Original Research Article

A STUDY ON ROLE OF OPEN GOVERNMENT DATA TOWARDS ACHIEVING SUSTAINABLE DEVELOPMENT GOALS IN INDIA

Ashish Jaiswal

Department of Management, Sri Satya Sai University of Technology & Medical Sciences
Pachama, Sehore, India -466001

Abstract: - Open Data can be defined as the data which is available online for anyone and everyone to consume and use it freely, it can be reused and also redistributed. In India in the year 2012 the Open Government Data Platform India (https://data.gov.in) has been setup as per the National Data Sharing and Accessibility Policy of India. Open Government Data platform provides single point access to open datasets, enhanced visualization platform, responsive web layout, cataloging of similar resources, embedding catalogs, APIs, widgets for sharing filtered set of catalogs and catalogs subscriptions etc. The open data initiatives also support the UN 2030 Agenda for Sustainable Development Goals (SDG) which intends to bring accountability and transparency in public administration which can further help into developing national development plans and sustainable development strategies. The paper provides an insight on role of open data available in India towards achieving Sustainable Development Goals. There is a lack of awareness and validation of open data that limits the effectiveness of uses of open data initiatives for planning, monitoring and research, quality of existing government data and there is long way to go before the output of open data will be actual benefit the life of citizens.

Keywords: Open data, Sustainable Development Goals, SDG, Open Government data platform, data set, services, platform.

Introduction: Open Data can be defined as the data which is available online for anyone and everyone to consume and use it freely, it can be reused and also redistributed.

Open Data in Government sector is aimed to change old traditional methods of data sharing and thrives to increase transparency and accountability in public service delivery from Government institutions and to strengthen citizens' inclusion and participation with Government systems.

E-governance has evolved online citizen services delivery through various channels and also provides one-stop solutions to access a variety of Government services. This has made very easy for citizens to interact with

Government administration and get sufficient and complete responses to their needs and queries. This has started contributing to the evolvement of new forums of collaborative partnerships between citizens and government institutions and in turn reinforcing the attention on citizen's needs.

Methodology: For Secondary sources and information Journals, Articles, Internet, websites and report on Open data in India are referred.

Limitations of the study: The study is conducted based on the secondary data available which is only a conceptual research.

The objective of the present study is:

• To gain insight into the open data sets available for use in India.

• To identify the role of open data towards achieving Sustainable Development Goals.

Open data initiative in India: In India in the year 2012 the Open Government Data Platform India (https://data.gov.in) has been setup as per the National Data Sharing and Accessibility Policy of India. The policy's objective is to provide proactive access to Government owned shareable data with its usage information in open/ machine readable format through a network across the country. The data will be periodically updated within the framework of various related policies, rules and acts of the Government. This is also a part of pillar 6 – Information for all under the Digital India program.

Open Government Data platform provides single point access to open datasets, enhanced visualization platform, responsive web layout, cataloging of similar resources, embedding catalogs, APIs, widgets for sharing filtered set of catalogs and catalogs subscriptions etc. It also offers community participation through blogs, forums and infographics to enhance collaboration. At present the open data platform comprises of 279632 resources, 144 departments (84 Central and 60 States), 4707 catalogues, 10844 APIs and 1643 visualizations. The datasets have been viewed 21.70 million times and downloaded 6.76 million times appears to

be good. Few States have started contributing data directly on the portal, Sikkim is the first State with its own Data Portal followed by Tamilnadu and Odisha. Surat Municipal Corporation is also among the pioneers having its data portal.

Open Government Data and Sustainable Development Goals: As per the Open Government Data 2018 Survey report published by United Nations the number of countries offering Open Government Data catalogues has more than doubled in 2016 compared to 2014, with 106 out of 193 countries offering Open Government Data catalogues, compared to 46 countries in 2014. The open data initiatives also support the UN 2030 Agenda for Sustainable Development Goals (SDG) which intends to bring accountability and transparency in public administration which can further help into developing national development plans and sustainable development strategies. Open government data initiatives can contribute in many ways to the achievement of the SDGs.

Open Data efforts in India towards achieving Sustainable Development Goals: Open data platform has built a foundation to create an open data ecosystem in the country. Some of the initiatives under this platform are or may contribute for achieving the Sustainable Development Goals in India.

Goal 1: No poverty: National Service Portal (http://services.india.gov.in/) provides 8886 services listed where citizen can search availability of citizen centric services from key domains such as Pension and Benefits, Agriculture, Rural and Environment, Education and Learning, Health and Wellness etc. Government institutions can enable access to basic services for masses living in poverty thus fulling the objective of Goal 1 which is end poverty in all its forms everywhere.

Goal 2: Zero hunger: Data sets available on queries of farmers in Kisan Call Centre, Pradhan Mantri Fasal Bima Yojana, Restructured Weather Based Crop Insurance Scheme, Soil Health Cards, Information on National Food

Security, Integrated Child Protection Scheme and All India Health Centres Directory supports better education of farmers and buyers about agriculture and raises awareness of vulnerable groups' needs on nutrition as desired under the Goal 2 which focuses on ending hunger, achieve food security and promote sustainable agriculture,

Goal 3: Good health and well-being and Goal 6: Clean Water and Sanitation: Goal 3 for Ensuring healthy lives and promote well-being for all at all ages and datasets like Health Management Information System which provides HMIS indicators up to district level, National Rural Drinking Water Programme helps in water management sustainability and sanitation for all, providing information on water facilities and quality of water towards achieving Goal 6 for ensuring availability and sustainable management of water and sanitation for all. Swachh Bharat Mission data which provides status of cleanliness through Solid and Liquid Waste Management, Open Defecation Free (ODF), clean and sanitized cities and villages are big contributor for this goal.

