieving Sustainable Development Goals (SDGs) A Case Study of Egypt

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Abstract:- Due to limited researches in Egypt linking between E-government with Sustainable Development Goals. This study aims to clarify contribution of E-government services in achieving SDGs and some of its literary references and the relationship between them by using a methodology clarifying the relationship between the SDGs and the e-government services and provides the researchers and anyone wants to improve or add a new service to E-government services or achieve the SDGs and its domains with data that help them ease of choice and decision making.

E-government services have been sorted and tested to verify whether these services are available or not. furthermore, classification of SDGs and linking e-services to them has been provided through a matrix assessing Egyptian E-government services parameters to achieve SDGs and targets.

This study has found that almost all Egypt Ministries and other governmental organizations have websites, mostly used for providing structural information functions, activities, news, and services helping in achieving SDGs. Despite the limited number of Egyptian e-services and their domains, it contributes to the achievement of 11 goals (about 65%) and 33 SDG targets (about 20 %).

Keywords:- SDGs; E-government; UN; Egypt; E-government Services; Sustainable Development Goals.

I. INTRODUCTION

On September 2015, at an historic UN Summit and in the presence of 193 countries. The 2030 agenda for Sustainable Development Goals (SDGs) was adopted, it included 17 SDGs. The SDGs comprise a new broad range of economic, social and environmental goals that universally apply to all, the governments have been working on achieving Sustainable Development Goals (SDGs).

E-government has developed across the world over last year's rapidly, the focus of E-government evaluation is moving from merely technical issues to issues that span the social, political, cultural and economic environment.

E-Government provides to Sustainable Development the transparency through open data, greater efficiency, effectiveness, better access, quality of services, economic growth, social Inclusion,

Environmental protection and enhanced citizen participation. And many of the SDGs have goals directly or indirectly related to the indicators of local e-government evaluation which makes the improvements in the evaluation of e-government work as a catalyst for achieving the goals of sustainable development.

So, Governments around the world are becoming increasingly aware of the importance of using E-government to improve delivery of public services to citizens besides the importance of SDGs achievement prior to 2030.

Egypt, a country of high ambitions regarding information and communications technology, E-government and SDG's achievement. furthermore, Currently Egyptian governmental websites became more developed and multilingual (Arabic and English) but most of the websites are designed for Arabic because most Egyptians speak only Arabic thus, citizens can use most State websites and most of these websites are updated.

II. RESEARCH BACKGROUND

➤ *E-Government:* -

The researchers' studied the adoption, use and domestication of technology in society focusing on societal consequences of technology domestication. (1) So , E-government has developed across the world over last year's rapidly. (2) The focus of E-government evaluation is moving from merely technical issues to issues that span the social, political, cultural and economic environment. (3)

Electronic government or E-government is the use of information technology to enable and improve efficiency through which governmental services are provided to citizens, employees, businesses and agencies. (4) Delivering multiple services for a wide range of users such as employees (G2E), citizens (G2C), business (G2B) and to other government departments (G2G). (5) While each user has their specific concern and claim to adopt E-government services. (6)

E-government benefits improving quality of citizen delivered services, as enhances better public sector-efficiencies and Law enforcement, it reduces corruption and increases transparency, as enables better information dissemination. It enhances promotion of governmental services and outreach, as facilitates more involvement of citizens in democratic processes. (7) It provides greater convenience, as empowers citizens through access to information, growth of revenues, cost reductions, and increase efficient government management among others. (8) Purpose is: 1- improving government services and Web-based service delivery; 2- linking between governmental agencies; 3- Citizen access to government information 4- Procurement, and payment; 5- Citizen participation . (9)

➤ *The Sustainable Development Goals (SDGs):*

On September 2015, at an historic UN Summit and in the presence of 193 countries. The 2030 agenda SDGs was adopted, it included 17 SDGs (as shown in Fig 1) and 169 targets. (See - Table 4 – Appendix) (10) .

The SDGs comprise a new broad range of economic, social and environmental(as shown in Fig 2:- Classification by domains- below) objectives that universally apply to all, and over the next fifteen years countries will mobilize efforts to end all forms of poverty, fight inequalities and tackle climate change while ensuring that no one is left behind.



