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Websites of Central Universities in India: A Webometric Analysis

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ABSTRACT

Webometrics is concerned with measuring aspects of the web: websites, web pages, parts of web pages, words in web pages, etc. This study examines 40 central universities websites in India. Investigates domain systems of the websites, analyses the number of webpages and link pages and calculates the simple web impact factor, self link web impact factor, external link web impact factor and revised web impact factor for Central universities in India and ranks the websites as per the WIF. It also develops a novel network diagram showing link structures between web nodes in webometric analysis. This study warns against taking the analogy between citation analysis and link analysis too far.

Keywords: Central universities India, world wide web, webometrics, search engines, link analysis, web impact factor

1. INTRODUCTION

In the face of a growing demand for education and fundamental changes in higher education in most countries, the increasing value gets the creative coordination of world universities on the basis of a constant exchange of experience between them. The easiest and the effective way to operational exchange of information is publication on the website. Enhancing a web policy expands the dialogue between the universities, contributes to the formation of new communications in the scientific community, and helps the realisation of innovative development. This would shed some light on the use of key communication medium and could lead to more effective academic use of the web. The World Wide Web (WWW) has now become one of the main sources of information on academic and research activities, and therefore is an excellent platform to test new methods of evaluating webometric activities.

A website is a collection of related web pages, images, videos or other digital assets that are addressed relative to a common Uniform Resource Locator (URL), often consisting of only the domain name, or the IP address, and the root path ('/') in an Internet Protocol-based network. A website is hosted on at least one web server accessible via a network such as the Internet or a private local area network.

2. CONCEPT OF WEBOMETRICS

Since the mid 1990s, the nature and properties of the WWW have been increasingly investigated by applying modern informetric methodologies. The term webometrics is a coinage from two modern English words, "web" and "metric". The word web is a short of WWW. The Dictionary of Science define web as: a hypermedia system… that allows users to view and retrieve information from documents containing links". On the other hand, metrics has to do with counting or measurement. Webster's Comprehensive Dictionary of English Language defines metrics as: "the mathematical theory of measurement."

Webometrics is a quantitative study of web-related phenomena. The webometrics study could be applied to web with commercial search engines providing the raw data. Quantitative studies of the web have been named as webometrics by Almind and Ingwersen although the basic

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issue had been identified simultaneously by Larson who is also a pioneer with his early exploratory link structure analysis with the first pure informetrics analysis of the web.[1-2]

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".[3] This definition covers the construction side and usage side of the web, which embrace the following four main areas of webometrics study:

(i) Web page content analysis.

(ii) Weblink structure analysis (e.g., hyperlink, self link and external link).

(iii) Web usage analysis (e.g., exploiting log files for users searching and browsing behaviour).

(iv) Web technology analysis (including search engine performance).

3. CENTRAL UNIVERSITIES IN INDIA

The Government of India is responsible for arranging, allocating and distributing financial resources required by the University Grants Commission (UGC) for the establishment of central universities in India. Currently there are 41 central universities in India (Appendix 1). Improving the quality and access of higher education and research in India have become all the more important keeping in view the growing needs for qualified human resources in various sectors of the economy. Therefore, it can be hoped that there would be more central universities in India in the near future.

The Central Government has also been empowered by a Special Act of the Constitution to maintain a particular standard conducive to the educational health of the country. The Central Government lays special emphasis on research and development carried out in technical as well as other institutions.

Salient features of Central Universities in India are:

- The President of India acts as the 'Visitor' for all the Central Universities.
- The President has the power to nominate few members to the Executive Committee/Board of Management/Court/Selection Committees of the University in terms of the various statutes and provisions laid down in the University Act.
- The Ministry of Human Resources and Development (MHRD) assists the President of India in the appointment of Vice Chancellors, Court Nominees, and Selection Committee Nominees.

This study covers all the central universities listed in the Department of Higher Education websites in India[4].

