

A WEBOMETRIC ANALYSIS OF SELECTED NON-PROFIT ORGANIZATIONS (NGOS) OF ASSAM

Manoj Kumar Verma*, Krishna Brahma**

Abstract *In present digital era website is very important source of information and it play very important role to disseminate information about institutions and its activities. In recent years, wide proliferations of NGOs in Assam have been noticed and at present about 400 NGOs are working actively in Assam. This study carries out an innovative approach to measure the efficiency of NGO websites in Assam with webometric indicators and examined the websites of 25 selected NGOs in Assam on the basis of various links, impact factor, international & external web impact factor etc and ranked the websites on the basis of their web impact factor. After analysis of selected websites, it was found that Centre for North East Studies and Policy Research and AARANYAK have gained the high profile among the selected NGOs websites under the study. in Assam based on the links provided by them. Since the Webometric analysis in this Area is new one.*

Keyword: *Webometrics, NGO Websites, Web Impact Factor, Link Analysis, Search Engine*

INTRODUCTION

The term non-governmental organization (NGO) is commonly used for an organization that is neither a part of a government nor a conventional for-profit business. These organizations have important role in welfare of the society/people and social development. In country, many NGOs are engaged in research related to issues on social development and welfare of urban and rural communities with a mission to arriving at some feasible solution leading to the upliftment and enhancement of standard of living of poor people with adequate education and social awareness drives among these downtrodden masses.

actively working for genuine social development issues and welfare activities of urban and rural communities and they always ready to come ahead to work for the upliftment and betterment of children & women, education & social awareness etc. At present more than 400 NGOs are available in Assam that are working on different social issues like child education, child welfare, child rights, women development & empowerment, old age homes, physically and mentally handicap persons, and upliftment of slum children and women.

WEBOMETRIC- CONCEPT AND DEFINITION

Almind and Ingwersen are the pioneers to con the term 'webometrics' in the year 1997. The term webometrics is a combination of two English words, "web" and "metric".

Since the mid-1990s, the nature and properties of the WWW have been increasingly investigated by applying modern informatics methodologies. The World Wide Web which is very commonly known as WWW has taken a major role in dissemination of scholarly information all across the world. The Dictionary of Science defines web as a system of hypermedia that allows users to browse and retrieve information from the open web through various documents containing links to other documents. The later term metrics is simply the method of measurement of counting of impact of web documents. As defined by Webster's Comprehensive Dictionary of English metrics is simply the the mathematical theory of measurement.

Webometrics, therefore, means the quantitative study of web based documents. In all faireness, the webometrics study

* Assistant Professor, Department of Library and Information Science Mizoram University, Aizawl, Mizoram, India. Email: manojdlis@mzu.edu.in

** Ph.D. Research Scholar, Department of Library and Information Science Mizoram University, Aizawl, Mizoram, India. Email: krishnabrahma255@gmail.com

could be applied to web with the help of various commercial search engines that are instrumental in gathering raw data from entire web. Thus, quantitative analysis of the literature reflected in web in terms of their relative popularity, impact and influence is called webometrics. Besides the concept developed by Almind and Ingwersen, Larson also identified his early exploratory link structure analysis with the first pure informetrics analysis of the web.

Bojorneborne defined webometrics as: “the study of the quantitative aspects of the construction and use of information resources, structures and technologies on the web, drawing on bibliometric and informetric approaches”. This definition covers the construction side and usage side of the web, which embrace the following four main areas of webometrics study:

- Web page content analysis
- Web link structure analysis (hyperlink, self-link and external link)
- Web usage analysis (exploiting log files for users searching and browsing behaviour)
- Web technology analysis (including search engine performance)

According to Thelwall, Webometrics is nothing but the study of web-based contents using the quantitative methods of analysis followed in social science research that are not specific to any particular field. In other words, the method is wider in range applied to almost all branches of knowledge. Similar scientific fields are Bibliometrics, Informetrics, Scientometrics, Virtual ethnography and Web mining.

