Himalayan Information Subject Gateway in Digital Era: A Proposal for its Development

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Abstract

One of the major problems in accessing information from internet is that it is very difficult and time consuming to get reliable and relevant information in the limited time. An effective and efficient way to provide easy access to quality information on internet is by developing subject gateways in specific areas. To meet the information requirement of the scientific and academic community in the digital era, various departments have developed Subject Gateways in their respective areas and some are in developing process. This paper suggests a proposal for developing Himalayan Information Subject Gateway for scientists and researchers engaged in Himalayan Studies. This paper also gives an overview of some the subject information gateways.

1. INTRODUCTION

UNESCO's mandate 'to promote the free flow of ideas by word and image', clearly indicates that the organisation is called upon to play in making information and knowledge freely accessible to all, with the ultimate objective of bridging the gap between the information rich and the information poor. In the IFA Programme (Information for All Programme) of UNESCO, five areas have been identified for digital content development and the third area among these is 'Strengthening institutions as gateways to information'. [1]

Gateways give an opportunity to authors/scholars/users for providing an input of information resource through its template, though it is further evaluated and assessed by gateway editors keeping in view the audience and context/content for inclusion into the subject gateways. The accepted resource is then classified, indexed and catalogued. The internet today contains huge amount of global information. To access the required, specific, relevant, and quality information is not an easy job. The information to be accessed has a definite purpose and theme. The theme is usually subject oriented, therefore to have an access to subject oriented quality information, one must search through the subject gateways. Subject gateways have an input of identified, selected, evaluated and assessed subject oriented information sources. A quality input provides a quality output search and it is easy for the user to decide whether the output is matching their requirement. These type of search facilities are created, designed and maintained by librarians/information professionals and/or subject experts with the aim of providing access to high quality sources of information, and also contain the full range of subject oriented internet material which negate the possibility of repetition in the search results. The use of traditional cataloguing and classification techniques aims to ensure accurate subject description and facilitate the retrieval of accurate, concise, current and subject oriented required information sources. Evaluated/assessed information sources also provide a complete guide to determine the

scope, value, purpose, comprehensiveness, updation, usefulness and format of the information source accessed through the subject gateways on the internet.[2]

2. WHAT IS SUBJECT GATEWAY?

Subject gateways are online services and sites that provide searchable and browsable catalogues of internet based resources. Subject gateways will typically focus on a related set of academic subject areas.

Researchers and academics do not always have adequate time, inclination or skills to surf the Internet for all the resources that could support their work. As Internet publishing and communication has become more commonplace, this could be a disadvantage to some researchers as they will miss valuable information and communication resources. In the traditional information environment, human intermediaries, such as publishers and librarians, filter and process information so that users can search catalogues and indexes of organised knowledge. Subject gateways work on the same principle–they employ subject experts and information professionals to select, classify and catalogue internet resources to aid search and retrieval by the users. Users are offered access to a database of internet resources descriptions which they can search by keyword or browse by subject area. They can do this with the knowledge that they are looking at a quality controlled collection of resources. A description of each resource is provided to help users assess very quickly its origin, content and nature, enabling them to decide if it is worth investigating further.[3] Table 1 shows important subject information gateways on the web.

3. SUBJECT INFORMATION GATEWAYS DEVELOPED BY INDIAN ORGANISATIONS

3.1 SPM Information Gateway of Social Science

Syama Prasad Mookerjee Information Gateway of Social Sciences (SPMIGSS) (http://www.icssr.org/igss), developed by Indian Council of Social Science Research (ICSSR) is an internet based quality controlled information service that provides links to other web sites, documents, data, multimedia files and other services in social sciences. Users can either search the information by keyword or browse the resources under subject headings. It is created by a network of social scientists, information specialists, network operators and