Goal 4: Quality Education: Open Government Datasets on Education sector which provides enrollment ratio, literacy rate, schools' with toilets, electricity, computers and drinking water is very helpful to plan for the betterment of education facilities. Pradhan Mantri Kaushal Vikas Yojana and Anganwadi Centres may lead to increased access to public education and helps to improve the quality of education through better policies and management of educational institutions. Women Entrepreneurs benefited under Pradhan Mantri Mudra Yojana can empower women by providing information on a host of services available enabling support in achieving Goal 4 which focuses on ensuring inclusive and quality education and learning opportunities for all.

Goal 5: Gender Equality and Goal 8: Decent Work and Economic Growth: Data on Education sector which provides enrollment ratio, literacy rate, Labour and Employment sector would be helpful for Goal 5 on achieving gender equality and empower all women and girls. Various datasets under Mahatma Gandhi National Rural Employment Guarantee Act, Financial Inclusion, Aadhar provides valuable information towards achieving Goal 8 which promotes sustained, inclusive and sustainable economic growth, full and productive employment.

Goal 9: Industry Innovation and Infrastructure and Goal 11: Sustainable Cities and Communities: Information available through Data sets on National Highways, State Highways, Other PWD Roads, Panchayat Raj Roads, JRY & PMGSY Roads, Urban Roads and Project Roads., Automobile Production, Smart Cities will help in achieving Goal 9 for Building resilient infrastructure, promote inclusive and sustainable industrialization and Goal 11 which is intended to make cities and human settlements inclusive, safe, resilient and sustainable.

Goal 12: Responsible Consumption and Production: Data set on Agriculture sector which provides data on production of crops, animal husbandry, fisheries, horticulture, livestock etc. There are data sets on Power generation from Thermal, Water, Wind, Renewable energy, the power consumption data from domestic and commercial, data on fuel consumption helps to plan for production versus consumption.

Goal 13: Climate Action, Goal 14: Life below water and Goal 15: Life on land: Open Data on Pollution from Industries, Climate, Weather, Compensatory afforestation, ICT for Fishermen, Coastal Ocean Monitoring and Prediction System tracks the levels of marine pollution along the coastline will help in planning activities for the achievement of Goal 13 on combat climate change and its impacts, Goal 14 on conservation of marine resources for sustainable development and Goal 15 which focuses on Protection and sustainable use of terrestrial ecosystems and sustainably manage forests.

Goal 16: Peace, Justice and strong Institutions: Goal 16 which specifically calls for effective, accountable and inclusive institutions at all levels.

There are data and information available on services portal under Justice, Law and Grievance category which provides information on Courts, Sentencing and Tribunals. Online safety, Prisons and Probation, Your Rights and the Law

Goal 17: Partnerships for the Goals: To achieve this goal a combined effort form all the countries, states, cities and citizens is required, open data can play a big role in understanding the actual situation and make plans accordingly. It can also help in continues monitoring and raising alerts for the betterment of each one of us.

Challenges: There is a lack of awareness and validation of open data that limits the effectiveness of uses of open data initiatives for planning, monitoring and research, quality of existing government data is not very good and not matching to unified standards, even some of the available datasets are incomplete, outdated, duplicate and inadequate metadata.

However, the efforts made needs to be appreciated and there is long way to go before the output of open data will be actual benefit the life of citizens.

Conclusion: The open government data will help to build the national development strategies and plans considering the maturity level of department's development and capacities and enable a holistic framework for achieving Sustainable Development Goals.

References:

1. United Nations (2015), The 2030 Agenda for Sustainable Development https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf
2. United Nations (2018), Sustainable Development Goals Report
3. World Bank policy paper (2015) , Open Data for Sustainable Development, August 2015 http://pubdocs.worldbank.org/pubdocs/publicdoc/2015/8/999161440616941994/Open-Data-for-Sustainable-development.pdf
4. Oleg Petrov, Joel Gurin, and Laura Manley(2016), Open Data for Sustainable Development, World Bank Group, March 2016, Note 2016-5
5. Govt. of India (2012), Open data policy https://data.gov.in/sites/default/files/NDSAP.pdf
6. Govt. of India (2012), Government Open data license-India (2017), Govt. of India. https://data.gov.in/sites/default/files/Gazette_Notification_OGDL.pdf
7. NIC, Govt. of India (2012), Implementation Guidelines for National Data Sharing and Accessibility Policy (NDSAP) version 2.4 https://data.gov.in/sites/default/files/NDSAP%20Implementation%20Guidelines%202.4.pdf
8. Open Government Data (OGD) Platform India, https://data.gov.in/
9. National Government Service Portal, https://services.india.gov.in/?ln=en
10. Sumandro Chattapadhyay (2014), Access and Use of Government Data by Research and Advocacy Organizations in India: A Survey of (Potential) Open Data Ecosystem, Eighth International Conference on Theory and Practice of Electronic Governance (ICEGOV) 2014 at Guimarães, Portugal,
11. Natasha Agarwal (2015), Open Government Data An Answer to India's Growth Logjam
12. UNDP (2015) The Role of Open Data for Sustainable Development: A brief from Eastern Europe and Central Asia
13. Stuti Saxena (2016), Open Government Data (OGD) usage in India: A conceptual framework using TOE & UTAUT frameworks, Special issue on E-Government: 'Future of E-government: learning from the Past', Vol. 4 No. 3 (2016) Issue- September ISSN 2347-6869 (E) & ISSN 2347-2146 (P)