Fig 1:- Sustainable Development Goals – (Adapted from [11])

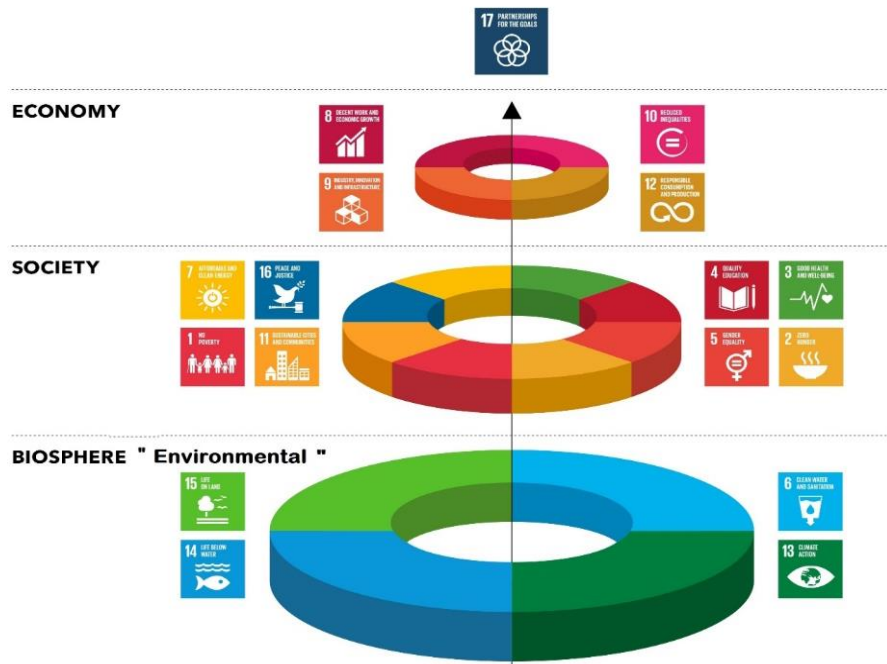


Fig 2:- Classification by domains
 Source: Stockholm Resilience Center - Stockholm University (11)

➤ *E-Government for Sustainable Development*

E-Government provides to Sustainable Development the transparency through open data, greater efficiency, effectiveness, better access, quality of services, economic growth, social Inclusion, environmental protection, and enhanced citizen participation. (12)

Many of the SDGs in the agenda 2030 have goals directly or indirectly related to the indicators of local e-government evaluation, which makes the improvements in the evaluation of e-government work as a catalyst for achieving the goals of sustainable development.

So, online service provision leads to empowering and promoting social, economic, Environmental and political inclusion on the elimination of discriminatory laws and practices, ensuring equal opportunities and reducing inequality in outcomes and practices and strengthening

appropriate legislation and procedures and e-participation, including e-consulting (As shown by the UN e-government survey for 2018). (13)

➤ *E-Government in Egypt:*

The Egyptian government is making great efforts to develop an appropriate framework for E-government. Important steps have been taken developing the national E-government infrastructure.

The E-government portal - www.Egypt.gov.eg - was launched in 2004, containing government information and Ministries websites as well as other governmental organizations.

Egypt won the United Nations public service awards (UNPSA) (as depicted in Table 1) . (14) (15) (16) (17)

Year	Category	Place Winner	Initiative
2003	2	3	The Ministry of State for Administrative Development Providing faster service to citizens by Automating Service Request procedures
2009	2	5	“e-Tanseek - University Enrollment Project ”
2011	1	2	Government Procurement Portal
2011	5	1	Women Health Outreach Program
2012	2	2	Egypt Elections
2013	2	1	Information Center - Ministry of Communication and Information Technology
2013	5	1	Multidisciplinary Breast Cancer Clinic - Women Health Outreach Program

Table 1:- Egypt won the United Nations Public Service Awards

The UN global E-government survey represents a comparative world-country ranking according to two primary indicators: (18) (19) (13) The first is E-government Development Index (EGDI) which is a weighted average of three normalized scores on three most important dimensions of E-government, namely: Online Service Index (OSI), Telecommunication Infrastructure Index (TII) and the Human Capital Index (HCI) , and the second is E-participation Index.

