

OPPORTUNITIES OF INSTITUTIONAL REPOSITORIES IN BANGLADESH: AN OVERVIEW

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Abstract

Institutional repositories, which collect scholarly works of the authors of their own institutions, are getting attention of the librarians worldwide, especially in the libraries of Europe and North America. This paper provided a picture of the institutional repositories of Bangladesh. International repository registries were navigated and relevant literatures were consulted to learn the current situation of institutional repositories in Bangladesh. To get a comparative picture, the position of world institutional repositories was also touched.

Key words

Institutional repository; Digital repository; Research outputs; Universities; Research organizations; Open access; Archives; Libraries; Bangladesh.

Introduction

Institutional Repositories (IRs) are now getting importance in the libraries to preserve, organize, maintain and facilitate access to information resources owned by the respective organizations. These resources are mainly the intellectual outputs of the people serving or associated with the organizations or records of those organizations. Contents, that are created in a particular country, are usually known as local resources or contents. Local contents, particularly of developing countries, are not visible enough as their journals are mostly un-indexed and consequently, these are not getting much attention of other researchers and suffering from receiving low citations. The digital age opens a new avenue to make these contents available in global arena and the concerned organizations which are creating contents are working accordingly. Many institutions developed a device for documenting and preserving the contents that are created by their own organization or people for future use. This device is called “Institutional Repository” or IR. Canadian Association of Research Libraries (CARL) portrayed the importance of IR as – “Institutional repositories benefit both the institution and its scholars by raising the institutional profile while also bringing broader dissemination, increased use, and enhanced professional visibility of scholarly research (CARL, n.d.)” Stanger and

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McGregor (2006) mentioned IR as a hot topic as many institutions were actively implementing IR concepts throughout the world.

Reasons for the Growth of Institutional Repositories

Digitization of resources and easy method of distribution or dissemination of digital resources have attracted the authors and scholars to a new form of scholarly communication. Initially, emails became popular for the prompt delivery of digital items among the researchers and authors. The researchers, especially the scientific researchers, have initiated to establish digital repositories on their interested subject areas to serve as the clearinghouse on that subject(s). One of the most prominent such subject repositories is arXiv.org. This repository was established in 1991 (arXiv.org, 2015). The success of ArXiv.org inspired others to develop subject repositories in other fields. The digitization of scholarly items vastly increased in the decade of 90s in the libraries of USA.

There two facts which influence the sharp growth of institutional repositories. One is the introduction of the internet and the growth of the World Wide Web (WWW). Another is the high price of journals and libraries were failing to keep track with the sky-rocketing of the price of journals. As a result, affordability to subscribe their required number of titles was reducing. Often the libraries could not even subscribe the titles where works of researchers of their own institutions were published. Consequently, that particular organization, sometimes the authors too, lose the access right to their own works. Research outputs are the main indicators of creditability of an institution. On the other hand, the authors wanted to have more citations from other authors. Stopping subscription or collecting fewer resources by the libraries were identified as the major causes of least citations. The authors raised their voices to make their writings more available and utilize new technology. The WWW and the internet made a revolution in the field of information access. Authors wanted to utilize these modern technologies and make their resources easily available to anyone who wanted to carry out research. Eventually, the concept of 'Open Access' evolved at the beginning of the new millennium. Budapest Open Access Initiative (BOAI) of 2001 received appreciations from scientists and other researchers. In response to this initiative, two channels of OA evolved. One is known as 'Gold' another is called 'Green'. The institutional repositories are known as Green Channel of OA. In the IRs, authors can submit their all sorts of creative and original works. Researchers can publish them in any journal, but a copy can be submitted (if permitted by publishers) into their respective IRs. Nowadays, a good number of journals are practicing open access. Some journals are completely open and some journals keep some of their published items open to all. These open access journals

are known as ‘Gold’ channel. Gold channels are already open. Institutional repositories may exclude these gold channel’s resources. However, the institutions may even collect those to showcase their own total research outputs from a single place. With this view, the institutions worldwide started to establish ‘Institutional Repositories’. Many authors described the importance and role of institutional repositories in the institutions, particularly universities. Lynch (2003) saw institutional repositories as a prospective setting in the institutions all over the world. Chan (2004) described impact of institutional repositories as follows:

