Challenges and Prospects of Higher Education in Afghanistan

Shaheen Yusufzada[1], Zhiqiang Xia[1], and Maryam Sediqi[2]

[1]School of Public Administration, Sichuan University, Chengdu 610065, China

[2]College of Psychology and Educational Sciences, Kabul University, Kabul, Afghanistan

ABSTRACT: Education is one of the vital basic elements of development for a developing country like Afghanistan. The aim of this study is to explore the challenges and prospects of higher education in Afghanistan. This study adopts a qualitative approach and based on secondary data. A systematic review has been done to substantiate the argument. This study explores that the opportunity for higher education in Afghanistan is very little and far beyond to the level of expectation. It is due to the long-time war as well as destruction of the country. This study also analyzes the prospects social, economic and cultural perspectives. This study argues that education can play a pivotal role for developing economy, culture and strength of a modern nation. For ensuring smooth educational development, this study recommends that quality of education should be ensured in every stage of education. Equal opportunity should be ensured for male and female as well as financially poor students, and multi-dimensional education system should be ensured by the government of Afghanistan.

KEYWORDS: Education administration, policy, educational opportunity, quality, leadership.

1 INTRODUCTION

Afghanistan is a country which faces a series of war and destruction years after years. Though it is known as developing country but there is no such development visible last few years. But Afghanistan has a decade long prominent culture and ancient rich history. It is a country of 31 million people of which about 2-3 million people is considered as ethnic people. The major ethnic groups are Pashtuns, Tadjik, Hazaras and Uzbeks. It has also two official languages such as Pashtu and Dari [1]. Due to continuous war and destruction, education facilities are not smooth in Afghanistan. There are three categories of education systems available in Afghanistan such as traditional, modern as well as Islamic education. Islamic education is a top practiced education system irrespective of rural and urban areas in Afghanistan [2]. Learning Quran is prioritized education with other education system. Islamic education system is practiced from the very beginning of arrival of Islam in Afghanistan.

Islamic education is practiced in the mosque under the guidance of Imam (leader) over the country. The level of learning is usually dependent on the size of the city and location. Though sometimes a little learned people are considered as teacher in remote village areas [3]. Nowadays, students usually attend to conventional school, Islamic schools (Madrassa) and kindergarten [4]. Islamic education is a part of almost all schools for ensuring smooth learning. Due to geographical position, Afghanistan was free from colonization. In Nineteenth century, it is focused as an Islamic country. In 20th century, a new constitution is formed prioritizing girl's education for all [5]. Though primary education with free and compulsory system started from 1935, but the progress is beyond the expected level. Usually primary level covers grade one to six. In Afghanistan, children start education at the age of six or seven like other countries [6]. In 1903, first modern conventional school is established to serve modern education in Kabul.

The other city also experienced modern schools in 1919. In 1921, a girl school was established to serve education for female students. The rapid development of education was found after 1950. In 1964, the constitution of Afghanistan ensures free and equal education for all over the country. Technical education was also gained momentum in 1969 through establishment of Polytechnic Institute in Kabul. Almost all engineering field was included to teach students. Accordingly, Balkh University, Herat

University and Kandahar University was established in 1986, 1988 and 1991 respectively. Some other institutions were established in Baghlan, Takhan, and Bamiyan in mid 1990s [5]. The modern education facilities started from 1996 but suffered from various logistic facilities. Besides, Taliban government excluded girls from universities. The quality of vocational education is little bit lower than the general education. Though vocational education is available at university level. It was started in 1956 but got full form 1968 through establishment of Kabul University. Frequent war made change in infrastructure of higher education institutions [7].

Though various challenges are common but there is also opportunity to overcome the challenges. A world class quality education can be ensured through solving the existing problems. Few researchers have already been done in the field of education such as education system, problems, quality, general challenges [8],[9],[10],[11],[12] but challenges and opportunities in higher education are still lacking. Therefore, this study is intended to explore the potential to solve the existing problems in higher education in Afghanistan.

2   METHODOLOGY

A qualitative method has been adapted in this study. Secondary data like government report, international NGOs report, various available documents, journal articles, books and newspaper article published in Persian language have been assessed all related data for ensuring data reliability as well as validity. A careful selection of information has been done through cross-checking of information. Sometimes, this study depends on online sources but careful cross-checking and verification has been done. Besides, expert opinion has be collected from Afghanistan especially for focusing the present realistic challenges in the university campus, curriculum, assessment system, research and international collaboration. A careful selection of latest information also been done for meaningful presentation of this study.