Egypt’s rank according to UN E-government survey conducted in 2014, 2016 and 2018. (as depicted in Table 2). (20)

Year	Rank	EGDI	OSI	TII	HCI	EPI	Trend
2014	80/193	0.513	0.591	0.357	0.591	0.549	- 27
2016	108/193	0.459	0.471	0.303	0.605	0.406	+ 28
2018	114/193	0.488	0.534	0.322	0.607	0.539	+ 6

Table 2:- Rank of Egypt in UN E-Government Survey

Currently Egyptian governmental websites became more developed and multilingual (Arabic and English) but most of the websites are designed for Arabic because most Egyptians speak only Arabic thus, citizens can use most State websites and most of these websites are updated.

III. RESEARCH LIMITATION

As the scope of this research is E-government services and sustainable development goals in Egypt. So the limits of research have been identified (as depicted in Table 3 - below).

Element	E-government services	SDGs
Country	Egypt	
Time of Sorting and Testing	Between Jun 7 th , 2018 and Dec 31 st . 2019.	
Websites Testing	Egypt E-government Portal, Governorates Websites, Ministries Websites and Governmental Organizations	
Classification	Service providers Classification	UN Classification

Table 3:- Research Limitation

IV. RESEARCH METHODOLOGY

As the scope of this research is E-government services and SDGs in Egypt. Therefore, e-services in Egypt will be displayed, sorted and tested, then classified according to SDGs , Then E-services will be linked to SDGs to derive an assessment matrix Egyptian E-government Service Parameters towards achieving SDGs and targets (as shown in).



Fig 3:- Research Methodology

➤ *Sorting E-services Stage*

Egypt has more governmental web pages on the world wide web, the sorting of E-government services was done according to the research limits(see Table 3 - above), which identified 67 Government Websites. 34 for Ministries, 25 for Governorates and 8 for Governmental Organizations other than the Egypt E-government Portal. (See - Table 5 – Appendix)

➤ *Testing Stage*

The main testing approach that used in this study is verifying whether Governmental websites services are available or not. and the process of testing has been revealed that 16 service providers are available and 19 forms "Template" which can be printed and submitted directly on service request. (See - Table 5:- List of Egyptian Ministries, Governorates and other Egyptian Governmental Organizations

and Table 6:- List of Egyptian E-Government Services

- Appendix)

➤ *Classification of e-services according to SDGs Stage*

During the test stage and according to the research limits, there were 16 service providers, out of which 8 only match SDG domains, However, during this stage, the E-services were classified according to SDGs covering domains of (Health, Social Protection, Economic Growth, Employment & Decent Work, Environmental Protection,

Public Security and , Education) (21) (See - **Error! Reference source not found.** – Appendix)

➤ *Mapping E-Services against SDGs*

During the classification phase there were only 8 service providers that match different SDG domains. At this stage e-services and SDGs were classified according to domains to obtain assessment parameters matrix used in Egyptian E-government Services to achieve SDGs and targets. (See - Table 9 and Table 10 – Appendix)

➤ *Discussion*

As the scope of this research is E-government services and SDGs in Egypt. So, e-services will be displayed, sorted according to the research limits, which identified 67 Government Websites. 34 for Ministries, 25 for Governorates and 8 for Governmental Organizations other than the E-Government Portal Verifying whether services are available or not. The process of testing reveal that 16 service providers are available with 19 forms "Template" which can be printed and submitted directly on service request., During this stage E-services were classified according to SDGs covering domains of: Health, Social Protection, Economic Growth, Employment & Decent Work, Environmental Protection, Public Security and Education. E-services were then corresponded to SDGs to obtain the Egyptian E-government service parameters assessment matrix towards achieving SDGs and targets.

The study concluded 16 service providers in the E-government, only 8 services providers match SDG domains, and despite the low number of Egyptian e-services and their domains, it contributes towards the achievement of 11 goals (about 65%) (See Figure 5) and 33 SDG Targets (about 20 %) (See Figure 4).

