Preparedness of higher education institutions for achieving Sustainable Development Goal 4: the case of Nepalese universities

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Abstract: The purpose of this paper is to assess the quality of education, research, and governance of Nepalese higher education institutions (HEIs) as a supplement to achieve Sustainable Development Goal 4 (SDG 4) by 2030. This paper follows a qualitative method to analyse the viewpoints of the actors and stakeholders. From the analysis of stakeholders' views, it appears that Nepalese HEIs have not found prepared for integrating their plans, policies, and strategies to the SDG 4. Furthermore, the quality of education, research, and governance require total restructuring to integrate this public policy agenda in the operational activities of universities. This research initiates discourse on policies and framework to inculcate sustainability culture through teaching, research, and good governance. The paper is the first of its type in the context of a least developed country.

Keywords: higher education institutions; Sustainable Development Goal 4; SDG4; universities; quality of education and research; operational activities.

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1 Introduction

Whereas universities are blamed for being big-sized and unmanageable, there are also challenges to meet the quality requirements (Beretz, 2012) and to play a leadership role to implement sustainable practices (Katehi, 2012). In 2016, IAU launched the 'Global Survey on the Role of Higher Education Fostering Sustainable Development', in which 120 universities from 130 countries participated (IAU, 2017). The result of the study indicates that HEIs are increasingly interested in addressing sustainable development issues in their curriculum, teaching, research, and campus management (p.4). The survey finds that a large number of respondents are familiar with the correlation between SDGs and education for sustainable development. The survey also revealed that 45% of the higher education institutions adopted a whole-institution approach, and about 34% declared that their higher education institution had adopted a strategic plan related to sustainable development, while 38% are developing one (IAU, 2017).

How far Nepalese universities are engaged in activities to support SDGs is still not so clear. In recent stakeholder meetings and interviews with high-ranking officials of universities on the higher education reform agenda, none of the stakeholders has mentioned their viewpoints linking this global agenda of development to the goals and activities of universities. Therefore, this paper aims to:

a discourse on the status of quality of education and research, and governance structure, to ensure sustainable development at Nepalese universities

b to assess the preparedness of HEIs to pursue SDG4. This paper applies the term HEIs/university synonymously.

Universities are founded "to be open to all and dedicated to the pursuit of truth in the service of others" (Elphinstone, 1495; https://www.abdn.ac.uk/about/history/#panel453), through "coexistence of research and teaching" (Humboldt, 1809, cited in Drucker, 1994) and "for the common good" [Welby, (2018), p.45]. Concerning the common good, Welby (2018) clearly stated that it "is not something legislated or mandated but is the sum of innumerable small and large actions by every participant in society" [Welby, (2018), p.236]. Drucker (1994) viewed that every organisation, whether it is engaged in business or not, has a theory of business. Citing the example of German statesman and scholar Wilhelm von Humboldt and his contribution, he further stated that "a radically new theory of university … defined the German university". Brubacher (1970) writes about two mutually exclusive theories of higher education: first, "self-authenticating quality" aloof from the social environment, and second, "caught up in the stresses and strains of contemporary events" (p.99). Ingold (2020) highlighted four visions of the future university – freedom, trust, education, and community, and stated its purpose in a democratic society as, "to educate future generations of citizens and to forge the knowledge needed to sustain a just and prosperous world" [Ingold, (2020), p.29]. Inspired by Plutarch, Scharmer (2019) and Leef (2019) state that education is not just giving students the right answer; it is about engaging them in the life-long search for wisdom.

The UN agenda for sustainable development was established with the publication of 'Our Common Future' by the World Commission on Environment and Development (WCED) in 1987. The commission defines sustainable development as the "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (p.41). Formally, HEIs have been working on sustainability

issues since the Rio Summit in 1992 through the implementation of Agenda 21 (https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcom pact/A_CONF.151_26_Rev.l_Vol.%20l_Agenda.pdf). The Magna Carta of European University has documented at the Bologna Conference (1998) that "universities must give future generations education and training that will teach them, and through them, others to respect the great harmonies of their natural environment and of life itself" [cited in Leal Filho, (2000), p.18]. The objective for integrating economic, social, cultural, environmental, and educational goals, as set by the Rio Summit, was ratified by the Nagoya Declaration in 2014 (Nagoya Declaration on Higher Education for Sustainable Development, 2014), which declared to "ensure that the higher education community continues to innovate and contribute to achieving sustainable development in line with the goals and aspirations" (https://i.unu.edu/media/ias.unu.edu-en/news/5466/Nagoya-Declaration-on-HESD-Annex_final.pdf.). It was in September 2015 that the UN General-Assembly passed a resolution to ratify the 17 SDGs Global Agenda 2030. With these developments, HEIs have received a mandate to work for SDGs.