3   RESULTS AND DISCUSSION

The results and discussion section have been presented into three subsections such as features of education in Afghanistan, challenges of higher education and possible ways to solve the challenges.

3.1   FEATURES OF EDUCATION IN AFGHANISTAN

Islam overwhelms most pieces of the nation; henceforth, Islamic instruction has come to roughly the entire public of the nation and the locale, remembering those living for provincial zones [7]. Educating Quran has been the center of strict training, particularly, Islamic instruction in the district and the nation, notwithstanding, perusing, composing and including were considered even in country regions. Instructive framework in Afghanistan can be partitioned into three primary classes that incorporate customary, current and Islamic training. In different districts of the Islamic world, Islam is blended in with pre-Islamic culture and traditions; where a few cases can be seen as opposing to the Quran lessons. As model, retribution and blood retaliation, even on individual Muslims is against the fundamental lessons of Quran. The foundation of most clashes can be found in customs and convictions that have nothing to do with Islam except for attached to some inborn practices and beliefs [2].

Islamic instruction started with the appearance of Islam. Those with strict information, normally men, have been educating in the mosques all through Afghanistan for a long time. Their degree of information relies upon the area and the size of the city or town. A man with a low level of customary and Islamic information can be viewed as a Mullah in a little town while is treated as an ignorant in a bigger city or town. Today, some male youngsters go to madrasas to get strict training and some other kids go to normal grade schools. Islamic instruction is a part of these schools too. All kids, male or female, get some strict instruction in some structure during their pre-school age [8].

3.1.1   MODERN EDUCATION IN AFGHANISTAN

Analysis Afghanistan was rarely colonized. English made three bombed endeavors to catch and hold Afghanistan. Toward the finish of the nineteenth century Afghanistan as a merged and fortified state accentuated Islam as a state religion and disconnected itself from the western world. In any case, in the mid twentieth century an endeavor was made to modernize the nation. The principal constitution was embraced and instruction openings were built up, likewise for young ladies [12].

Free and necessary essential tutoring goes back to 1935 in Afghanistan. Essential training covers grades one to six. Offspring of age six or seven beginning as first graders and finish the elementary school when twelve or thirteen. The main current school, for young men just, was built up in Kabul in 1903. After 1919, schools were set up likewise outside Kabul. The primary young

lady school was established in 1921. During the 1950s, the training part extended quickly. In 1956, there were 126,000 understudies selected. The constitution of 1964 ensured free training for all. Educational development from 1950 to 2015 is mentionable (Figure 1).
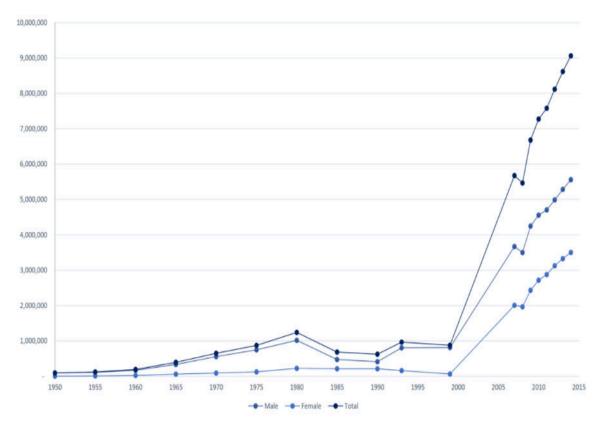

Fig. 1.   Educational development over a long period (1950-2015) [1]

3.1.2   TECHNICAL EDUCATION HISTORY

In 1978, the education system in Afghanistan was started to develop its quality, though the first medicine college was opened in 1932 in Kabul, Afghanistan. In 1946, Kabul University recruited many faculties for smoothly running the university. Women felt interest to admit in Kabul University in 1960 but a central campus made ready to hold all the faculties in 1964. Then Kabul University tried to establish a specialized institute for medicine education called Nangarhar faculty which acted as a center to develop Nangarhar Islamic University later.

In order to accommodate a huge number of students, a number of educational institution was required to provide quality education [11]. Considering the importance of the issues, a number of vocational institution was established. But the development of vocational institution was very slow and tried to provide quality education. Due to continuous war, a number of university and college infrastructure are damaged which causes physical, economic damage and psychological instability [6].