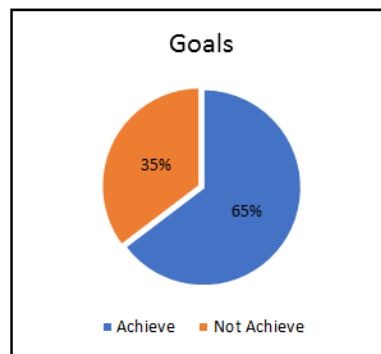


Fig 3:- SDGs

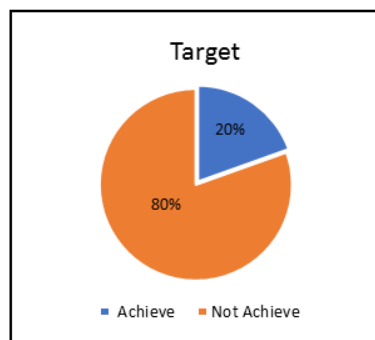


Fig 4:- Targets

V. CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE WORK

This study has found that almost all Egypt Ministries and other governmental organizations have websites, mostly used for providing structural information functions, activities, news, and services helping in achieving SDGs, and also Our study provides to the researchers and anyone wants to improve, add a new service to E-government services or achieve the SDGs and its domains with data that help them ease of choice and decision making.

These data include:

- Tables which contain the list of E-government services available in Egypt, and List of Egyptian Ministries, Governorates, and other Egyptian Governmental Organizations.
- Clarification mapping which Classifies E-government Services According to SDGs Domains.
- Assessment parameters matrix used in Egyptian E-government Services to achieve SDGs and targets.

At the end of the study and upon sorting and testing e-services, it was found that there are 16 E-government service providers. Upon classification of SDGs only 8 services providers match SDG domains, and despite the low number of Egyptian e-services and their domains, it contributes towards the achievement of 11 goals (about 65%) and 33 SDG targets (about 20 %).

For future work, an enhancing E-Government services will be proposed to achieve SDGs and to make available many e-services that contribute to such.

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APPENDIX

Goals number	Description	main Target	Sub-Target	Total of Target
1	No poverty	5	2	7
2	Zero hunger	5	3	8
3	Good healthy and well-being	9	4	13
4	Quality education	7	3	10
5	Gender equality	6	3	9
6	Clean water and sanitation	6	2	8
7	Affordable and Clean	3	2	5
8	Decent work and economic growth	10	2	12
9	Industry innovation and infrastructure	5	3	8
10	Reduced inequalities	7	3	10
11	Sustainable cities and communities	7	3	10
12	Responsible consumption and production	8	3	11
13	climate action	3	2	5
14	Life below water	7	3	10
15	Life on land.	9	3	12
16	Peace justice and strong institutions	10	2	12
17	Partnerships for the goals	19	0	19
17	Total	126	43	169

Table 4:- Total of Goals and Target in Sustainable Development Goals.

S.N.	Web Site Title	URL
1	The Cabinet of Ministers	http://www.cabinet.gov.eg
2	Ministry of Defense and Military Production	http://www.mod.gov.eg
3	Ministry of State for Military Production	http://www.momp.gov.eg
4	Ministry of Petroleum and Mineral Wealth	http://www.petroleum.gov.eg
5	Ministry of Electricity and Renewable Energy	http://www.moee.gov.eg
6	Ministry of Foreign Affairs	http://www.mfa.gov.eg
7	Ministry of Environment	http://www.eeaa.gov.eg
8	Ministry of Communication and Information Technology	http://www.mcit.gov.eg
9	Ministry of Education and Technical Education	http://www.moe.gov.eg/
10	Ministry of Manpower	http://www.manpower.gov.eg
11	Ministry of Justice	http://www.jp.gov.eg/ar/Default.aspx
12	Ministry of Local Development	http://www.mold.gov.eg
13	Ministry of Housing Utilities and Urban Communities	http://www.moh.gov.eg
14	Ministry of Religious Endowment	http://www.awkaf.org
15	Ministry of Interior Affairs	http://www.moiegypt.gov.eg
16	Ministry of Commerce and Industry	http://www.mfti.gov.eg
17	Ministry of Finance	http://www.mof.gov.eg
18	Ministry of Civil Aviation	http://www.civilaviation.gov.eg
19	Ministry of Transportation	http://www.mot.gov.eg
20	Ministry of Culture	http://www.moc.gov.eg/