Table 1 depicts the year of establishment of 41 central universities in India. There was a phenomenal growth during 2001-2010; nearly 22 (53.66 per cent) central universities were established during this period. Banaras Hindu University was the first central university established in 1915. In the last 21 years, about 30 central universities have been established, which reflects the growth of higher education in India.

Table 1. Classification of central universities of India by year of their establishment

Year of establishment	No. of universities	Percentage
Before Independence	4	9.76
Between 1951 and 1960	1	2.44
Between 1961and 1970	0	0.00
Between 1971 and 1980	3	7.32
Between 1981 and 1990	3	7.32
Between 1991 and 2000	8	19.51
Between 2001 and 2010	22	53.66
Total	41	100.00

The distribution of central universities in India is given in Table 2. Almost all the Indian States and Union Territories have established at least one central university. While Uttar Pradesh and Delhi have the maximum of four (9.76 per cent) central universities, Andhra Pradesh has three (7.32 per cent) followed by Assam, Bihar and Manipur with two and remaining 24 States with one central university each.

4. REVIEW OF RELATED LITERATURE

Jeyshankar, Ramesh Babu, and Gopalakrishnan explained basic frame work and development of webometrics from librametrics, informetrics, bibliometrics, scientometrics and cybermetrics.[5]

Thelwall states that the earlier weblink studies have used the webpage as the primary indivisible source document for counting purposes.[6] He defined three alternative heuristics for the educational arena based upon the directory, the domain and the whole university site, and examined 108 UK university institutional websites. Noruzi investigated the Web Impact Factor (WIF) for the Iranian universities and introduced a new system of measurement.[7] Jeyshankar and Ramesh Babu examined websites of 45 universities in Tamil Nadu comprising 27 State universities and 18 private universities.[8] Their study identified the domain systems

Table 2. State-wise distribution of central universities of India

Name of states and union territory	No. of universities	Percentage
Andhra Pradesh	3	7.32
Arunachal Pradesh	1	2.44
Assam	2	4.88
Bihar	2	4.88
Chhattisgarh	1	2.44
Delhi	4	9.76
Gujarat	1	2.44
Goa	1	2.44
Haryana	1	2.44
Himachal Pradesh	1	2.44
Jammu & Kashmir	1	2.44
Jharkhand	1	2.44
Karnataka	1	2.44
Kerala	1	2.44
Madhya Pradesh	1	2.44
Maharashtra	1	2.44
Manipur	2	4.88
Mehalaya	1	2.44
Mizoram	1	2.44
Nagaland	1	2.44
Orissa	1	2.44
Pondicherry	1	2.44
Punjab	1	2.44
Rajasthan	1	2.44
Sikkim	1	2.44
Tamil Nadu	1	2.44
Tripura	1	2.44
Uttar Pradesh	4	9.76
Uttaranchal	1	2.44
West Bengal	1	2.44
Total	**41**	**100**

of the websites analysed the number of webpages, link pages and WIF, self link WIF of the university websites in Tamil Nadu, and ranked the websites as per the WIF. Mukherjee applied the webometric techniques to national political party's websites, and judged the popularity of Internet measure whether internet can be used as a tool in Indian political context.[9] The results indicated that political parties in India are using Internet as one of the viable tools for campaigning and that Internet can be used as a supplementary tool for measuring popularity. Ramesh Babu, Jeyshankar and Nageswara Rao studied 34 State agricultural universities' websites in India.[10] They investigated domain systems of the websites, analysed the number of webpages and link pages, and calculated the simple WIF, self link WIF, external link WIF and revised WIF. They ranked the websites according to their WIF. They suggested that WIF can be calculated as a way of comparing the attractiveness of websites or domains on the web, and proposed a novel network diagram notation to fully appreciate and investigate link structures between web nodes. This study warns against taking the analogy between citation analysis and link analysis too far.

5. OBJECTIVES

The objectives of the study are:

(i) To identify and classify the domain of central universities' websites in India.

(ii) To find the number of webpages, number of link pages, number of self link pages, and external link pages of central universities' websites in India.