3.2   CHALLENGES OF HIGHER EDUCATION

Afghanistan is fronting a critical time in their history. It causes instability of the people's mind, damage of physical infrastructure, discourage student to attend school, college and university, disheartened guardian of the students to stop the education of their children, and policymakers to develop new infrastructure [13], sufficient funding and timely policy [14]. Higher education in Afghanistan is regularly facing a number of severe challenges in terms of social, political, financial and moral changes, and the future solely depends on the initiatives taken by the policymakers [15]. The main challenges faced by the higher education authorities are as follows:

3.2.1   QUANTITY

Regardless of the limitations of assets, the quantitative extension has been profoundly terrific in the post-autonomy period. The foundations have not exclusively been duplicated, the understudy enlistments at schools and colleges have enrolled especially high pace of development. The quantities of new participants are currently more than the all-out number of understudies in advanced education preceding autonomy [16]. The interest of advanced education has hence expanded by jumps and bonds. Notwithstanding quality control just as solidification, it will keep on developing continually for quite a while to come [17]. The quantitative extension is obvious because of expanding desire of the individuals and social, monetary, and political powers impacting the improvement of advanced education [28]. In the post-autonomy period, the job of advanced education has been all around perceived in the improvement of science and innovation, just as different fields of human headway [19].

3.2.2   EQUITY

The amazing leap forward was apparent in the majority rule nations of the existence where establishment was given to all grown-ups independent of rank, doctrine, sex, and financial or economic well-being (Sarker et al., 2019). The perfect of value was seriously obliged by leaving in characteristics in the dissemination of property and profitable assets, low degree of training and mindfulness among the individuals, and solid impacts practiced by individual and gathering to encourage their very own sectional intrigue as opposed to add up to social intrigue (Nasrin et al., 2019). The way of thinking of social equity is particularly much the same as the rule of value [22]. It is an invite improvement over the idea of inalienable imbalance which was looked to be clarified by organic contrasts among people [16]. The way of thinking of balance of men being applied to political procedure, circulation of property, and gainful assets is seen as the wellspring of imbalances in the public arena [23]. This methodology helped the advancement of abilities among men through equivalent appropriation of higher instructive open doors both in quality and amount [24]. There is the way of thinking of disparity as a characteristic inherited, organic marvel, with no logical levelheaded proof. This idea is established in sectional intrigue instead of in cultural intrigue. The developing quantities of schools and colleges have given access to advanced education to the individuals in different parts and segments of creating nations in South Asia [25]. Yet, the enlistments of understudies particularly female understudies are generally exceptionally little.

3.2.3   QUALITY OF EDUCATION

Advancement of community not just depends on the number of business and ventures created, yet in addition on their quality. It again prompts personal satisfaction of the individuals and the nature of the general public all in all. It is properly said that the philosophical premise of value is the natural attributes of an individual to achieve a better quality and the need of greatness for accomplishing a higher stage in the advancement (Sarker et al., 2019). The extent of the possibility of value is seriously constrained by two broadly winning perspectives. Quality is a particular wonder and no one but few can achieve it. Ensuring quality in explicit region instead of value is fundamentally unrelated and stress particularly to the loss of value [26]. Endeavors to acknowledge explicit destinations of value will in general restricted down the extension and debilitate endeavors to achieve quality in different backgrounds. Different projects have been created and are being actualized throughout the previous two decades for improving the nature of instructors and their capability in releasing their obligations and duties (Sarker et al., 2018). The advanced education commission has been giving budgetary help to these projects of personnel improvement which empower educators to stay informed concerning the latest curriculum and research examines just as cooperate with specialists in the same and related field of knowledge. These projects target improving the expert capability of instructors with the goal that they can grant great directions and contribute essentially to increasing the expectation of advanced education in creating nations [1].

3.2.4   STUDENT TURMOIL

The condition of higher education in colleges and are not agreeable according to international standard. Lacking of physical and instructive offices is getting a lot of deterrent the method for improvement. Educators are less persuaded to do certain assessment. Most instructors are not qualified and able to teach and conduct research higher education organizations [28]. Along these lines, social or scholarly foundation is a significant factor in deciding the frame of mind of the understudies toward social monetary and administrative issues. Hence, examines are important to satisfy the expectation of the legislature and the goals of the adolescent just as to adapt to the progressions which are the requests of all understudies of today. The college understudies ought to figure out how to consider potential answers for this quick evolving world [29]. Along these lines, so as to accomplish this, the understudies at the college level need to get a lot further information about the citizenship job in the

---

public eye and the new open doors that open to the understudy because of financial improvement and innovative progression [30].