S.N.	Web Site Title	URL
21	Ministry of Health and Population	http://www.moHP.gov.eg
22	Ministry of Water Resources and irrigation	http://www.mwri.gov.eg
23	Ministry of Agriculture and Land Reclamation	http://www.agr-egypt.gov.eg
24	Ministry of Investment and International Cooperation	http://www.gafi.gov.eg/arabic/Pages/default.aspx
25	Ministry of Tourism	http://www.egypt.travel
26	Ministry of Planning Monitoring and Administrative Reform	http://www.mpmar.gov.eg
27	Ministry of Higher Education and Scientific Research	http://portal.moheSR.gov.eg/ar-eg/Pages/default.aspx
28	Ministry of Supply and Internal Trading	http://www.msit.gov.eg
29	Ministry of Antiquities and Heritage	http://www.antiquities.gov.eg
30	Ministry of Youth and Sports	http://www.emss.gov.eg
31	Minister for Parliamentary Affairs	www.parliament.gov.eg
32	Ministry of Social Solidarity	http://www.moss.gov.eg
33	Ministry of Immigration and Egyptian Expatriates Affairs	http://www.emigration.gov.eg
34	Ministry of Business Sector	www.bsic.gov.eg
35	Ismailia Governorate	http://www.ismailia.gov.eg/
36	Monofiya Governorate	http://www.monofeya.gov.eg/Default.aspx
37	Cairo Governorate	http://www.cairo.gov.eg/Default.htm
38	Fayoum Governorate	http://www.fayoum.gov.eg/default.aspx
39	Giza Governorate	http://www.giza.gov.eg/Default.aspx
40	Qaliobia Governorate	http://www.qaliobia.gov.eg/
41	Suez Governorate	http://www.suez.gov.eg/
42	Domyat Governorate	http://www.domyat.gov.eg/
43	Matrouh Governorate	http://matrouh.gov.eg/tadaman.aspx
44	Newvalley Governorate	http://www.newvalley.gov.eg/
45	Luxor Governorate	http://www.luxor.gov.eg/default.aspx
46	Minia Governorate	http://www.minia.gov.eg/default.aspx
47	sharkia Governorate	http://www.sharkia.gov.eg/default.aspx
48	Kafr el sheikh Governorate	www.kafrelsheikh.gov.eg/
49	Beni sueif Governorate	http://www.benisuef.gov.eg
50	Alex Governorate	http://www.alexandria.gov.eg
51	Aswan Governorate	http://www.aswan.gov.eg
52	Assiut Governorate	http://assiut.gov.eg/
53	Redsea Governorate	http://www.redsea.gov.eg/IntoPage.aspx
54	Portsaid Governorate	http://www.portsaid.gov.eg
55	Southsina Governorate	http://www.southsinai.gov.eg
56	Dakahliya Governorate	http://www.dakahliya.gov.eg/
57	Sohag Governorate	http://www.sohag.gov.eg/
58	North Sinai Governorate	http://www.northsinai.gov.eg
59	Qena Governorate	http://www.qena.gov.eg
60	EGYPT POST	https://www.egyptpost.org/lost.aspx
61	Government complaints	http://www.shakwa.eg/GCP/Default.aspx
62	Government Procurement	https://www.etenders.gov.eg/
63	Public service map	https://www.etenders.gov.eg/
64	Industrial Development Authority	http://www.ida.gov.eg
65	National elections authority	www.elections.eg/
66	Egypt's information portal	http://www.eip.gov.eg/Services/ServiceList.aspx
67	Egyptian constitution	http://sharek.dostour.eg/

Table 5:- List of Egyptian Ministries, Governorates and other Egyptian Governmental Organizations