SDG 4 explicitly emphasised on quality education for sustainable development (United Nations, 2015; https://sdgs.un.org/goals). Agenda 4 is related to enhancing quality education, and Agenda 4.3, which is solely dedicated to higher education, declares, "by 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university" (p.18). Agenda 4 is also related to higher poverty (SDG 1); health and well-being (SDG 3); gender equality (SDG 5) governance; decent work and economic growth (SDG 8); responsible consumption and production (SDG 12); climate change (SDG 13); and peace, justice, and strong institutions (SDG 16). Higher education also forms an important part of these goals (https://en.unesco.org/themes/higher-education/sdgs). The agenda on the quality of higher education has received widespread attention of HEIs to embed in the mainstream of higher education and put it into action (Lozano et al., 2015).

The conceptualisation of implementation and research on the university to support SDGs at the university began in the mid-1990s (Leal Filho et al., 1996; Barth and Rieckmann, 2016; Lozano, 2006; Leal Filho, 2010; Rieckmann, 2012). However, due to the inherent complexity and ambiguity in SDGs, it is still hard to embed SDGs in mainstream academia (Bauer et al., 2018; Blanco-Portela et al., 2017). Bauer et al. (2018) argue that a whole-institution approach (the university as a whole) is needed to embed SDGs into the HEIs and to apply transformative actions at all levels of HEIs. At the same time, there is a need to enhance the capacity of HEIs to work with the complexity and ambiguity of SDGs with an integrative view (Giesenbauer and Müller-Christ, 2020).

Scholars also argue that SDGs are "rhetorically malleable and as fluid as those in public and political discourse" [Weisser, (2017), p.1077], "some of them (goals) contradict each other and thus cannot be easily fulfilled", "initiate a renaissance of Utopian thinking" [Hinkelammert, 1994, cited in Vogt and Weber, (2020), p.10], and "prescribes declamatory overload of responsibility [Lubbe, 1994, cited in Vogt and Weber, (2020), p.10], creating "tension between their developmental policy and ecological goals" [Vogt and Weber, (2020), p.10]. While other proclaim that failure to embed sustainability in HEIs suggests that universities have to break the past, and, if not, difficult to conquer the future and will fail to become part of the culture (Adams et al., 2018; Katehi, 2012).

HEIs have to understand the social grammar of responsibility. It is the relationship between subject, object, and addressee, also known as 'social grammar of responsibility'

[Vogt and Weber, (2020), p.9]. Such understanding "helps to overcome the idleness of declamatory overloaded concepts of responsibility in favor of a better understanding of conflicts between ecological and social demands and a down-to-the-earth distance to Utopian thinking" [Vogt and Weber, (2020), p.17]. According to the view of scholars, it appears that our universities have remained highly responsible in the past and will be more responsible in the future. Universities can make a change in our society, visioning for the welfare of the community at large for the common good.

With regard to the role of universities in achieving SDGs, scholars argue that universities cannot stay just as observers; they have to work as movers and shakers, which needs a whole-institution approach (Vogt and Weber, 2020) in search of a culture of sustainability and responsibility. Universities have to be responsible for being the 'transformation lab' in achieving SDGs (Giesenbauer and Tegeler, 2020). Ingold (2020) aptly argues that in a democratic society, the civic purpose of the universities is to educate future generations of citizens and to forge the knowledge needed to sustain a just and prosperous world. Scharmer (2019) argues that, together with upgrading the operating system, vertical development of universities is imperative to cope with the disruptive changes that our society faces in this 21st century.