3.2.5 EMOTIONAL INTEGRATION

Education can assume an essential job in fortifying enthusiastic integration [31]. It is felt that training ought not target bestowing information however ought to build up all parts of an understudy's character. It ought to widen the viewpoint, encourage the sentiment of unity, patriotism, a soul of penance, and resilience with the goal that restricted gathering interests are submerged in the biggest enthusiasm of nation [4]. Whereas, the future generation ought to be prepared in quality based education system for the development of the country.

3.2.6 REFORM OF EDUCATION ADMINISTRATION

Education administration reform is a continuous process. It requires necessary update of the curriculum in higher education, educational leadership and management. The quality of the higher education should be a global standard level so that graduates can compete at global competitive market. There should be an interconnected linkages between the policymakers and educational institutions as well as among the domestic educational institution to the international institution for exchanges ideas, syllabus, researches and necessary collaboration [32]. Bureaucratic protection from change is a marvel which can be discovered both in the progressed and the underdeveloped nations [33]. Protection from change inside an organization ordinarily shows itself in the standards of conduct and mentalities of its individuals. These reactions might be gathered in two general classes, those that look to extend the college organization administration as an establishment, and the individual reactions to different dangers, saw from inside and outside the administration. In the two cases changes in business as usual are viewed as a potential risk to endurance.

3.2.7 FACULTY

The present size of the staff is exceptionally low as indicated by the usual international standard. The teacher student proportion is remarkably low which is very bad for educational institution. The turnover ratio of educational staff is also high which indicates a sign of dissatisfaction of the employees in the organization. Besides, majority of the teachers have no higher degree and specialty in technical education and research which is also a prominent factor for low education quality. The salary and other facilities of the teachers and staff are also lower than neighboring countries that makes a dissatisfaction of the teachers to provide sincere and quality education. The advanced education commission is trying to give offices to their instructors and contracting outside staff for the instructive norms in Afghanistan. Still the staff and specialized backing of the training teacher are absent. There is no genuine arrangement or set of rules for showing assessment or educating viability. The above issue is an incredible test for advanced education in Pakistani and South Asian creating nations. An assessment of the present supply and future possibilities for drawing in able employees in adequate number to meet prerequisites in different territories; fitting move ought to be made to give an appealing and aggressive workforce pay; sensible instructing and research assignments; and incidental advantages to pull in top positioning teachers [7].

3.2.8 INSTRUCTIVE POLICIES

The staff should have essential duties regarding deciding the instructive approaches of the organization. Instructive polices incorporate such basic issues as the topic and techniques for guidance, offices and backing for the examination work of employees and understudies, measures for confirmation of understudies, and so forth [1]. They likewise incorporate the essential part of the student life which relate legitimately to the instructive method. The personnel ought to efficiently partake in choices made on different issues that may directly influence the educational approaches for that it is principally mindful. These issues remember significant changes for the size of the understudy body, noteworthy adjustment in the scholarly schedule, establishment of the new colleges and university, the arrangement of augmentation administrations for the network, as well as suspicion by the establishment of research or administration obligations to open private or public offices [34].

3.2.9 SCHOLARLY FREEDOM

The opportunity of scholarly chance must be apparent so as to allow the staff, analysts, and student to carry on their jobs. Scholarly freedom for university's self-rule are now and again viewed as synonymous, however they are two very various ideas, though they can cover at numerous focuses. The mentioned facilities are the embodiment of the development of the higher education as well as authoritative undertakings. The essential capacity of an educational institution is to protect, increase,

condemn, and convey information and to cultivate resourceful limits [7]. The facilities are performed by a network of researchers who must be allowed to practice free judgment in the arranging and execution of their instructive duties. Sadly, an educational institution may think that it's hard to earn the scholarly facility or self-sufficiency [35]. The sheets of trustees ought to be progressively worried about issues prompting the relations of an educational institution with the external bodies and approach.