S.N.	Service Provider	Service	URL
1	Ministry of Health and Population	A distribution system for doctors in hospitals and medical centres	http://mhealth.cu.edu.eg
		Alexandria Dental Research Center	http://www.adrcegypt.com
2	Ministry of Justice	Ministry of Justice and The interests of the real estate and Documentation	http://www.egypt.gov.eg/services/listServicesCategory.aspx?ID=1301&section=serviceproviders
	Ministry of Interior	Civil Status Organization	http://rern.gov.eg
3	Ministry of Environment	Services of the Ministry of Environment	https://cso.moi.gov.eg
4	Electricity Holding Company Egypt	Electricity Regulatory Authority And consumer protection	http://www.egypt.gov.eg/services/listServicesCategory.aspx?ID=1308&section=serviceproviders
			http://egyptera.org/ar/a7sb%20fatork.aspx
5	Egyptian Telecommunication Company	Egyptian Telecommunication Company	https://billing.te.eg/ar-EG/Login#PayMyBills
6	Egypt Railways Authority	Egypt Railways	https://enr.gov.eg/ticketing/public/login.jsf
7	Egypt Air	Egypt Air	https://www.egyptair.com/ar/Pages/HomePage.aspx
8	General Organization for Standardization Standard and quality	General Organization for Standardization Standard and quality	http://www.eos.org.eg/ar
9	Ministry of Investment	Investment Authority Services	http://www.gafi.gov.eg/Arabic/eServices/Pages/default.aspx
10	Customs Department	Services customs	/http://www.customs.gov.eg
11	Egyptian Authority for Safety Navigation	Egyptian Authority for Safety Navigation	http://www.eams.gov.eg/Home/recognition_a
12	E-Government Portal Services	Addresses Ministry and Government Procurement	http://www.egypt.gov.eg/services/LoadxtrServices.aspx?PgURL=73753&section=subjects
			http://www.egypt.gov.eg/services/listServicesCategory.aspx?ID=1285&section=subjects
13	Ministry of Tourism	Tourism	http://www.egypt.gov.eg/services/listServicesCategory.aspx?ID=1321&section=subjects
14	Ministry of Manpower	The portal of electronic functions and manpower	http://www.egypt.gov.eg/services/listServicesCategory.aspx?ID=1326&section=subjects
	With disabilities	More services	http://www.egypt.gov.eg/services/LoadxtrServices.aspx?PgURL=102853&section=subjects
15	Ministry of Higher Education and Scientific Research	Education	http://portal.mohe.sr.gov.eg/ar-eg/Pages/default.aspx
	Ministry of Education and Technical Education		http://emis.gov.eg/services.aspx?id=1103
16	Ministry of Supply and Internal Trading	Ministry of Supply and Internal Trading	/http://www.msit.gov.eg/ar

Table 6:- List of Egyptian E-Government Services

S.N.	Service	Service Name	URL
1	Department of Passports, Immigration and Nationality	request permission to naturalize foreign nationality while retaining Egyptian citizenship	http://www.egypt.gov.eg/Services/ServiceDetailsFiles.aspx?ID=4763
2	Local units	Request for a copy of documents in the local unit	http://www.egypt.gov.eg/Services/ServiceDetailsFiles.aspx?ID=4819
3	Services of Egyptians Abroad	Office of ratifications - Ministry of Foreign Affairs	http://www.egypt.gov.eg/Services/ServiceDetailsFiles.aspx?ID=4503
			http://www.egypt.gov.eg/Services/ServiceDetailsFiles.aspx?ID=4504
4	Housing services	Construction and processing - The phase of use and operation – Utilities - Ownership and leasing - Property taxes	http://www.egypt.gov.eg/services/servicelist.aspx?ID=295&section=Citizens
5	Business services	Work permits - training and employment - Youth and alumni services	http://www.egypt.gov.eg/services/servicelist.aspx?ID=312&section=Citizens
6	Traffic services	Vehicle Licenses / Driving Licenses	http://www.egypt.gov.eg/services/servicelist.aspx?ID=321&section=Citizens
7	Education services	Schools, Universities and Institutes	http://www.egypt.gov.eg/services/servicelist.aspx?ID=327&section=Citizens
8	Health services	Health Care - Analyzes of organic materials – Deaths	http://www.egypt.gov.eg/services/servicelist.aspx?ID=339&section=Citizens
9	Travel and immigration services	Foreign Travel - Immigration	http://www.egypt.gov.eg/services/servicelist.aspx?ID=345&section=Citizens
10	Financial Services	Insurance & Pensions - Taxes - Loans - Compensation - Post Office - Banks	http://www.egypt.gov.eg/services/servicelist.aspx?ID=353&section=Citizens
11	Judiciary services	Documents and certificates - Representations of inquiries and services	http://www.egypt.gov.eg/services/servicelist.aspx?ID=365&section=Citizens
12	disabilities and the elderly Services	Persons with disabilities / elderly	http://www.egypt.gov.eg/services/servicelist.aspx?ID=369&section=Citizens
13	Miscellaneous services	Authority and Directorates of Endowments - Social Affairs	http://www.egypt.gov.eg/services/servicelist.aspx?ID=372&section=Citizens
14	The Egyptian Book and Documentation authority Services	Document Services - Scientific Research - Libraries - Recitations	http://www.egypt.gov.eg/services/servicelist.aspx?ID=1143&section=Citizens
15	Personal document services	Services of personal documents	http://www.egypt.gov.eg/services/listServiceCategory.aspx?ID=1232&section=citizens
16	Tourism services	ELECTRONIC VISA PORTAL	https://visa2egypt.gov.eg/eVisa/HowDoIApply?VISTK=W00H-4VTK-8DRS-I2IV-S1LV-ZOIL-OTS2-TSR2-5VW5-GIPP-GWJU-0UCB-TU1W-D9CF-C7H6-E1EJ
17	Cultural services	Digital Library of the Bibliotheca Alexandrina	http://dar.bibalex.org/webpages/dar.jsf
18	Localities and libraries	Localities and libraries	http://www.egypt.gov.eg/services/listServiceCategory.aspx?ID=1343&section=citizens
19	Cities	Neighbourhood - cities	http://www.egypt.gov.eg/services/listServiceCategory.aspx?ID=1344&section=citizens