Table 1. Important Subject Information Gateways on the Web

S. No.	Name of the Gateway	Universal Resource Locator
1.	Agricultural (Agrigate)	http://www.agrigate.edu.au/
2.	Engineering (AVEL)	http://www.avel.edu.au
3.	Education Network (Edna Online)	http://www.edna.edu.au
4.	Chemistry (MetaChem)	http://metachem.ch.adfa.edu.au/
5.	Engineering (EEVL)	http://www.eevl.ac.uk/
6.	Health and Medicine (OMNI)	http://www.omni.ac.uk/
7.	Humanities	http://www.humbul.ac.uk/
8.	Life Sciences	http://www.biome.ac.uk/
9.	Physical Sciences (PSIGATE)	http://www.psigate.ac.uk/
10.	Reference Sources (RDN)	http://www.rdn.ac.uk/findit
11.	Social Sciences (SOSIG)	http://www.sosig.ac.uk/
12.	Business and Economic (Biz/ed)	http://www.bized.ac.uk/

technologists. These types of search facilities are created, designed and maintained by librarians/information professionals and/or subject experts with the aim of providing access to high quality sources of information and also to negate the possibility of repetition in the search results. In this gateway links shall be provided to:

♦ All social science subjects as enumerated by ICSSR

♦ Indian social scientists

♦ Completed and on-going social science research projects

♦ Forthcoming conferences including training workshops for accessing digital and Internet based social science information

♦ Social Science institutions/libraries/ teaching departments/ ICSSR net of regional centres and its financially supported research institutes

♦ Web sites of other existing Indian portals, information networks, e.g. INFLIBNET, DELNET etc./International gateways/virtual libraries in social sciences

♦ Career development/ job opportunities for social scientists/researchers in all sectors. [4]

3.2 Indian Medlars Centre

For Indian medical researchers, Indian Medlars Centre (http://indmed.nic.in) is virtually a treasure trove, developed jointly by the Indian Council of Medical Research (ICMR) and National Informatics Centre (NIC). The Indmed database on the web is an index of 75 peer-reviewed journals. The Indian Medlars Centre is the first Indian portal to provide links to websites for medical professionals, consumers, nursing professionals and the medical librarians. In the near future, full text of the journals, which are covered in Indmed, will be available on the web.[5]

3.3 Agriculture Gateway to India

This gateway (http://web.aces.uiuc.edu/ aim/diglib/india/default.htm) is developed by Dr N Sandhya Shenoy, FAO Fellow & Senior Scientist, National Academy of Agricultural Research Management (NAARM), and presently maintained by the AIM Lab. It gives information related to agricultural sciences.

3.4 Gateway on Sustainable Development from India

This gateway (http://sdnp.delhi.nic.in) provides all information on sustainable development/environment related issues. This sustainable development portal is developed by Sustainable Development Networking Programme (SDNP), of Ministry of Environment & Forests, India. Salient features of the portal are:

♦ It provides in-depth analysis and coverage of major issues/debates concerning multifarious areas having a bearing on sustainable development.

♦ A total of 25 major thematic areas ranging from pollution, biodiversity, wildlife conservation, climate change to agriculture, bio-technology, poverty, WTO, employment, etc., are covered.

♦ Each thematic area deals with basic issues, case studies, success stories, best practices, replicable models, conventions/treaties, and provides linkages to various databases, libraries, organisations, publications, journals and list servers.

♦ Daily update on news items concerning sustainable development through e-Newsletter called *Developments Today.* Separate coverage on major Indian stories relating to environment/sustainable development through *Recent Indian Headlines* is provided.

♦ Hosts Ministry's publications such as *Annual Report*, *Enviro News*, *Paryavaran Abstracts* and provides information on legislations concerning environment and various funding schemes of the Ministry of Environment & Forests.

♦ Provides query response service concerning diverse aspects relating to sustainable development to users all across the world free of cost.

♦ Hosts websites of partner nodes on specified areas pertaining to sustainable development. Linkage are provided to its sponsored website for promoting

environment awareness among school children with the support of Community Adoption and Monitoring Programme for Schools (CAMPS).

4. HIMALAYAN INFORMATION SUBJECT GATEWAY – A PROPOSAL

The Himalayas have always remained a source of fascination and inspiration for people from all walks of life, and have been deemed to be the cradle of civilisation in the sub-continent. The variety of culture, terrain, forests physiography, flora and fauna of this region has lured the intelligentsia of the world since times immemorial. However, in the recent years, the Himalayas have become the focus of attention of scientists and the government and efforts are underway for a better understanding of its highly complex environmental and ecological systems and to bring about an all-round development of the region, which has remained backward throughout the centuries. [6]