3.2.10 COURSES AND CURRICULA

The courses of the higher educational institutions are not designed as per the guideline and standard of the higher education authorities. There is no congruity of a portion of the significant courses. There is additionally no connection between the available courses and the latest information. Such a significant number of significant and present-day courses designed for the higher education and learning are not instructed by any stretch of the mind. The learning programs are not written in detail and close to tutor's preferences, interests or experience. The essential science courses are not planned well to fit the need of the understudies, and they are not efficient, or accurately managed by the division [36]. For the most part talking, there are insufficient well-prepared staff and organization workplaces, study halls, or building, science, and different research centers for the developing understudy body and employees. The workshops at the more elevated level are not appropriate for preparing, in light of the fact that basic materials, elements, space, and methods are not sufficient as indicated by the necessary standard. There is a continuous change in and bringing down of the level of prospectuses and lethargic attitude to higher education [37].

3.2.11 PLANNING AND FINANCING

Integral to all the priority sector is another idea of planning and financing at the more elevated level. The regular arrangement of a yearly spending plan is likely the most confounding and least comprehended. The monetary allowance obviously, plays out various basic capacities which even the most baffled will recognize. The worry here is with the spending limit as an instrument of scholarly arranging which may advance the extraordinary points of every school and establish a down to earth implies by which all college reason might be acknowledged in a perfect world, it must protect budgetary dissolvability of the college, however ought to likewise put duty and comparable power where it might be practiced most [38]. Concerning different components of the spending limit and the assignments made by officials or overseeing sheets among contending requests, the staff ought to be educated regarding significant improvements in managerial arranging including proposed capital consumptions, and the workforce ought to likewise be counseled on significant issues of strategy engaged with such advancement [39]. Clearly, any suitable arrangement must be planned as to underwrite as completely as might be steady with scholastic endless supply of these, and ideally to prevent occasional emergencies [40]. Truth be told, practical arranging and definitive activity are the best way to keep instructive methodologies from deteriorating into fitful responses to unexpected exigencies [41]. The college's point ought to be to form a framework which in its year to year activity may accommodate its very own proceeding with recharging.

4 CONCLUSIONS AND RECOMMENDATIONS

Remaking of the country in its various structures and fields relies upon the country's instruction, and advanced education is the foundation of any efficient, social and social improvement. The economy, culture, and quality of a cutting-edge society are bolstered by training of its residents, and especially through organizations of advanced education that address national issues and universal gauges. Past fundamental instruction, advanced education produces mindful, educated and exceptionally gifted pioneers for building and keeping up a common society with a developing economy where issues of joblessness, destitution, and struggle can be keenly settled. Afghan colleges and schools must give thorough learning chances to youth to guarantee the country's future supply of taught experts who add to national advancement in all fields. These organizations of higher learning must be broadly open to qualified youth so as to guarantee new ages of taught pioneers, researchers, researchers, and experts who add to the development of a stable vote-based society. Afghanistan today needs to reestablish its previous fantastic foundations of advanced education, just as make new and assorted organizations. Colleges in Afghanistan can indeed become makers just as purchasers of information. Understanding and perceiving the difficulties and openings, assumes a key job in appropriate usage of different missions set by the Ministry of Higher Education to accomplish the dreams portrayed in the strategic plans. During the execution time of the principal vital arrangement created by the Ministry of Higher Education in Afghanistan, a portion of the previously mentioned difficulties just as circumstances were revealed, perceived, and experienced firsthand by the offices and people engaged with different exercises identified with fortifying advanced education in Afghanistan. Tending to the underlying foundations of the previously mentioned perceptions in structure and

usage of any plan to recreate the instructive framework and fortify the advanced education in Afghanistan assumes a basic job to accomplish the appropriate objectives.