[. . .] facilitate more timely and open access to research and scholarship, maximize the potential research impact of archived publications, supporting alternative forms of journal publishing and novel forms of digital scholarship by preserving and making accessible academic digital objects, datasets, and analytic tools that exist outside of the traditional scholarly publishing system (Babu, Kumar, Shewale and Singh, 2012).

Objective of the study

The purpose of this study is to review the position of the institutional repositories in Bangladesh and provide an overview with the perspective of its position in the world.

Methodology of the study

The study reviewed the existing literature and websites of the repository registries. To know the position of IRs, the concerned prominent registries were consulted through navigating their websites. There are two registries which enlist the repositories of the world. One is Registry of Open Access Repositories (ROAR) and another is Directory of Open Access Repositories which is known as OpenDOAR. Additionally, literature, accessible from a university in Bangladesh, on Institutional repositories of Bangladesh were consulted.

World Scenario of Institutional Repositories

Countries of Europe and North America are in the forefront in establishing repositories. There are several directories which are listing repositories of the world. Two of those were consulted to know the world situation on repository establishment. ROAR (Registry of Open Access Repositories) has registered around four thousand repositories worldwide. Table-1 shows the area wise number of repositories registered in ROAR found by visiting their website on 13 September 2018. It can be noted that the University of Southampton, UK hosts ROAR and it is a part of the EPrints.org. Out of 3,972 repositories, 3,200 repositories are run by universities or research institutions (Registry of Open Access Repositories, n.d.).

Table-1: Continent-wise number of repositories in ROAR

Continents	Number of Repositories
Africa	145
Asia	832
Europe	1556
North America	983
Oceania	97
South America	399
Total	3972

Source: ROAR website

ROARMAP (Registry of Open Access Repositories Mandate and Policies), a companion of ROAR, lists organizations which have open access policies. It has listed 716 universities and research institutions. This indicates that less than one fifth of the repositories, registered in ROAR, have mandate or policy for open access. Bangladesh is absent in this policy registry page.

Another site also registers repositories. It is OpenDOAR (Directory of Open Access Repositories). OpenDOAR also registers open access repositories around the world (Yakel, Rieh, Jean, Markey and Kim, 2008). This is a service of SHERPA (Securing a Hybrid Environment for Research Preservation and Access). SHERPA, based at University of Nottingham, was established for facilitating worldwide rapid and efficient dissemination of research outputs. Registration with this directory requires open access publications which means at least some of the resources of the repository should be open for all. Table-2 shows the number of repositories in different regions of the world registered at OpenDOAR (OpenDOAR : The Directory of Open Access Repositories, 2018). The information was collected on 14 May 2018 and Figure-1 shows the number of organizations associated with establishing the repositories.

Table-2: Geographic area wise number of repositories in OpenDOAR

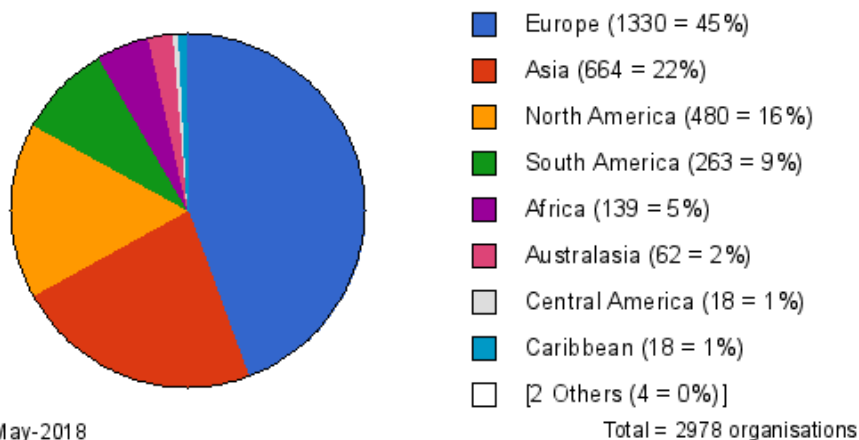
Geographic Area	Number of Repositories
Africa	158
Asia	705
Australasia	70
Caribbean	19
Central America	19
Europe	1617
North America	614
Oceania	4
South America	312
Unspecified	1
Total	3519