REVIEW OF LITERATURE

Thomas and Willet (2000) conducted a study on webometric analysis of departments of Librarianship and Information science (LIS). They studied on analysis of the linkages to websites associated with departments of Librarianship and Information Science and concluded that citation data are not well suited to the quantitative evaluation of the research status of LIS departments, and that departments can best boost their web visibility by hosting a wide range of types of material as possible. Mukhopadhyay (2004) made a webometric study based on the analysis of hyperlinks i.e., measuring Web Impact Factors (WIF). The study is about the calculation of web impact factor for ccTLDs of SAARC countries, sub-level domains that are related to education & research and registered under ccTLD and hosts under IIT and IIM educational system in India. Babu, Jeysankar and Rao (2010) examined 40 central universities websites of India and investigated the domain systems of the websites, analyses the number of web pages and link pages and calculated the simple WIF, self-link WIF, external WIF and revised WIF for central universities in India and ranks the website as per

the WIF. Kannan and Govindan (2011) made an analysis of E-commerce websites for business intelligence which explore the websites of top 50 retail companies of Asia Pacific and USA. Their findings explored that US private retail companies are more visible on the web than the Asia Pacific retailers, furthermore this study has also found that counts of links pointing to a retail websites are positively correlated with the website age. Lee and The (2001) have evaluated the content and design of 12 academic library websites of public and private institutions of higher learning in Malaysia and uses a mixed- method approach that combines both quantitative and qualitative analyses of academic library websites evaluation. Their findings reveal that the academic libraries in Malaysia generally have set up well-designed and useful websites, few of the academic library websites have very simple and basic features. Jeysankar, Sujita and Valarmathi (2012) made a study on Web Pages of ICMR Institutes Websites. As a study, the ICMR institutes in India have been taken and their link structure has been analysed. Kothainayaki and Gopalakrishnan (2012) conducted a web analytic study to determine the organisation of its content in the websites of Agricultural universities in India. A total of 54 Indian agricultural universities were taken up for the study and the various web objects were identified and also their locations in the home page of the universities were analysed and discussed. The study also helps the web designers to improve the usability of websites. Vijayakumar (2012) made a study on webometric analysis of university websites in Sri Lanka. The investigation is done to learn the impact of 19 universities spread over the country of Sri Lanka on the web. The result reveals that the universities of Sri Lanka are possessing varied domains for their home pages namely .ac, .net and .lk but mostly prefer the sub level domain like .ac and University of Colombo, University of Sri Jayewardepura, University of Peradeniya ranked one by possessing highest web pages, in links and selflinks. University of the Visual & Performing Arts of Sri Lanka topped one for web impact factor for inlinks, the Open University of Sri Lanka ranked one for web impact factor for selflinks and here once again university of Colombo is first in the WISER ranking.

SCOPE OF STUDY

In Assam, Non-Profit Organisations/Non-Governmental Organisations are working for social development and welfare of the state people. There are more than 400 NGOs in Assam are working at present. These NGOs are actively working for genuine social development programmes and welfare activities of urban and rural communities and they are always ready to come ahead to work for the uplift and betterment of the children, women and old people through education and social awareness. The scope of present study is limited to 25 selected NGOs websites of Assam as listed in Table 1. The study is an attempt to analyses the websites of

selected NGOs and aimed to investigate the domain systems of selected NGOs websites, analyse the number of web pages, link pages and calculate the simple web impact factor

(WIF), internal link web impact factor (IWIF), external link web impact factor (EWIF) and finally rank the websites as per the WIF.