REFERENCES

[1] A. R. Sherzad, "Education in Afghanistan: Challenges and Suggestions for Improvement," Berlin, Germany, 2017.
[2] K. Mashriqi, "Afghanistan Women Perceptions of Access to Higher Education," *J. Res. Initiat.*, vol. 2, no. 1, pp. 1–22, 2016.
[3] M. N. I. Sarker, M. Wu, and M. A. Hossin, "Economic Effect of School Dropout in Bangladesh," *Int. J. Inf. Educ. Technol.*, vol. 9, no. 2, pp. 136–142, 2019.
[4] Asia Foundation, "Education Programs in Afghanistan," 2001.
[5] T. Pherali and A. Sahar, "Learning in the chaos: A political economy analysis of education in Afghanistan," *Res. Comp. Int. Educ.*, vol. 13, no. 2, pp. 239–258, 2018.
[6] D. J. Roof, "Day-By-Day: Higher Education in Afghanistan," *FIRE Forum Int. Res. Educ.*, vol. 1, no. 3, 2018.
[7] Z. Shayan, "Gender Inequality in Education in Afghanistan: Access and Barriers," *Open J. Philos.*, vol. 05, no. 05, pp. 277–284, 2015.
[8] M. H. Romanowski, T. McCarthy, and T. L. Mitchell, "Rebuilding Afghanistan'S Higher Educational System: Observations from Kabul," *J. Educ. Policy*, vol. 2, no. 3, pp. 1–15, 2007.
[9] A. Esmaeily, A. Pahwa, J. Thompson, and D. Watts, "Challenges and opportunities for strengthening higher education in Afghanistan," *ASEE Annu. Conf. Expo. Conf. Proc.*, 2010.
[10] A. R. Sherzad and A. Rahman, "Applicability of Educational Data Mining in Afghanistan: Opportunities and Challenges," *CoRR*, vol. abs/1703.0, pp. 634–635, 2016.
[11] M. K. Javaid, "Education in Afghanistan : Private Higher Education Sector Contribution," in *International conference on the Future of Education*, 2012, pp. 1–5.
[12] M. J. Adkins, "Challenges for Progressive Education in Afghanistan: A History of Oppression and the Rising Threat of ISIS," *Int. J. Progress. Educ.*, vol. 12, no. 2, pp. 104–111, 2016.
[13] M. N. I. Sarker, M. Wu, Q. Cao, G. M. Alam, and D. Li, "Leveraging Digital Technology for Better Learning and Education: A Systematic Literature Review," *Int. J. Inf. Educ. Technol.*, vol. 9, no. 7, pp. 453–461, 2019.
[14] World Bank, "Higher education in Afghanistan: An emerging mountainscape," Washington, DC 20433, USA, 2013.
[15] M. Z. Rahman, M. N. I. Sarker, N. Huda, S. Islam Khan, N. A. B. M., and M. R. Zaman, "Assessment of Socio-Economic and Sexual Vulnerability of Tea Workers in Bangladesh," *J. Soc. Sci. Res.*, vol. 4, no. 11, pp. 229–240, Nov. 2018.
[16] M. N. I. Sarker, M. Wu, R. C. Shouse, and C. Ma, "Administrative Resilience and Adaptive Capacity of Administrative System: A Critical Conceptual Review," in *Lecture Notes on Multidisciplinary Industrial Engineering*, J. et al. Xu, Ed. Springer Nature Switzerland, 2019, pp. 1–13.
[17] M. A. Hossin, M. N. I. Sarker, Y. Xiaohua, and A. N. K. Frimpong, "Development dimensions of e-commerce in Bangladesh," in *Proceedings of the 2018 International Conference on Information Management & Management Science - IMMS '18*, 2018, pp. 42–47.
[18] M. N. I. Sarker, M. A. Hossin, A. N. K. Frimpong, and Y. Xiaohua, "Promoting information resource management for e-government through big data approach," in *Proceedings of the 2018 International Conference on Information Management & Management Science - IMMS '18*, 2018, pp. 99–104.
[19] H. Taheryar, "Perceptions of Quality in Higher Education in Afghanistan : A Case Study of Shaheed Rabbani Education University," University of Massachusetts Amherst, 2017.
[20] M. N. I. Sarker, M. Wu, R. Liu, and C. Ma, "Challenges and Opportunities for Information Resource Management for E-Governance in Bangladesh," in *Proceedings ofthe Twelfth International Conference on Management Science and Engineering Management: Lecture Notes on Multidisciplinary Industrial Engineering*, J. Xu et al., Ed. Springer International Publishing, 2019, pp. 675–688.
[21] M. Nasrin, M. N. I. Sarker, and N. Huda, "Determinants of health care seeking behavior of pregnant slums dwellers in Bangladesh," *Med. Sci.*, vol. 23, no. 95, pp. 35–41, 2019.
[22] P. Bronstein and A. Zahirpour, *The State of Public Education in Afghanistan: Political Problems, and Future Prospects Political Problems, and Future Prospects*. New Delhi 110021, India: Vivekananda International Foundation, 2012.
[23] Q. Cao, M. N. I. Sarker, and J. Sun, "Model of the influencing factors of the withdrawal from rural homesteads in China: Application of grounded theory method," *Land use policy*, vol. 85, pp. 285–289, Jun. 2019.
[24] S. I. Khan, M. N. I. Sarker, N. Huda, A. B. M. Nurullah, and M. R. Zaman, "Assessment of New Urban Poverty of Vulnerable Urban Dwellers in the Context of Sub-Urbanization in Bangladesh," *J. Soc. Sci. Res.*, vol. 4, no. 10, pp. 184–193, Oct. 2018.
[25] M. Daxner and U. Schrade, "Higher Education in Afghanistan: Governance at Stake," Berlin, Germany, 63, 2013.
[26] M. N. I. Sarker, "Instrumentally Rationalizing Public Administration," in *Global Encyclopedia of Public Administration, Public Policy, and Governance*, A. Farazmand, Ed. Springer Nature Switzerland AG, 2019, pp. 1–5.