Source: OpenDOAR website

The highest numbers of repositories are in Europe according to websites of both OpenDOAR and ROAR. North America followed Europe according to ROAR. But, in OpenDOAR, North America is behind Asia. Asia holds second position with 705 repositories in OpenDOAR and third position having 832 repositories in ROAR.

Registrations of these sites are not compulsory, rather it is voluntary. Naturally, there would be the possibility of excluding a number of repositories. These two sites help us to understand the minimum number of repository existence in the world. Repositories which are not bound by open access policy cannot register in OpenDOAR. However, ROAR allows other types of repositories too.

Proportion of Repository Organisations by Continent
Worldwide



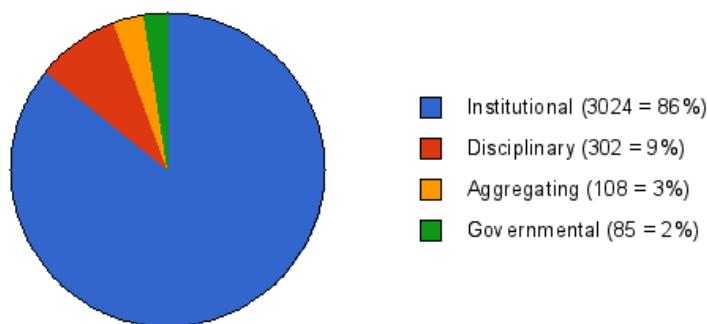
OpenDOAR 14-May-2018

Total = 2978 organisations

Figure-1: Organizations that established repositories in different parts of the world

Two thousand nine hundred seventy-eight organizations established repositories according to OpenDOAR. Asian representation among these organizations is twenty-two percent. Presence of IRs in Europe is more than double of Asia.

Open Access Repository Types
Worldwide



OpenDOAR 14-May-2018

Total = 3519 repositories

Figure-2: Various types of repositories in OpenDOAR

Figure-2 shows that all repositories registered in OpenDOAR are not institutional repositories. There are three other types of repositories – disciplinary, governmental

and aggregating repositories. However, 86% of the listed repositories are institutional.

Another important service is provided by SHERPA to identify the open access journals. It is RoMEO (Rights Metadata for Open Archiving). This is one of their most popular and useful services. It collaborates with many international partners, especially with the publishers. To assist researchers, it lists the publishers of the world identifying their willingness to permit archiving. RoMEO categorized publishers into four colors according to their open policies which usually provided in their copyright transfer agreements.

Table-3: Number of publishers according to archiving policy

RoMEO Color	Archiving policy	Publishers	%
Green	Can archive pre-print and post print	1042	41
Blue	Can archive post-print (i.e. final draft post refereeing)	845	33
Yellow	Can archive pre-print (i.e. pre-refereeing)	166	7
White	Archiving is not formally supported	490	19

Source: SHERPA website

On 14 May 2018, two thousand five hundred forty-three publishers were found at the RoMEO database (SHERPA/RoMEO, 2018). According to RoMEO colours, the authors can understand the level of rights and publishers' copyright rules, i.e., whether the publishers allow authors to deposit their papers in the authors' affiliated repositories. Checking a publisher's position is necessary for authors to keep control over their own papers/works. The Table-3 shows the number of publishers according to the colors and Table-4 shows the geographic area-wise number of publishers.