(iii) To measure the simple WIF, self link WIF, external WIF and revised WIF of central universities' websites in India and rank them as per the WIF.

(iv) To construct the link network of the Department of Educational websites in India.

6. HYPOTHESES

The following are the hypotheses framed for this study:

(i) A majority of the central universities in India have hosted websites on the Internet.

(ii) The domain structures of websites of these universities in India are heterogeneous.

(iii) Higher the number of webpages, smaller the link pages; and the greater the WIF, smaller the number of webpages.

7. SCOPE

This study makes a webometric analysis of central universities' websites in India. There are 41 central universities in India. One Central University of Tamil Nadu do not have website. Therefore, this study examined the websites of 40 central universities in India. The study

aimed at to establish a kind of academic ranking of these websites by measuring their WIF. The study of the ranking will help the reader to compare and identify central universities websites in India by their WIF.

8. METHODOLOGY

The study used AltaVista (www.altavista.com) search engine for collecting data. Altavista advanced web queries was used to find the approximate number of pages in each website that links to one another. The Altavista query is based upon the lexicon of the domain names of webpage URLs. AltaVista has been used to search and collect data. The data collection method extensively makes use of four special keywords like domain, linkdomain, linkdomain AND, linkdomain AND NOT and linkdomain NOT. From AltaVista search engine, as surveyed by Thelwall (2002)[11], the four Boolean search statement methods were used to collect data for each agricultural university websites as:

Domain:ugc.ac.in: Extract the number of webpages at the website under www.icar.org.

Linkdomain:ugc.ac.in: Reveals the number of link webpages linking to the website under www.icar.org.

Linkdomain (ugc.ac.in AND domain: ugc.ac.in): It provides a complete report of number of webpages under www.icar.org; which provides hyperlinks to website www.icar.org. It is called self links pages (links from the same website).

Linkdomain (ugc.ac.in AND NOT domain: ugc.ac.in): It provides the report of number of pages not under www.icar.org. It is called external link pages.

Linkdomain (ugc.ac.in NOT domain: ugc.ac.in): Reveals the number of links incoming from other websites.

9. WEB IMPACT FACTOR

Web impact factor is a part of the methodology in webometrics studies. The idea of measuring WIF as one of the quantitative indicators (or the average link frequencies) was developed by Ingwersen.[12] WIF is a 'snapshot' of a search engine database at a specific time. 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. Four types of links and WIF are formulated in the following way:

- The simple WIF: the ratio of all links to the number of pages.
- The self link WIF: the ratio of selflinks within the site to number of pages.
- The external WIF: the ratio of links made from external sites to the target site, to the number of pages at the site.
- The revised WIF: the ratio of links made incoming from other sites.

Table 3 reveals that nine types of 'domain extensions' were observed in this study. Almost one third of the university websites have '*.ac.in'* (47.5 per cent) extension, followed by '.org', '*nic.in'* (15 per cent) and (10 per cent) and *edu.in* and 'org' in extensions in three (7.5 per cent) universities each. This phenomenon explains that there is no homogeneity among the central universities websites.

Table 3. Classification of central universities websites by the domain extensions

Domain	No. of universities	Percentage
.ac.in	19	47.5
.org	6	15
.nic.in	4	10
.edu.in	3	7.5
.org.in	3	7.5
.in	2	5
.ernet.in	2	5
.com	1	2.5
Total	**40**	**100**

Table 4 illustrates the rank distribution of central universities in India according to their simple web impact factor (SWIF). Dividing the number of link pages (B) by number of webpages (A), the SWIF for each university has been calculated. Mizoram University occupies the first place with 262 link pages and 41 webpages with 6.39 SWIF. The second and third place goes to central university of Himachal Pradesh and Jawaharlal Nehru University, respectively. University of Delhi (12200) and Indira Gandhi National Open University (19100) have more number of webpages than the above three universities, but they are ranked 17th and 20th, respectively based on their SWIF.