In the case of Nepal, 'SDGs Status and Road Map 2016–30' (NPC, 2017) emphasises on "equal access for all women and men to affordable and quality technical, vocational, and tertiary education, including university" (Target 4.3, p.29). By 2030, the country has to "ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity, and culture's contribution to sustainable development" (Target 4.7, p.51). Although the country has ratified the SDGs, a few questions need to be clarified in order to embed them in the mainstream academic policies of our universities. Have HEIs been including the SDG 4 agenda in their plans and policies? What are the ambiguities and complexities for reforming Nepalese universities for sustainable development? How to embed sustainability culture at all levels of universities (policy and practical implications)? Whether sustainability agenda of improving the quality of higher education is rhetoric or reality to reform the universities in Nepal?

Research takes the following form – review of the literature, research context, and methodology. We present our findings and then discuss their meaning and implications and draw a conclusion.

2 Literature review

Over the past decades, there has been a wide range of debates on sustainable development in the academic, governance, planning, and development intervention arenas (Emas, 2015). The debate has not only been confined to the role of the government, but also on the role that organisations and individuals have to play in the process of achieving sustainable goals (Leal Filho et al., 2015). Sustainable development has emerged as a global development agenda that is pervading every sphere of life. The word 'sustainability' comes from two words – sustain and able (https://www.dictionary.com/browse/sustainable). It "can perhaps be seen as the process(es) by which something is kept at a certain level" (https://youmatter.world/en/

definition/definitions-sustainability-definition-examples-principles) and "able to be maintained or kept going, as an action or process" https://www.dictionary.com/browse/process). The three pillars of sustainability are: economic, environmental, and social (Grant and Scott, 2020; https://www.investopedia.com/terms/s/sustainability.asp). The original definition of sustainable development, provided by the Brundtland Report, in 1987, is as follows: "a way of organizing society so that it can exist in the long term" (https://youmatter.world/en/definition/definitions-sustainable-development-sustainability). More specifically, it refers to the process of "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" [WCED, (1987), p.43]. The publication of 'Our Common Future' in 1987 by the World Commission on Environment and Development (WCED) promoted the term 'sustainable development' to initiate global efforts to spread and develop the concept.

Beretz (2012) noted that universities are operating in a very complex and fragile environment that can not be solved just by recognising as a knowledge factory. Therefore, "all stakeholders should ensure that universities remain the best environment for innovation to flourish. In this way, we can set the stage for our society to be prepared for the unpredictable and unknowable. But whether we are on the right path remains totally unforeseeable" (p.150). There has been a wide range of debates undergoing to embed SDGs in universities/HEIs (MoEST, 2019; IAU, 2017; Vogt and Weber, 2020; Emas, 2015; Blanco-Portela et al., 2018; Leal Filho, 2011; Weber and Dudarstadt, 2012; Verhulst and Lambrechts, 2015). Most of these debates are concentrated on conceptualising SDG in HEIs, embedding SDG culture, governance, quality of teaching, connectivity, research, technology transfer, and the common good.

According to Diesendorf (2000), the goal of sustainability could be achieved with the sustainable development process. Dyllick and Muff (2016) explain the consequence of a 'big disconnect' between micro-level progress and macro-level deterioration. Emas (2015) argues about the possibility of curing the effects of disconnect, and states, "if we work together for long-term sustainable goals achievable through acknowledging and addressing economic, environmental, and social concerns throughout our decision-making process … and ensure responsible human behavior and actions at the international, national, community and individual levels to uphold and promote the tenets of this paradigm in the interest of human development" (p.2) (https://www.researchgate.net/publication/339003550).

However, many are still of the view that there are misconceptions about the application of sustainability in the academic arena. It is because of the lack of initiative from the side of universities that misconception is on the rise (Leal Filho, 2000, 2011). Leal Filho (2000) identifies some barriers to sustainability, and states that it is 'too abstract', 'too broad', 'no personnel to deal with it', "it demands substantial resources which we do not have or can justify', and "it lacks a scientific basis" (p.14). He further describes the misconceptions about sustainability, such as, it is not a subject per se, too theoretical, too broad, too recent a field, and is a fashion (p.16). Moreover, lack of resources, difficulty in changing habit and behaviour (Waas et al., 2012), pre-established systems due to universities' complex bureaucracy and rigid structures (Verhulst and Lambrechts, 2015; Blanco-Portela et al., 2018), the lack of commitment, engagement, awareness, interest, and involvement of faculty, students, staff, management, and policymakers (Verhulst and Lambrechts, 2015; Weber and Dudarstadt, 2012; Waas et al., 2012), and lack of training and specialisation in sustainability (Jorge et al., 2015; Verhulst and Lambrechts, 2015) are some other barriers for incorporating the idea of

higher education for sustainable development at our universities. With these barriers and misconceptions, universities have not been following a holistic approach to embed sustainable development agenda into the curriculum (Shiel and Paço, 2012).