Table-4: Number of publishers in RoMEO database

Geographic Area	Number of Publishers
Africa	42
Asia	293
Australasia	57
Caribbean	11
Central America	5
Europe	1298
North America	656
South America	142
Unspecified	39
Total	2543

Seven publishers were found on SHERPA/RoMEO site which originated in Bangladesh. Table-5 shows those publishers and their RoMEO colours.

Table-5: Bangladeshi Publishers in SHERPA/RoMEO

Publisher	RoMEOColour
Bangladesh Association of Young Researchers <ul style="list-style-type: none"> Journal of the Bangladesh Association of Young Researchers 	Blue
Bangladesh Livestock Society <ul style="list-style-type: none"> Bangladesh Livestock Journal 	Green
Bangladesh Medical Research Council <ul style="list-style-type: none"> Bangladesh Medical Research Council Bulletin 	Blue
Bangladesh Pharmacological Society (BDPS) <ul style="list-style-type: none"> Bangladesh Journal of Pharmacology 	Blue
Bangladesh Society of Medicine <ul style="list-style-type: none"> Journal of Medicine 	Blue
Network for the Veterinarians of Bangladesh <ul style="list-style-type: none"> Journal of Advanced Veterinary and Animal Research 	Green
Pediatric Endosurgery Group <ul style="list-style-type: none"> Bangladesh Journal of Endosurgery 	Green

Repository managers usually convey authors the publishers' position on copyright issues. They usually advocate for green publishers and pursue authors to avoid the white group. The repository managers are even happy with blue and yellow groups as both grouped publishers allow at least pre-final version of the authors' works. Excluding the 'white' category, there were around 81% publishers, listed on RoMEO website, which were somehow allowing authors to submit their works into their institutional repositories.

Institutional Repositories in Bangladesh

The research contents or publications of Bangladesh are yet to get considerable exposure. Islam and Akter (2013), Islam and Alam (2011) and Shoeb (2010) identified poor visibility of research outputs as a major problem of scholarships of Bangladesh. Quality of research outputs depends on the recorded readership which can be quantified by their citations from other authors (Islam and Akter, 2013). Impact of research work is very important to authors. The impact can be increased by receiving more citations. Poor visibility of research works is the main reason for their low impact. Precondition for reported readership or citations is to make the research papers available to other authors. By establishing Institutional Repositories, libraries are trying to overcome this problem. Some libraries of Bangladesh in the meantime have taken initiative in this regard.

Islam and Akter (2013) found three repositories in Bangladesh. Chowdhury, Uddin, Afroz and Sameni (2011) mentioned about those three repositories too. But, Chowdhury, Uddin, Sameni and Afroz (2011) found only two repositories active and reported that one more IR was in the process of establishment. The two active repositories were run by icddr,b and BRAC University. Another organization mentioned in both the papers was Independent University, Bangladesh. Nazim and Mukharjee(2011) found only two IRs in Bangladesh. Maheswaran (2016) mentioned Daffodil International University which was also running an IR. Mukhlesur Rahman (2017) found ten more institutional repositories in Bangladesh. These repositories were associated with University of Dhaka, Islamic University of Technology, CIRDAP, Eastern University, East West University, North South University, Northern University of Bangladesh, Asian University of Bangladesh, Bangladesh University of Engineering and Technology, and Presidency University (Mukhlesur Rahman, 2017).

International Registries, such as OpenDOAR and ROAR listed 14 and 10 repositories of Bangladesh respectively. Some organizations listed more than one

repository in DOAR. Table-6 shows the institutions of Bangladesh listed in two websites (the sites visited on 25 March 2019).