The ranking of central universities in India is based on their Self Link Web Impact Factor as shown in theTable 5. Central university of Orissa occupies the first place with 14 self link pages and 18 webpages with 0.78

Table 4. Simple web impact factor for central universities of India

Name of the university	NWP (A)	LWP (B)	SWIF (B/A)	Ranked by SWIF
Mizoram University	41	262	6.39	1
Central University of Himachal Pradesh	320	1430	4.47	2
Jawaharlal Nehru University	3150	12700	4.03	3
Central University of Kerala	12	48	4.00	4
Assam University	245	967	3.95	5
Aligarh Muslim University	826	2790	3.38	6
Central University of Jharkhand	9	27	3.00	7
University of Hyderabad	2200	6420	2.92	8
Manipur University	236	685	2.90	9
Central University of Bihar	21	54	2.57	10
Hemawati Nandan Bahuguna Garhwal University	24	56	2.33	11
Nagaland University	94	180	1.91	12
North Eastern Hill University	1110	2120	1.91	12
Visva Bharati University	1300	2460	1.89	13
Central University of Punjab	32	59	1.84	14
Guru Ghasidas University	222	406	1.83	15
Central University of Goa	498	908	1.82	16
Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya	249	440	1.77	17
University of Delhi	12200	21200	1.74	18
Central University of Gujarat	11	19	1.73	19
Tripura University	275	446	1.62	20
Indira Gandhi National Open University	19100	29500	1.54	21
Central University of Haryana	6	9	1.50	22
Rajiv Gandhi University	150	212	1.41	23
Central Agricultural University	48	66	1.38	24
English and Foreign Languages University	295	381	1.29	25
Banaras Hindu University	8450	10900	1.29	25
University of Allahabad	525	634	1.21	26
Maulana Azad National Urdu University	788	922	1.17	27
University of Sagar	826	939	1.14	28
Jamia Millia Islamia	1640	1860	1.13	29
Central University of Karnataka	9	9	1.00	30
Pondicherry University	1990	1780	0.89	31
Tezpur University	3040	2290	0.75	32
Central University of Rajasthan	19	14	0.74	33
Central University of Orissa	18	13	0.72	34
Patna University	659	406	0.62	35
Sikkim University	132	70	0.53	36
Central University of Jammu & Kashmir	32	13	0.41	37
Babasaheb Bhimrao Ambedkar University	689	243	0.35	38

NWP = No. of webpages; LWP = No. of linked webpages; SWIF = Simple web impact factor

Table 5. Self-link web impact factor for central universities of India

Name of the university	NWP (A)	SLWP (C)	SLWIF(C/A)	Ranked by SLWIF
Central University of Orissa	18	14	0.78	1
Central University of Haryana	6	4	0.67	2
Central University of Jharkhand	9	5	0.56	3
Central University of Goa	498	182	0.37	4
Sikkim University	132	45	0.34	5
English and Foreign Languages University	295	61	0.21	6
Patna University	659	108	0.16	7
Indira Gandhi National Open University	19100	2940	0.15	8
Central Agricultural University	48	6	0.13	9
University of Sagar	826	100	0.12	10
Jawaharlal Nehru University	3150	371	0.12	10
Mizoram University	41	5	0.12	10
Central University of Bihar	21	2	0.10	11
Assam University	245	22	0.09	12
Central University of Gujarat	11	1	0.09	12
Tezpur University	3040	261	0.09	12
Central University of Kerala	12	1	0.08	13
Maulana Azad National Urdu University	788	62	0.08	13
Nagaland University	94	7	0.07	14
North Eastern Hill University	1110	73	0.07	14
Tripura University	275	20	0.07	14
Visva - Bharati University	1300	95	0.07	14
Central University of Punjab	32	2	0.06	15
Banaras Hindu University	8450	473	0.06	15
Pondicherry University	1990	97	0.05	16
Central University of Himachal Pradesh	320	13	0.04	17
Manipur University	236	10	0.04	17
University of Allahabad	525	19	0.04	17
Hemawati Nandan Bahuguna Garhwal University	24	1	0.04	17
Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya	249	10	0.04	17
University of Delhi	12200	3750	0.03	18
Aligarh Muslim University	826	24	0.03	18
Jamia Millia Islamia	1640	47	0.03	18
University of Hyderabad	2200	70	0.03	18
Guru Ghasidas University	222	5	0.02	19
Babasaheb Bhimrao Ambedkar University	689	7	0.01	20
Rajiv Gandhi University	150	1	0.01	20
Central University of Jammu & Kashmir	32	0	0.00	21
Central University of Rajasthan	19	0	0.00	21
Central University of Karnataka	9	0	0.00	21