Table 1: Websites of NGOs

SL. No.	Name of the NGO	Websites	City/district
1	Assam Centre for Rural Development	www.acrdghy.org	Kamrup
2	Aaranyak	http://www.aaranyak.org	Guwahati
3	Assam Socio-Economic Health Association	http://www.ashaassam.org	Guwahati
4	Ashadeep	www.ashadeepindia.org	Guwahati
5	Balipara Tract and Frontier Foundation	http://www.baliparafoundation.com	Sonitpur
6	Cachar Cancer Hospital and Research Centre	http://www.cacharcancerhospital.org	Silchar
7	Centre for Development Action and Appropriate Technology	http://www.indev.nic.in/cadat	Sonitpur
8	Centre for North East Studies and Policy Research	http://www.c-nes.org	Guwahati
9	Colours	http://www.coloursindia.com	Jorhat
10	Manab Sewa Sangha	www.manabsewasangha.org.in	Kamrup
11	National Alliance Mission	http://www.namone.org	Guwahati
12	North East Network	www.northeastnet.org	Guwahati
13	PFI Foundation	http://www.pfifound.org	Guwahati
14	Rajiv Open Institute	http://www.rajivopeninstitute.org	Silchar
15	Resources Centre for Sustainable Development	http://www.rcsdin.org	Guwahati
16	Shishu Sarothi	http://www.shishusarothi.org.	Guwahati
17	SPECTRUM	http://www.karmayog.org/ngo/SPECTRUM/	Dima Hasao
18	Tathagata Trust	http://www.tgtrust.com.	Lakhimpur
19	Uttaran	www.uttaranngo.org	Guwahati
20	Xavier's Foundation	http://www.xaviersfoundation.org	Guwahati
21	Council for Education Research and Development	http://cerd-india.webs.com	Jorhat
22	Rashtriya Gramin Vikas Nidhi	http://www.rgvindia.org	Guwahati
23	Aakriti	http://aakritingoindia.wordpress.com	Guwahati
24	Aami Sahayatree	http://www.karmayog.org/ngo/aami/	Guwahati
25	Backward and Social Development Trust	http://www.karmayog.org/ngo/bsdt/	Nagaon

OBJECTIVES OF THE STUDY

The objectives of present study are to:

- Analyse the domains of selected NGOs websites of Assam.
- Calculate the number of web pages of selected NGO website
- Examine the link-equity in websites of NGOs under study
- Find out internal and external link pages of websites of NGOs under study

- Calculate the web impact factor of selected NGOs websites.

METHODOLOGY

This study used open site explorer (www.opensiteexplorer.org) and website optimization for collecting raw data. While undertaking WIF study, a suitable search engine is necessary to select that could count the number of pages linking to the websites and number of pages in website. Open site explorer, makes the gathering, sorting and exporting link data which is the easiest way than ever. It is built with speed

and quick accessibility that provides a tremendous amount of information about the links to any page or site.

Open Site Explorer gives a wealth of data that would be beneficial to cover the basic, top level metrics. It is an actionable metrics that can track and use to measure SEO performance.

- Page Authority: The quality score of the web pages (based on link metrics).
- Domain Authority: The quality score of the website (as a whole, based on link metrics).
- Linking Root Domains: The number of domains (separate websites) linking to you directly from their website (as opposed to multiple links coming from the same site).
- Total Links: The total quantity of links points to your website.
- Social Signals: This includes social media metrics that have a positive correlation with rankings.

WEB IMPACT FACTOR (WIF)

Web Impact factor is the measure of the extent to which it is linked to and recognised by other sites. WIF is a part of the methodology in webometrics studies. Broadly, it is a measure of the extent to which it is linked to and recognised by other sites. The WIF is a form of measurement used to determine the relative standing of websites in particular fields, or a country, for instance, academic web sites in a country. The higher the WIF, the greater the perceived reputation of the website. The idea of applying revised WIF techniques to the web was proposed by Noruzi.¹³ According to them, WIF is defined as the ratio of links made to a website to the number of pages at the website.

The WIF provides quantitative tools for ranking, evaluating, categorising, and comparing websites, and top-level domains and sub-domains. There are three types of links-

- The Simple WIF is the ratio of all links to the number of web pages.
- The Internal WIF is the ratio of internal links within the site to number of pages.
- The External WIF is the ratio of links made from external sites to the target site, to the number of pages at the site.

METHOD OF CALCULATING IMPACT FACTOR

The result of Web Impact Factor visualised various impact factor such as Simple Web Impact Factor, Internal Web

Impact Factor and External Web Impact Factor.