[27] M. N. I. Sarker *et al.*, "Determinants and Pattern of Urbanization and Counter-Urbanization: The Case of South Asia," *J. Soc. Sci. Res.*, vol. 4, no. 12, pp. 802–812, Dec. 2018.

[28] M. N. I. Sarker, "Public Administration as an Academic Discipline and Social Science," in *Global Encyclopedia ofPublic Administration, Public Policy, and Governance*, A. Farazmand, Ed. Springer Nature Switzerland AG, 2019, pp. 1–8.

[29] M. N. I. Sarker, "Public Administration as a Professional Practice," in *Global Encyclopedia ofPublic Administration, Public Policy, and Governance*, A. Farazmand, Ed. 2019, pp. 1–6.

[30] B. Rubin and C. Rudeforth, "Enhancing Access To Education : Challenges and Opportunities in Afghanistan," 2016.

[31] M. N. I. Sarker, M. Z. Rahman, Q. Cao, and Z. Xu, "Impact of small entrepreneurship on poverty alleviation and sustainable livelihood of street vendors," *Int. J. Innov. Appl. Stud.*, vol. 25, no. 4, pp. 1241–1254, 2019.

[32] Pouras Consult Aps, "Education Sector Analysis Afghanistan," 2016.

[33] M. N. I. Sarker and M. Wu, "Bureaucracy in Bangladesh: A Disaster Management Perspective," in *Global Encyclopedia of Public Administration, Public Policy, and Governance*, A. Farazmand, Ed. Springer Nature Switzerland AG, 2019, pp. 1–5.

[34] M. N. I. Sarker, M. A. Hossin, W. Min, and M. Aktaruzzaman, "Poverty Alleviation of Rural People through Good Governance in Bangladesh," *J. Soc. Sci. Res.*, vol. 4, no. 12, pp. 547–555, Nov. 2018.

[35] M. N. I. Sarker, M. Wu, and M. A. Hossin, "Smart governance through bigdata: Digital transformation of public agencies," in *2018 International Conference on Artificial Intelligence and Big Data (ICAIBD)*, 2018, pp. 62–70.

[36] G. M. M. Alam, K. Alam, S. Mushtaq, M. N. I. Sarker, and M. Hossain, "Hazards, food insecurity and human displacement in rural riverine Bangladesh: Implications for policy," *Int. J. Disaster Risk Reduct.*, vol. 41, no. 12, pp. 1–27, Oct. 2019.

[37] Y. Sun, "Research on the Path of Integration of Innovation and Entrepreneurship Education and Professional Education in Applied Universities," *Adv. Soc. Sci. Educ. Humanit. Res.*, vol. 180, pp. 136–138, 2018.

[38] D. T. T. Hien and S. E. Cho, "Relationship between entrepreneurship education and innovative start-up intentions among university students," *Int. J. Entrep.*, vol. 22, no. 3, pp. 1–16, 2018.

[39] M. N. I. Sarker, M. Wu, G. M. Alam, and M. S. Islam, "Role of climate smart agriculture in promoting sustainable agriculture : a systematic literature review," *Int. J. Agric. Resour. Gov. Ecol.*, vol. 15, no. 2, pp. 1–15, 2019.

[40] M. Yin and Y. Wang, "Research on the Effect of Entrepreneurship Education on College Students' Entrepreneurial Capability," *Eurasia J. Math. Sci. Technol. Educ.*, vol. 13, no. 8, pp. 5813–5819, Aug. 2017.

[41] M. Shafi, M. N. I. Sarker, and L. Junrong, "Social Network of Small Creative Firms and Its Effects on Innovation in Developing Countries," *SAGE Open*, vol. 9, no. 4, p. 1-16, 2019