SLWIF. Central university of Haryana and central university of Jharkhand are ranked at 2nd and 3rd places with SLWIF of 0.67 and 0.56, respectively. Though Indira Gandhi National Open University has more number of webpages than all the other universities, it occupies the 7th position because the number of self link pages is very less compared to its web pages, and its SLWIF is 0.15. Further, University of Sagar, Jawaharlal Nehru University and Mizoram University share the 9th position with SLWIF as 0.12. The central university of Jammu and Kashmir, central university of Rajasthan, and central university of Karnataka do have link pages. Table 6 shows the rank

Table 6. External link web impact factor for central universities of India

Name of the university	NWP (A)	ELWP(D)	ELWIF (D/A)	Ranked by ELWIF
Aligarh Muslim University	826	713	0.86	1
Central University of Haryana	6	5	0.83	2
Central University of Orissa	18	12	0.67	3
Central University of Karnataka	9	6	0.67	3
English and Foreign Languages University	295	185	0.63	4
Hemawati Nandan Bahuguna Garhwal University	24	15	0.63	4
Tripura University	275	167	0.61	5
Central University of Jharkhand	9	5	0.56	6
Jawaharlal Nehru University	3150	1730	0.55	7
Central University of Bihar	21	11	0.52	8
Visva Bharati University	1300	662	0.51	9
Central University of Gujarat	11	5	0.45	10
Sikkim University	132	56	0.42	11
Manipur University	236	91	0.39	12
North Eastern Hill University	1110	420	0.38	13
Assam University	245	92	0.38	13
Central University of Jammu & Kashmir	32	12	0.38	13
Indira Gandhi National Open University	19100	7140	0.37	14
University of Sagar	826	299	0.36	15
Central Agricultural University	48	17	0.35	16
Central University of Punjab	32	11	0.34	17
Central University of Kerala	12	4	0.33	18
Patna University	659	195	0.30	19
Pondicherry University	1990	581	0.29	20
Tezpur University	3040	884	0.29	20
University of Hyderabad	2200	618	0.28	21
University of Allahabad	525	131	0.25	22
Mizoram University	41	10	0.24	23
Banaras Hindu University	8450	1980	0.23	24
Guru Ghasidas University	222	52	0.23	24
Maulana Azad National Urdu University	788	178	0.23	24
Jamia Millia Islamia	1640	337	0.21	25
Central University of Himachal Pradesh	320	62	0.19	26
University of Delhi	12200	2010	0.16	27
Rajiv Gandhi University	150	23	0.15	28
Nagaland University	94	13	0.14	29
Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya	249	33	0.13	30
Central University of Rajasthan	19	2	0.11	31
Central University of Goa	498	14	0.03	32
Babasaheb Bhimrao Ambedkar University	689	16	0.02	33

distribution of central universities in India according to their external link WIF (ELWIF). Aligarh Muslim University occupies the Ist place with 826 webpages, 713 link pages and with ELWIF 0.86. Central university of Haryana is in the 2nd position with ELWIF 0.83. Central university of Orissa and central university of Karnataka were ranked 3rd with ELWIF 0.67 each. English and Foreign Languages University and Hemavathi Nandhan Bahuguna Garhwal University are positioned at the 4th place with the ELWIF 0.63 each. The data in Table 7 exhibits the rank distribution of central universities in India according to their revised web impact factor (RWIF). Central University of Haryana ranked Ist with 6 webpages, 4 inlink pages and RWIF 0.67. Central