Distribution of Data by SWIF has been calculated by the following formula:

$$SWIF = \frac{(\text{Total No.of Links})}{(\text{Total No.of Web pages})}$$

Distribution of Data by IWIF has been calculated by the following formula:

$$IWIF = \frac{\text{Total No.of Internal Links}}{\text{Total No.of Web Links}}$$

Distribution of Data by EWIF has been calculated by the following formula:

$$EWIF = \frac{\text{Total No.of External Links}}{\text{Total No.of Web Pages}}$$

DATA ANALYSIS

Table 2 shows the type of domain used by NGOs and reveals that four types of 'domain extensions' were used by NGOs under study. It is found that 18(72%) of the NGO websites have '.org' extension, 5(20%) NGO websites have '.com' extension and 2(4%) NGO websites have 'org.in' '.in' extensions each.

Table 2: Classification of NGOs Websites by the Domain Extensions

Sl. No.	Domain	No. of NGOs	Percentage
1	.org	18	72
2	.com	5	20
3	org.in	1	4
4	.in	1	4
	Total	25	100

Table 3 illustrates the Domain Authority and Page Authority of selected NGOs websites, in which the Domain Authority of Aakriti is the highest with 96(15.97%) among the websites, followed by Council for Education Research and Development with 91(15.14%) and SPECTRUM, Aami Sahayatree and Backward and Social Development Trust with 41(6.82%). The Page Authority of Aaranyak with 47(9.93%) is the highest, followed by Centre for North East Studies and Policy with 37(7.82%) and Resources Centre for Sustainable Development, Guwahati with 33(6.97%).

Table 3: Domain Authority and Page Authority

Sl. No.	Name of the NGOs	Domain Authority	Page Authority
1	Assam Centre for Rural Development	7 (1.16%)	23 (4.86%)
2	AARANYAK	37 (6.15 %)	47 (9.93%)
3	Assam Socio-Economic Health Association	1 (0.16 %)	1 (0.21%)
4	Ashadeep	34 (5.65%)	28 (5.91%)
5	Balipara Tract and Frontier Foundation	26 (4.32%)	31 (6.55%)
6	Cachar Cancer Hospital and Research Centre	14 (2.32%)	27 (5.70%)
7	Centre for Development Action and Appropriate Technology	30 (4.99%)	19 (4.01%)
8	Centre for North East Studies and Policy Research	29 (4.82%)	37 (7.82%)
9	Colours	14 (2.32%)	24 (5.07%)
10	Manab Sewa Sangha	7 (1.16%)	22 (4.65%)
11	National Alliance Mission	1 (0.16%)	1 (0.21%)
12	North East Network	12 (1.99%)	23 (4.86%)
13	PFI Foundation	6 (0.99%)	1 (0.21%)
14	Rajiv Open Institute	11 (1.83%)	25 (5.28%)
15	Resources Centre for Sustainable Development	20 (3.32%)	33 (6.97%)
16	Shishu Sarothi	15 (2.49%)	28 (5.91%)
17	SPECTRUM	41 (6.82%)	1 (0.21%)
18	Tathagata Trust	12 (1.99%)	24 (5.07%)
19	Uttaran	1 (0.16%)	1 (0.21%)
20	Xavier's Foundation	8 (1.33%)	23 (4.86%)
21	Council for Education Research and Development	91 (15.14%)	29 (6.13%)
22	Rashtriya Gramin Vikas Nidhi	6 (0.99%)	22 (4.65%)
23	Aakriti	96 (15.97%)	1 (0.21%)
24	Aami Sahayatree	41 (6.82%)	1 (0.21%)
25	Backward and Social Development Trust	41 (6.82%)	1 (0.21%)
	Total	601	473

Table 4 shows the Just-Discovered Links and Established Links of selected NGOs websites, in which the NGO AARANYAK leads with 16 Just-Discovered Links. The

Established Links of AARANYAK leads with 68 followed by Centre for North East Studies and Policy Research with 32 and Balipara Tract and Frontier Foundation with 9.