Table 7:- List of Egyptian Template and form in E-Government Services

S.N	Domains	Service Provider	URL	Statement of Services
1	Health	Ministry of Health and Population	http://mhealth.cu.edu.eg	A distribution system for doctors in hospitals and medical centres
		Alexandria Dental Research Center	http://www.adrcegypt.com	Alexandria Dental Research Center
2	Justice	Ministry of Justice and The interests of the real estate and Documentation	http://www.egypt.gov.eg/services/listServicesCategory.aspx?ID=1301&section=serviceproviders	Traffic Prosecution Services – Vehicle license violations - Traffic Prosecution Services – Driving license violations - Traffic Prosecution Services – Application Tracking Service - the commissioner’s session roll listing.
			http://rern.gov.eg/	Contract registration status - Registration copy extraction - Real Estate 664ertificate extract
		Civil Status Office	https://cso.moi.gov.eg/	Divorce Document Extract - Death Document Extract - Birth Certificate Extract - Family Record Extract - Marriage Document Extract - National ID Extract
3	Environment	Ministry of Environment	http://www.eeaa.gov.eg/en-us/services.aspx	EIA – Fund – Inspection - NGOs - Training - Public and Investors Complaints and Inquiries - Licenses - Coal -Protectorates Services - Ozone Unit Services - Charcoal.
4	Public facilities	Electricity Regulatory Authority And consumer protection	http://www.egypt.gov.eg/services/avlblservices.aspx?section=serviceproviders	The website of many electricity companies and the type of service
			http://egyptera.org/ar/a7sb%20fator tk.aspx	Calculation of Electricity Consumption Bill - Electricity Facility Regulatory Au - Track the power load - the power facility regulation authority - Tracking Electricity Consumption - Electricity Facility Regulatory Authority - Electricity Consumption Calculator
5	Investment	Services of the Ministry of Environment	http://www.gafi.gov.eg/english/eServices/Pages/default.aspx	Companies E-Establishment Service - General Authority for Investment - Doing Business in Egypt
6	Manpower	Government jobs portal and Manpower	<u>Graduates</u>	Follow-up of vacant government posts - Job Service Evaluation - Registration of job seekers
		Various	<u>With disabilities</u>	Many of the services provided by : Ministry of Social Affairs - Ministry of Health and Population - Ministry of Education - Ministry of Manpower - Other Services
7	Education	Ministry of Education and Technical Education And Ministry of Higher Education and Scientific Research	<u>Students</u>	Wishes Registration - Secondary Coordination Services - Introduction for the equivalence of degrees - Inquiry about the request for equivalence of degrees - Wishes Results - Wish Registration - Secondary Azhar coordination services - Wish Results - Results of

S.N	Domains	Service Provider	URL	Statement of Services
				technical certificates - Technical certificate coordination services - Wish Registration - Coordinate Arabic equivalent certificates - Coordinate Foreign equivalent certificates - Nile schools for science and technology - STEM Schools for science and technology - Coordination services for Azhar secondary students applying for colleges and ins
8	Supply	Ministry of Supply and Internal Trading	<u>Supply and Internal Trading</u>	Extracting a new ration card Extraction of a loss of ration card Request to open a catering outlet Request to open a catering bakery