Table 7. Revised link web impact factor for central universities of India

Name of the university	NWP (A)	ILWP (E)	RWIF (E/A)	Ranked by ELWIF
Central University of Haryana	6	4	0.67	1
Central University of Jharkhand	9	5	0.56	2
Sikkim University	132	44	0.33	3
University of Sagar	826	252	0.31	4
English and Foreign Languages University	295	62	0.21	5
Indira Gandhi National Open University	19100	3000	0.16	6
Patna University	659	107	0.16	6
Mizoram University	41	6	0.15	7
Central Agricultural University	48	6	0.13	8
Jawaharlal Nehru University	3150	375	0.12	9
Central University of Bihar	21	2	0.10	10
Maulana Azad National Urdu University	788	82	0.10	10
Assam University	245	22	0.09	11
Central University of Gujarat	11	1	0.09	11
Nagaland University	94	8	0.09	11
Tezpur University	3040	274	0.09	11
Central University of Kerala	12	1	0.08	12
Tripura University	275	21	0.08	12
North Eastern Hill University	1110	73	0.07	13
Visva Bharati University	1300	95	0.07	13
Central University of Orissa	18	1	0.06	14
Central University of Punjab	32	2	0.06	14
Banaras Hindu University	8450	490	0.06	14
Manipur University	236	11	0.05	15
Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya	249	12	0.05	15
Pondicherry University	1990	100	0.05	15
Central University of Himachal Pradesh	320	14	0.04	16
University of Allahabad	525	19	0.04	16
Hemawati Nandan Bahuguna Garhwal University	24	1	0.04	16
Aligarh Muslim University	826	26	0.03	17
University of Delhi	12200	391	0.03	17
Guru Ghasidas University	222	7	0.03	17
University of Hyderabad	2200	72	0.03	17
Central University of Goa	498	15	0.03	17
Jamia Millia Islamia	1640	40	0.02	18
Babasaheb Bhimrao Ambedkar University	689	7	0.01	19
Rajiv Gandhi University	150	1	0.01	19
Central University of Jammu & Kashmir	32	0	0.00	20
Central University of Rajasthan	19	0	0.00	20
Central University of Karnataka	9	0	0.00	20

university of Jharkhand and Sikkim University occupied 2nd and 3rd positions with the RWIF 0.56 and 0.33, respectively. Figure 1 reveals the visual map demonstration links (only site links were mapped) Department of Education in India further indicates that it has close links with some central universities/other universities, government departments, international organisations, information sources of websites, etc.[14] It has also developed links with Google, Geocites, Wikipedia, etc.

10. CONCLUSION

Link analysis of the websites of central universities in India is an unexplored area of webometric research. This study gives a fair idea about the information provided by