Table 4: Just-Discovered Links and Established Links

Sl. No.	Name of the NGOs	Just-Discovered Links	Established Links (Root domains out of total links)
1	Assam Centre for Rural Development	0	2(3)
2	AARANYAK	16	68(490)
3	Assam Socio-Economic Health Association	0	0
4	Ashadeep	0	8(12)
5	Balipara Tract and Frontier Foundation	0	9(142)
6	Cachar Cancer Hospital and Research Centre	0	3(5)
7	Centre for Development Action and Appropriate Technology	0	0
8	Centre for North East Studies and Policy Research	1	32(1,089)
9	Colours	0	5(7)
10	Manab Sewa Sangha	0	1(4)

11	National Alliance Mission	0	0
12	North East Network	0	3(50)
13	PFI Foundation	0	0
14	Rajiv Open Institute	0	3(9)
15	Resources Centre for Sustainable Development	0	7(24)
16	Shishu Sarothi	0	5(37)
17	SPECTRUM	0	0
18	Tathagata Trust	0	2(28)
19	Uttaran	0	0
20	Xavier's Foundation	0	1(1)
21	Council for Education Research and Development	0	1(1)
22	Rashtriya Gramin Vikas Nidhi	0	1(1)
23	Aakriti	0	0
24	Aami Sahayatree	0	0
25	Backward and Social Development Trust	0	0

Table 5 illustrates the ranking of selected NGOs websites on the basis of Internal Equity-Passing Links, External Equity-Passing Links and Total Equity-Passing Links and it is found that the Internal Equity-Passing Links of Centre for North East Studies and Policy Research, Guwahati with 964 (78.69%) scores the highest position followed by Balipara Foundation with 108 (8.81%) and AARANYAK with 104 (8.48%). On the External Equity Passing Links basis,

AARANYAK with 349 (56.93%) occupied highest position followed by The Centre for North East Studies and Policy Research, Guwahati with 123 (20%) and Shishu Sarothi, Guwahati with 35 (5.70%). The Total Equity- Passing Links of the Centre for North East Studies and Policy Research, Guwahati with 1087(59.14%) is the highest followed by AARANYAK with 453 (24.64%) and Balipara Foundation with 142 (7.72 %).

Table 5: Internal Equity-Passing Links, External Equity-Passing Links and Total Equity-Passing Links

Sl. No.	Name of the NGOs	Int. Equity-Passing Links	Ext. Equity-Passing Links (Total Equity-Passing Links
1	Assam Centre for Rural Development	0	1 (0.16%)	1 (0.05)
2	AARANYAK	104 (8.48%)	349 (56.93%)	453 (24.64%)
3	Assam Socio-Economic Health Association	0	0	0
4	Ashadeep	0	14 (2.28%)	14 (0.76%)
5	Balipara Tract and Frontier Foundation	108 (8.81%)	34 (5.54%)	142 (7.72%)
6	Cachar Cancer Hospital and Research Centre	0	4 (0.65%)	4 (0.21%)
7	Centre for Development Action and Appropriate Technology	0	0	0
8	Centre for North East Studies and Policy Research	964 (78.69%)	123 (20%)	1087 (59.14%)
9	Colours	0	6 (0.97%)	6 (0.32%)
10	Manab Sewa Sangha	0	4 (0.65%)	4 (0.21%)
11	National Alliance Mission	0	0	0
12	North East Network	48 (3.91%)	2 (0.32%)	50 (2.72%)
13	PFI Foundation	0	0	0
14	Rajiv Open Institute	1 (0.08%)	8 (1.30%)	9 (0.48%)
15	Resources Centre for Sustainable Development	0	24 (3.91%)	24 (1.30%)
16	Shishu Sarothi	0	35 (5.70%)	35 (1.90%)
17	SPECTRUM	0	0	0
18	Tathagata Trust	0	6 (0.97%)	6 (0.32%)

19	Uttaran	0	0	0
20	Xavier's Foundation	0	1 (0.16%)	1 (0.05%)
21	Council for Education Research and Development	0	1 (0.16%)	1 (0.05%)
22	Rashtriya Gramin Vikas Nidhi	0	1 (0.16%)	1 (0.05%)
23	Aakriti	0	0	0
24	Aami Sahayatree	0	0	0
25	Backward and Social Development Trust	0	0	0
	Total	1225	613	1838

Table 6 shows the ranking of selected NGOs websites on the basis of Total Internal Links, Total External Links and Total Link and result visualised that Total Internal Links of Centre for North East Studies and Policy Research with 964 (78.69%) was the highest, followed by Balipara Foundation with 108 (8.81%) and AARANYAK with 104 (8.48%). The

Total External Links of AARANYAK with 386 (58.48%) was the highest, followed by Centre for North East Studies and Policy Research with 125 (18.93%) and Shishu Sarothi with 37 (5.60%). The Total Links of The Centre for North East Studies and Policy Research, Guwahati with 1089 (57.77%) was the highest, followed by AARANYAK with 490 (25.99%) and Balipara Foundation with 142 (7.53%).