Table-6: Institutional repositories of Bangladesh in DOAR and ROAR

DOAR	ROAR
--	Bangabondhu Sheikh Mujib Medical University
Bangladesh Public Administration Training Centre	--
BRAC University	BRAC University
Chittagong Veterinary and Animal Sciences University	--
Daffodil International University	Daffodil International University
Department of Disaster Management, Government of Bangladesh	--
East West University	East West University
Eastern University	Eastern University
Independent University, Bangladesh	Independent University, Bangladesh
International Centre for Diarrhoeal Disease Research, Bangladesh	International Centre for Diarrhoeal Disease Research, Bangladesh
Islamic University of Technology	Islamic University of Technology
--	National Library of Bangladesh
Sher-e-Bangla Agricultural University	--
University of Dhaka	University of Dhaka

Note: Extracted from DOAR and ROAR websites visited on 25 March 2019

One interesting part is that although the private universities are not permitted to offer any research degrees such as MPhil or PhD, even then, some of such universities have taken the initiative for establishing institutional repositories. Five private universities, viz., BRAC University, Daffodil International University, East West University (two repositories were listed in DOAR), Eastern University (two repositories were listed in DOAR), and Independent University, Bangladesh, registered their institutional repositories in both DOAR and ROAR sites. Four public universities were found in these registries. Only one public university, i.e., University of Dhaka, has registration with the two sites. One public university, Bangabondhu Sheikh Mujib Medical University, registered their IR only in the ROAR. Two more public universities were listed in DOAR. These were “Chittagong Veterinary and Animal Sciences University” and Sher-e-Bangla Agricultural

University. Islamic University of Technology, an international university operating in Bangladesh, is also registered on both the sites. Besides universities, names of three organizations were there. One is National Library of Bangladesh which was listed only in ROAR, one is Bangladesh Public Administration Training Centre which was listed only in DOAR and another is International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b) which was listed in both sites. The Department of Disaster Management, Government of Bangladesh was listed only in DOAR. It is not only collecting its departmental contents, moreover it allows other organizations to submit their resources. So it is a repository of multiple organizations, not purely institutional.

There was an effort to navigate these repositories on 30 March 2019 through the DOAR webpage. Many repositories were unreachable at that time. Later an attempt was made to explore those IRs through their respective university websites too. Except one, none could be reached. Two of those universities' websites were out of service. All others websites were in service but IRs were not active. Some sites showed "Service unavailable".

Zillur Rahman (2013) in his PhD thesis pointed out that under HEQEP (Higher Education Quality Enhancement Program), a project of University Grants Commission of Bangladesh, several public universities initiated to establish IRs. He mentioned the name of seven universities. These were: Bangabandhu Sheikh Mujib Medical University, Khulna University of Engineering and Technology (KUET), Sher-e-Bangla Agricultural University, Bangladesh University of Engineering and Technology (BUET), Chittagong Veterinary and Animal Science University, Department of Information Science and Library Management of the University of Rajshahi, Sylhet Agricultural University and Bangladesh Agricultural University. Visiting the websites of KUET, BUET, and the Department of Information Science and Library Management of the University of Rajshahi on 25 March 2019, active institutional repositories were found.

Discussion

Research organizations and universities of Bangladesh have immense opportunity to run institutional repositories to showcase their own works. The country has 139 active universities and almost similar number of research organizations. Through literatures and repository registries total 22 institutional repositories (excluding multi-organizations repository) were found in Bangladesh.

Registries, such as ROAR or OpenDOAR, listed very few institutional repositories of Bangladesh. Only thirteen institutional repositories were found on the websites of

these registries. Out of thirteen, ten were established by the universities. Research outputs are one criterion for university ranking. This is one of the reasons why the IR concept became popular in the university arena. Along with teaching and learning, a prime function of the universities is to conduct research. Research students of the universities are regularly producing research papers in the form of theses or dissertations. Faculty members are also trying to write research papers to contribute to their professional development. The universities try to showcase all of their research outputs for their own benefits and for helping the researchers. Many universities nowadays keep a substantial portion of their resources open to ensure more citations of their works. Researchers of research organizations also want maximum citations from other researchers.

Researchers/authors usually get their source materials for their works in the libraries. Because of financial and other limitations, libraries cannot subscribe all the reading resources of the world. Especially, high price of journals is the main barrier in the libraries to get good number of reading resources. As a result, authors are not receiving adequate citations. The open access movement emerged to address the researchers' continuous demand for getting citations. The Internet is a great enabler of the open access movement. The university libraries around the world are exploring the institutional repositories in digital form to support the universities and their stakeholders. IRs will, certainly, be the active contributors for making local contents available to the global community.