Table 8:- Classification (E-Services According to Sustainable Development Goals Domains)

	Domains	Service Provider	Statement of Services	SDGs
1	Health	Ministry of Health and Population	A distribution system for doctors in hospitals and medical centres	Goals 3: Good healthy and well-being.
		Alexandria Dental Research Center	Alexandria Dental Research Center	
2	Justice	Ministry of Justice and The interests of the real estate and Documentation	Traffic Prosecution Services - Vehicle license violations - Traffic Prosecution Services - Driving license violations - Traffic Prosecution Services - Application Tracking Service - the commissioner’s session roll listing.	Goals 16 : Peace justice and strong institutions
		Civil Status Office	Contract registration status - Registration copy extraction - Real Estate certificate extract Divorce Document Extract - Death Document Extract - Birth Certificate Extract - Family Record Extract - Marriage Document Extract - National ID Extract	
3	Environment	Ministry of Environment	EIA - Fund - Inspection - NGOs - Training - Public and Investors Complaints and Inquiries - Licenses - Coal - Protectorates Services - Ozone Unit Services - Charcoal.	Goals 6: Clean water and sanitation Goals 14 : Life below water
4	Public facilities	Electricity Regulatory Authority And consumer protection	The website of many electricity companies and the type of service	Goals 7 : Affordable and Clean
			Calculation of Electricity Consumption Bill - Electricity Facility Regulatory Au - Track the power load - the power facility regulation authority - Tracking Electricity Consumption - Electricity Facility Regulatory Authority - Electricity Consumption Calculator	
5	Investment	Services of the Ministry of Environment	Companies E-Establishment Service - General Authority for Investment - Doing Business in Egypt	Goals 8 : Decent work and economic growth Goals 9: Industry innovation and infrastructure
6	Manpower	Government jobs portal and Manpower	Follow-up of vacant government posts - Job Service Evaluation - Registration of job seekers	Goals 1: No poverty

	Domains	Service Provider	Statement of Services	SDGs
		Various	Many of the services provided by : Ministry of Social Affairs - Ministry of Health and Population - Ministry of Education - Ministry of Manpower - Other Services	<u>Goals 8 :</u> Decent work and economic growth <u>Goals 10 :</u> Reduced inequalities.
7	Education	Ministry of Education and Technical Education And Ministry of Higher Education and Scientific Research	Wishes Registration - Secondary Coordination Services - Introduction for the equivalence of degrees - Inquiry about the request for equivalence of degrees - Wishes Results - Wish Registration - Secondary Azhar coordination services - Wish Results - Results of technical certificates - Technical certificate coordination services - Wish Registration - Coordinate Arabic equivalent certificates - Coordinate Foreign equivalent certificates - Nile schools for science and technology - STEM Schools for science and technology - Coordination services for Azhar secondary students applying for colleges and ins	<u>Goals 4 :</u> Quality education
8	Supply	Ministry of Supply and Internal Trading	Extracting a new ration card Extraction of a loss of ration card Request to open a catering outlet Request to open a catering bakery	<u>Goals 1:</u> No poverty <u>Goals 2 :</u> Zero hunger

Table 9:- Mapping (E-Services Services against SDGs)

(SDGs)	Target Number	Domains of Services
Goals 1: No poverty	1.1	Manpower
	1.2	
	1.3	And
	a1	Supply
	b1	
Goals 2 : Zero hunger	2.1	Supply
Goals 3: Good healthy and well-being	3.8	
	3.b	Health
	3.d	
Goals 4 : Quality education	4.1	
	4.3	Education
	4.4	
	4.b	
Goals 6: Clean water and sanitation	6.2	
	6.3	Environment
	6.4	
	6.b	
Goals 7 : Affordable and Clean	7.1	Public facilities And electricity companies
	7.3	
	7.b	
Goals 8 : Decent work and economic growth	8.3	Manpower
	8.5	And
	8.6	
	8.8	Investment

(SDGs)	Target Number	Domains of Services
	8.10	
	8.b	
Goals 9: Industry innovation and infrastructure	9.3	Investment
Goals 10 : Reduced inequalities	10.4	Manpower
Goals 14 : Life below water	14.1	Environment
Goals 16 : Peace justice and strong institutions	16.5	Justice
	16.9	
	16.10	
	16.b	

Table 10:- The matrix