Table 6: Total Internal Links, Total External Links and Total Links

Sl. No.	Name of the NGOs	Total Internal Links	Total External Links	Total Links
1	Assam Centre for Rural Development	0	3 (0.45%)	3 (0.15%)
2	Aaranyak	104 (8.48%)	386 (58.48%)	490 (25.99%)
3	Assam Socio-Economic Health Association	0	0	0
4	Ashadeep	0	14 (2.12%)	14 (0.74%)
5	Balipara Tract and Frontier Foundation	108 (8.81%)	34 (5.15%)	142 (7.53%)
6	Cachar Cancer Hospital and Research Centre	0	5 (0.75%)	5 (0.26%)
7	Centre for Development Action and Appropriate Technology	0	0	0
8	Centre for North East Studies and Policy Research	964 (78.69%)	125 (18.93%)	1089 (57.77%)
9	Colours	0	7 (1.06%)	7 (0.37%)
10	Manab Sewa Sangha	0	4 (0.60%)	4 (0.21%)
11	National Alliance Mission	0	0	0
12	North East Network	48 (3.91%)	2 (0.30%)	50 (2.65%)
13	PFI Foundation	0	0	0
14	Rajiv Open Institute	1 (0.08%)	8 (1.21%)	9 (0.47%)
15	Resources Centre for Sustainable Development	0	24 (3.63%)	24 (1.27%)
16	Shishu Sarothi	0	37 (5.60%)	37 (1.96%)
17	SPECTRUM	0	0	0
18	Tathagata Trust	0	8 (1.21%)	8 (0.42%)
19	Uttaran	0	0	0
20	Xavier's Foundation	0	1 (0.15%)	1 (0.05%)
21	Council for Education Research and Development	0	1 (0.15%)	1 (0.05%)
22	Rashtriya Gramin Vikas Nidhi	0	1 (0.15%)	1 (0.05%)
23	Aakriti	0	0	0
24	Aami Sahayatree	0	0	0
25	Backward and Social Development Trust	0	0	0
	Total	1225	660	1885

Table 7 shows the Web Impact Factor (WIF) of selected NGOs websites and analyses the Simple Web Impact Factor (SWIF), Internal Web Impact Factor (IWIF) and External Web Impact Factor (EWIF) and resolved that the Centre for North East Studies and Policy Research, Guwahati occupied the first place with 29.43 SWIF followed by AARANYAK, which occupied second position with 10.42 SWIF and Balipara Foundation with 4.58 SWIF. In ranking on the basis of Internal Web Impact Factor (IWIF), The Centre for North East Studies and Policy Research, Guwahati occupied the first place with 26.05 IWIF followed by Balipara Foundation, which occupied second rank with 3.48 IWIF and AARANYAK with 2.21 IWIF. On the basis of External Web Impact Factor (EWIF), The AARANYAK occupied the first position with 8.21 EWIF followed by The Centre for North East Studies and Policy Research, Guwahati which occupied second place with 3.37 EWIF and Shishusarothi is in third position with 1.32 EWIF.