One may argue that National Library of Bangladesh (NLB) is receiving local documents and already a national depository is developing there. NLB publishes National Bibliography of Bangladesh to disseminate local documents. The institutional repository would be a duplication of work.

In fact, the National Bibliography of Bangladesh covers published print items received by NLB as legal deposit. On the basis of bibliographic information, one can consult with original by visiting the National Library physically. Unpublished documents are not covered by the National Bibliography of Bangladesh. It does not index all the articles individually, rather it indexes the publication that holds the articles. Again it receives only the first issue of a serial. Though National Library of Bangladesh started digitization of their materials, its periphery does not cover all documents created in the country. It is inevitable to develop a system through which one can get documents published in Bangladesh easily. Due to this, an individual organization needs to develop its own system of information retrieval and document delivery. Librarians may play an important role in this regard. Salawu (2010) described the importance of local contents and role of librarians as follows:

“... there has been a growing recognition of the need to generate local content with a view to making resources available through new and traditional media in order to empower communities and lead them to an allinclusive knowledge. The onus rests on libraries to intensify creation and acquisition of local content in order to meet the challenges of information age.”

It is expected that the research outputs coming through the institutions of Bangladesh would address the problems and challenges relating to managing local contents. Many research organizations are in existence in Bangladesh. These research institutes are also providing a substantial amount of research outputs. Usually, research outputs come through journals or working papers in print form. But locally published journals and the working papers have minimal circulation due to many limitations. Actually, very few journals are indexed in Web of Science or Web of Knowledge. Web of Science or Web of Knowledge is considered as most dependable scholarly search engine which provides dependable sources. Since research outcomes are not getting wide circulation and not indexed in high quality scholarly search engines, most of the research results fail to reach the serious researchers.

Krishnamurthy (2011) mentioned IRs as the very practical and cost-effective strategic means for universities (also research organizations) to advance scholarly communication. IRs would play an important role to display the research outputs of Bangladesh and contribute in world scholarly communication in a higher rate. The success of IR depends on both librarians and users. The support of authorities is the most essential part for the success of this program.

The repositories may be in the traditional form of storage device. In the current scenario it is wise to initiate the development of IRs in digital form, because the digital revolution has affected the libraries of the world and the institutional repositories are now evolving with the resources available in digital form. Some Open Source software makes IR establishment easy in digital form for any organization. Traditional archiving or storage cannot reach the people, rather people have to visit those places physically. Digital archive overcomes this drawback of the traditional storage devices and now people can access these resources from home.

It is expected that all scholarly articles and books will eventually be available in digital form (Maron and Pickle, 2013). The digital nature of information services provides endless opportunities and venues to organize and link the information to make it available to library users (McClure, 2004). McClure (2004) mentioned that

links among the information resources via the networked environment cover a range of choices for presenting, using, and accessing information.

Current institutional repositories are developing in digital format. So, it is the reality and demand of time to focus on the digital institutional repository. However, an Institutional Repository, nowadays, includes the electronic version of journal articles, pre-published articles, data sets, presentations, technical reports, seminar papers, teaching materials, theses, dissertations, work in progress, important digital images, etc. (Bailey, Coombs, Emery, Mitchell, Morris, Simons and Wright, 2006). Librarians are playing an important role to build repositories with such resources in their respective organizations through their expertise and stewardship. It is important to note that the resources in digital form, because of their fragile nature, need more attention for preservation comparing to resources available on paper (RLG-OCLC, 2002). So, the early initiative in Bangladesh may save many born-digital resources. A decade ago, the Census of Institutional Repositories in the United States found only 10.8% of the total respondents, (a total of 446 respondents responded to their survey) had IRs and 36.3% respondents were in the planning stage (Rieh, Markey, St Jean, Yakel and Kim, 2007). By now, IRs have become much matured. A European survey for their universities (169 universities participated), conducted between the end of 2015 and early 2016, found that 76.9% universities own institutional repositories (Morais, Bauer and Borrell-Damian, 2017). The report also mentioned that only 9.5% of universities reported that they did not have IRs. There were a few universities (1.8%) who were not aware of this. The remaining 11.8%, though they did not have their own IRs, shared the IRs of other universities (Morais, Bauer and Borrell-Damian, 2017). As for the universities of Bangladesh, only 10 universities registered their repositories in the repository registries and nine more universities were mentioned by several authors. In total, 19 universities (i.e., 14% only) established institutional repositories. Apart from universities, only four organizations were found in the registries and literatures. That means, the initiatives from other research organizations is also not very noticeable.