In the recent years, there has been tremendous growth of data and information particularly in the field of Himalayan resources. There has been a spurt in number of research and development institutions at the national and international level. Most of these research institutions and universities possess excellent libraries and information centres, but there is lack of information network by which co-ordination and resources sharing could be effected for the mutual benefit of each of these exist libraries. As a result, it has become difficult for an organisation to collect data and information required by the policy makers, administrators and research scientists. Thus, the access to right information at right time has become very difficult. The scientific departments of the Government of India have already started planning to start information network and gateways in their respective areas. Some of these projects are in the process of implementation and others are in the pipeline.[7]

For the last decade, many subject based information gateways were set up all over the world. India has also been active in the setting up of subject gateways and considerable progress has been achieved in this area. A number of subject information gateways have already been set up in India. We have already discussed some of them. Since most of the information related to Himalayas is scattered all over the country, there is a need to develop a Himalayan Information Subject Gateway. This gateway will provide linkages to various libraries, information centres of R&D institutions, universities and NGOs working in the Himalayan region. This gateway will be developed on the pattern of SPMIGSS. The system, therefore, has to take into account the specific information requirement of each development sector as far as its relevance to Himalayas is concerned.

5. NEED OF HIMALAYAN INFORMATION SUBJECT GATEWAY

The Government too should appreciate the need for integrating the components of information infrastructure in the overall developmental plans. Since the concept of the 'Himalayan Information Subject Gateway' will have to count on the support of the Government, the later should provide the necessary encouragement and incentive.

A Himalayan Information Gateway is eminently suitable for several spheres of national activities, including planning. Reliable and timely information for decision-making becomes increasingly important for India, where a concept of social welfare has been developed over the last three decades. Many organisations have successfully developed their own information gateways to plan, monitor or control their research activities, and these have yielded increased research proficiency. The Government should surely benefit from these methods. Apart from suggesting suitable solutions to the problems in planning, monitoring, allocation, control and coordination of the departmental programmes, one has to consider the special distribution of these programmes.[8] The need to set up a Himalayan Information Gateway

therefore, is to be considered in the context of the rapid development of Himalayan information as well as the increasing awareness of their relevance to societal development.

6. OBJECTIVES OF HIMALAYAN INFORMATION SUBJECT GATEWAY

♦ To create linked collection of internet-based high quality Himalayan resources.
♦ To create Indian contents in Himalayan studies and add them to the contents of internet
♦ To convert core Indian Himalayan journals/research reports/ dissertations/working papers into digital format
♦ To keep Indian databases of Himalayan journals and Newsletters of Himalayan Institute's online
♦ To establish a network of all Himalayan studies/research centres situated in different parts of the country for sharing research resources
♦ To provide online information of forthcoming conferences, seminars, training workshops in Himalayan research/studies centre in India
♦ To connect websites of Himalayan studies/hill studies departments of major universities and Himalayan research institutes
♦ To link websites of other existing Indian information networks and systems e.g., INFLIBNET, AGRIS, ENVIS, etc.
♦ To make a provision for discussions/chat groups, video conferencing facilities, etc. for Himalayan scientists.
♦ To provide details of completed and on-going Himalayan research projects.

7. PROPOSED GATEWAY USERS

The proposed information gateway is intended to cater to the needs of the specialists who are directly or indirectly concerned with Himalayan research as a subject or as an activity. The following categories of users can be supplied information in a digital form on the internet within a reasonable time:

1. Planners, policy makers, decision makers, administrators with respect to Himalayan development at government/non-government levels specialist
2. Institutions devoted to Himalayan research as a discipline
3. International organisations such as UNESCO and ICIMOD
4. Scientists engaged in the implementation/execution of plans and policies
5. Scientists, researchers, authors engaged in Himalayan research
6. Teachers engaged in teaching on Himalayas
7. Communicators who attempt to convey information about development policies, plans, programmes and projects
8. NGOs working on Himalayas.

8. HIMALAYAN STUDIES/ RESEARCH CENTRES

India has a reasonable good institutional set-up for Himalayan research. A host of institutions administered under the Ministry of Environment and Forests (MoEF), Department of Science and Technology (DST), Indian Council of Agricultural Research (ICAR), Council of Scientific and Industrial Research (CSIR), Defence Research and Development Organisation (DRDO), Indian Council of Forests Research and Education (ICFRE), universities under the network of University Grant Commission (UGC), science, technology and environment Departments in various Himalayan states, non-Government organisations (NGOs), etc., are currently involved in diverse fields of research and development on Himalayas.