Table 7: Web Impact Factor

SL.	Website	SWIF	IWIF	EWIF
01	Assam Centre for Rural Development	0.13	0	0.13
02	AARANYAK	10.42	2.21	8.21
03	Assam Socio-Economic Health Association	0	0	0
04	Ashadeep	0.5	0	0.5
05	Balipara Tract and Frontier Foundation	4.58	3.48	1.09
06	Cachar Cancer Hospital and Research Centre	0.18	0	0.18
07	Centre for Development Action and Appropriate Technology	0	0	0
08	Centre for North East Studies and Policy Research	29.43	26.05	3.37
09	Colours	0.29	0	0.29
10	Manab Sewa Sangha	0.18	0	0.18
11	National Alliance Mission	0	0	0
12	North East Network	2.17	2.08	0.08
13	PFI Foundation	0	0	0
14	Rajiv Open Institute	0.36	0.04	0.32
15	Resources Centre for Sustainable Development	0.72	0	0.72
16	Shishu Sarothi	1.32	0	1.32
17	SPECTRUM	0	0	0
18	Tathagata Trust	0.33	0	0.33
19	Uttaran	0	0	0

SL.	Website	SWIF	IWIF	EWIF
20	Xavier's Foundation	0.04	0	0.04
21	Council for Education Research and Development	0.03	0	0.03
22	Rashtriya Gramin Vikas Nidhi	0.04	0	0.04
23	Aakriti	0	0	0
24	Aami Sahayatree	0	0	0
25	Backward and Social Development Trust	0	0	0

FINDINGS

- The NGO website of Aakriti has the highest domain authority with 96(15.97%) followed by Council for Education Research and Development with 91(15.14%) and SPECTRUM, Aami Sahayatree and Backward and Social Development Trust with 41(6.82%).
- The NGO website of Aaranyak is at the top most with 47(9.93%) Page Authority, followed by the Centre for North East Studies and Policy with 37(7.82%) and Resources Centre for Sustainable Development, Guwahati with 33(6.97%).
- The Centre for North East Studies and Policy Research, Guwahati with 964 (78.69%) has the highest Internal Equity-Passing Links followed by Balipara Foundation with 108 (8.81%) and AARANYAK with 104 (8.48%). On External Equity Passing Links basis, AARANYAK with 349 (56.93%) occupies the first position followed by the Centre for North East Studies and Policy Research, Guwahati with 123 (20%) and Shishu Sarothi, Guwahati with 35 (5.70%). The Centre for North East Studies and Policy Research, Guwahati with 1087(59.14%) Total Equity - Passing Links is at the top most, followed by AARANYAK with 453 (24.64%) and Balipara Foundation with 142 (7.72 %).
- The Centre for North East Studies and Policy Research has the highest Total Internal Links with 964 (78.69%), followed by Balipara Foundation with 108 (8.81%) and AARANYAK with 104 (8.48%). On the Total External Links basis, AARANYAK with 386 (58.48%) ranks first, followed by Centre for North East Studies and Policy Research with 125 (18.93%) and Shishu Sarothi with 37 (5.60%).
- On the basis of Simple Web Impact Factor (SWIF), The Centre for North East Studies and Policy Research, Guwahati occupied the first place with 29.43 SWIF followed by AARANYAK, which occupied second position with 10.42 SWIF and Balipara Foundation with 4.58 SWIF. In ranking on the basis of Internal Web Impact Factor (IWIF), The Centre for North East Studies and Policy Research, Guwahati occupied

the first place with 26.05 IWIF followed by Balipara Foundation, which occupied second rank with 3.48 IWIF and AARANYAK with 2.21 IWIF. On the basis of External Web Impact Factor (EWIF), The AARANYAK occupied the first position with 8.21 EWIF followed by The Centre for North East Studies and Policy Research, Guwahati which occupied second place with 3.37 EWIF and Shishusarothi is in third position with 1.32 EWIF.

CONCLUSION

Link analysis of the websites of NGOs in Assam is an unexplored area of webometric research. The present study is an exploratory in nature and there is also a scope for future webometric research in the multi-dimensional approached. It would be useful further to carry out more comprehensive studies comparing more NGO Websites of Assam, since the webometric analysis in this area is new one. This study has given a Blueprint of the various links provided by the websites of 25 NGOs of Assam. From the above findings it is concluded that The Centre for North East Studies and Policy Research, Guwahati and AARANYAK have gained the high profile among the selected NGOs websites in Assam based on the links provided by them. These organisations also can pave the ways for fruitful collaborations with other NGOs through the application sophisticated web features.

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