Affordability of the institutions could not be the cause of low presence of IRs in Bangladesh. Universities and research organizations of Bangladesh maintain good libraries. In fact, the position of the university and special libraries are better than any other libraries of the country. These libraries are the pioneer of library automation program in the country (Chowdhury and Khan, 2012). Apparently, there are yet very few initiatives to digitize their own publications and the concept of the institutional repository in digital form has not yet received much attention from many of them. The concept of institutional repository possibly is not clear to the

researchers of Bangladesh. Elahi and Mezbah-ul-Islam (2018) stressed on public awareness raising to make the concept of institutional repository popular.

Bangladesh is marching towards a digital revolution. The Government of Bangladesh is emphasizing digital creation and working to achieve 'Digital Bangladesh' by 2021. 'Access to Information (A2I)', a project of the Prime Minister's Office of Bangladesh, in the meantime spread out its network throughout the country through establishing 'Union Digital Centres' (UDCs). Unions are the head offices of the lowest administrative unit of the local government.

Libraries of Bangladesh are not falling behind. Rahman (2017) found only four libraries which were running in manual system out of 33 libraries he surveyed. Rahman (2013) found only six manually operated libraries out of 20 university libraries. Their works allow us to realize that many libraries of this country are using computers and have internet connection. Consequently, good number of libraries would have infrastructure for developing IRs. It is required to identify the obstacles that are hindering the libraries to proceed in establishing IRs at their respective organizations. Lack of skilled manpower may be one reason, but lack of opportunities for training may also be another reason. The other reasons might be - the librarians or library heads are not interested in IR to avoid new burdens; the users are not interested to help librarians by posting their own contents or the policy does not permit them to proceed with it. Leadership plays an important role to make any change. To make the information resources available to the researchers by establishing IRs in different institutions, all challenges and barriers need to be addressed properly by the concerned authorities and in this regard a survey is required to come-up with specific recommendations to popularize IR system in Bangladesh.

Only understanding the barriers will not help to grow IRs. The concerned authorities of Bangladesh should give appropriate attention and provide support and incentives for the establishment of repositories in the respective organizations. University Grants Commission of Bangladesh, Ministry of Education, Ministry of Science and Technology, Ministry of Information Technology, Ministry of Agriculture, Ministry of Health, among others, should play a vital role to provide incentives and supports to their own agencies/divisions/departments. The supports can be of different forms, such as, financial, technical, sharing of skills and manpower, training, and policy development and implementation. The repositories not only showcase the institutions' scholarly works, it also shows a country's status on scholarly activities. The prestige is embedded with both, i.e., institutions and the country.

Conclusion

Since the beginning of the 21st century, the importance of the institutional repositories has been recognized by the universities and research organizations all over the world to overcome the low presence of the research outputs in the libraries and ensuring better citations of the research papers. Digital environment helps to grow institutional repositories. The Government of Bangladesh is also emphasizing digitization. Developing digital institutional repository would be the right project to capture our institutional scholarships and it will be an easy means of dissemination of the scholarships of the country. Research and university libraries can take initiatives as most of those have capacity to establish their own repositories. Awareness among the Bangladeshi authors, librarians and the authorities on the benefits of institutional repository would help it make a strong foothold in this country.

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