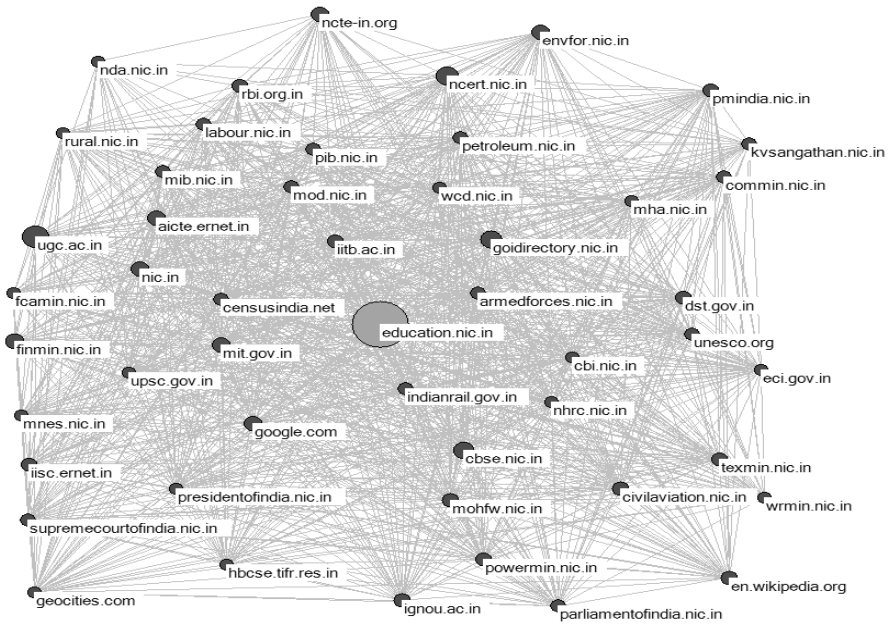

Figure 1. Link network diagram: Links between two or more websites by MHRD in India.

the websites of the 40 central universities of India. These findings open the door to further studies of other new areas of the web and for longitudinal studies to chart the changing nature of the way in which communities use the Internet.

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List of Central Universities in India and their URL

Name and locations of Central Universities	URL
Aligarh Muslim University, Uttar Pradesh	www.amu.ac.in
Assam University, Assam	http://assamuniversity.nic.in
Babasaheb Bhimrao Ambedkar University, Uttar Pradesh	www.bbauindia.org
Banaras Hindu University, Uttar Pradesh	www.bhu.ac.in
Central Agricultural University, Manipur	www.cau.org.in
Central University of Bihar, Bihar	www.cub.ac.in
Central University of Gujarat, Gujarat	www.cuguj.org
Central University of Goa, Goa	www.unigoa.ac.in
Central University of Haryana, Haryana	www.cuharyana.org
Central University of Himachal Pradesh, Himachal Pradesh	http://hpuniv.nic.in
Central University of Jammu & Kashmir, Jammu & Kashmir	www.cujk.ac.in
Central University of Jharkhand, Jharkhand	http://cuj.org.in
Central University of Karnataka, Karnataka	www.cuk.ac.in
Central University of Kerala, Kerala	www.cuk-edu.in
Central University of Orissa, Orissa	http://cuorissa.org
Central University of Punjab, Punjab	www.centralunipunjab.com
Central University of Rajanthan, Rajanthan	www.curaj.ac.in
Central University of Tamil Nadu, Tamil Nadu	—
English and Foreign Languages University, Andhra Pradesh	www.efluniversity.ac.in
Guru Ghasidas University, Chattisgarh	www.ggu.ac.in
Hemawati Nandan Bahuguna Garhwal University, Uttaranchal	www.garhwaluniversity.org
Indira Gandhi National Open University, Delhi	www.ignou.ac.in
Jamia Millia Islamia, Delhi	www.jmi.nic.in
Jawaharlal Nehru University, Delhi	www.jnu.ac.in
Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya, Maharastra	www.hindivishwa.org
Manipur University, Manipur	http://manipuruniv.ac.in
Maulana Azad National Urdu University, Andhra Pradesh	www.manuu.ac.in
Mizoram University, Mizoram	www.mzu.edu.in
Nagaland University, Nagaland	www.nagauniv.org.in
North Eastern Hill University, Mehalaya	www.nehu.ac.in
Patna University, Bihar	www.patnauniversity.ac.in
Pondicherry University, Puducherry	www.pondiuni.edu.in
Rajiv Gandhi University, Arunachal Pradesh	www.rgu.ac.in
Sikkim University, Sikkim	www.sikkimuniversity.in
Tezpur University, Assam	www.tezu.ernet.in
Tripura University, Tripura	www.tripurauniversity.in
University of Allahabad, Uttar Pradesh	www.allduniv.ac.in
University of Delhi, Delhi	www.du.ac.in
University of Hyderabad, Andhra Pradesh	www.uohyd.ernet.in
University of Sagar, Madhya Pradesh	http://sagaruniversity.nic.in
Visva Bharati University, West Bangal	www.visva-bharati.ac.in