Following organisations dealing with Himalayan studies/research, can also participate in the proposed gateway.[9]

Universities

❑ Centre for Environmental Sciences, Himachal Pradesh University, Shimla

- Centre for Himalayan Studies, University of North Bengal, Darjeeling, West Bengal
- Centre for Interdisciplinary Studies of Mountain & Hill Environment, University of Delhi, Delhi.
- G B Pant University of Agriculture and Technology, Ranichauri, Tehri-Garhwal
- North East Hill University, Shillong
- High Altitude Plant Physiology Research Centre, H N B Garhwal University, Srinagar-Garhwal
- Dr. Y S Parmar University of Horticulture and Forestry, Solan, Himachal Pradesh
- Institute of Integrated Himalayan Studies (IIHS), (UGC Centre of Excellence)
- Himachal Pradesh University, Shimla
- Institute of Himalayan Studies and Regional Development, Garhwal University, Srinagar- Garhwal.

R &D Institutions

- Central Institute of Higher Tibetan Studies, Sarnath, Varanasi
- Central Institute of Himalayan Culture Studies, Dahung, Arunachal Pradesh
- Defence Agricultural Research Laboratory, (DRDO), Pithoragarh, (Uttaranchal).
- Snow and Avalanche Study Establishment, (DRDO) Chandigarh
- Temperate Forest Research Institute (ICFRE), Shimla, (Himachal Pradesh)
- Himalayan Forest Research Institute, Shimla, (Himachal Pradesh)
- Forest Research Institute (ICFRE), Dehradun
- Institute of Himalayan Bioresources Technology, (CSIR), Palampur, (Himachal Pradesh)
- Regional Research Laboratory, (CSIR), Jammu Tawi, (J&K).
- G B Pant Institute of Himalayan Environment and Development, with its Headquarters at Almora; and Regional Units at Tadong, Gangtok; Srinagar, Uttaranchal; Shamshi,Kullu; Itanagar
- ICAR Research Complex for NEH Region, (ICAR) Umroi Road : Barapani, Meghalaya
- Vivekananda Parvatiya Krishi Anushandhanshala (ICAR), Almora

- Central Institute of Temperate Horticulture (ICAR), Srinagar, Jammu & Kashmir
- Indian Veterinary Research Institute, Regional Station, Palampur (ICAR), Himachal Pradesh
- Indian Veterinary Research Institute, Regional Station, Muketeswar (ICAR), Nainital
- National Bureau of Plant Genetic Resources (NBPGR), Regional Station, Bhowali–Niglat, Nainital
- North Eastern Regional Institute of Science and Technology, Nirjuli, Itanagar, (Arunachal Pradesh)
- Wadia Institute of Himalayan Geology, (DST), Dehradun.
- Wildlife Institute of India, Dehradun.

International Centre

- International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal.

NGOs

- Centre of Himalayan Development and Policy Studies, Dehradun
- Himalayan Environmental Studies and Conservation Organisation, Kotdwara (Garhwal), Uttaranchal
- Society for Integrated Development of Himalayas (SIDH), Landour Cantt., Musoorie
- Himalayan Action Research Centre (HARC), Dehradun
- Himalayan Study Circle, Pithoragarh
- People's Association for Himalayan Area Research (PAHAR), Nainital
- The Himalaya Trust, Dehra Dun
- The Himalayan Foundation, Nandprayag, Chamoli Distt
- Research, Advocacy, and Communication in Himalayan Areas (RACHNA), Dehradun
- Central Himalayan Environment Association, Nainital
- Himalayan Region Study & Research Centre Institute, New Delhi
- Himalayan Seva Sangh, New Delhi
- Himalayan Research Group, Nainital

- ❑ Himalayan Research & Cultural Foundation, New Delhi
- ❑ Himalayan Institute of Action Research and Development, Dehradun.

9. CONCLUSION

One of the many requirements to improve scientific research in the country is the easy access to scientific literature. Fortunately the information technology (IT) revolution has brought information to our doorsteps. While institutional and individual access to Internet in the country is expanding rapidly, published information is not within easy reach of most of the scientists in universities and other research institutions. One of the ways to make available this published information is by having a 'Subject Information Gateway' on the internet.[10]

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