The difficulty since the decades is on how to configure higher education for sustainable development to transform the society by acknowledging in the mainstream academia (Blanco-Portela et al., 2018; Giesenbauer and Tegeler, 2020). Coronado et al., (2020) suggested that by formulating appropriate curricula HEIs not only increase students' concerns but also contribute in creating a sustainable society in the future. For this, HEIs have to develop the sustainability culture that helps to streamline their policies, practices, and partners to ensure innovation and dynamism to achieve the goals of local and global sustainability (Katehi, 2012). At the same time, university leadership should be highly professional (Aldulaimi and Abdeldayem, 2020)

Scholars also advocate that sustainability is not fully understood and leaves doubt on its proper integration in higher education policies (Waas et al., 2012; Wright, 2010; Wright and Horst, 2013; Venkataraman, 2009). Scharmer (2017, 2019) states, "there could be difficulty in implementing the Paris Agreement and the SDGs worldwide because of widening knowledge-doing gap in our education system" (https://medium.com/presencing-institute-blog/vertical-literacy-12-principles-for-reinventing-the-21st-century-university-39c2948192e). He further goes on to argue that, if universities attempt to work to achieve the level 4.0 target with the support of 1.0 or 2.0 or 3.0 operating system (following the nomenclature of software development), this situation is referred to as 'knowledge-doing gap'. It might be the reason why only a few universities have successfully incorporated the SDG agenda in their structure and curriculum (Shiel and Paço, 2012). Therefore, Scharmer (2019) states that "the purpose of the 21st-century education and university is to help us develop what matters most: vertical literacy – the capacity to sense and actualize our highest future possibility in the face of disruption" (https://medium.com/presencing-institute-blog/vertical-literacy-12-principles-for-reinventing-the-21st-century-university-39c2948192ee). Taking reference from the work of Müller-Christ, Otto Scharmer, Bror Giesenbauer and Merle Tegeler, Giesenbauer and Müller-Christ (2020) summarised four different operating systems (traditional, modern, postmodern, and integrative) to support teaching and research in HEIs for SDGs. They further note that the traditional approaches of teaching, research, and governance do not fit in the postmodern, and integrative perspectives of HEIs. Therefore, to address SDG 4 issues, universities have to redefine their operational systems to integrate the framework of sustainability.

Previous research finds problems of incorporating SD in HEIs policy and practice in both developing and developed countries (Mader et al., 2013; Thomas, 2004; Leal Filho, 2000). Although there has been an extensive level of research funding and teaching in European universities on sustainability (Leal Filho, 2000; Finnveden et al., 2020), very few initiatives are taken to address the SDGs agenda in the mainstream of HEIs. Therefore, some measures, such as "(1) reliable in-service training provisions on matters related to sustainability; (2) setting up of working groups to debate how best to pursue it via specific initiatives; (3) development of networks (intra-institutional and inter-institutional) to exchange ideas and experiences; (4) the setting-up and execution of specific projects" [Leal Filho, (2000), p.18] are required to address the SDG agenda in the mainstream curriculum. Universities have to play the role of 'transformation labs' to initiate a culture of sustainability and responsibility [Vogt and Weber, (2020), p.17; Leal Filho et al., 2015) and as agents for change (Cortese, 2005). In parallel, education

for sustainable development has to be understood in terms of re-framing the curriculum and pedagogy, modus operandi of their institutions, organisational culture, student participation, leadership and management, community relationships, and research (Dawe et al., 2005; Rieckmann, 2018).

Nölting et al. (2020) write that HEIs do contribute to society through restructuring their teaching, research, and operational tasks sustainably. They further argue that HEIs have to go beyond teaching and research activities and "include sustainable development and technology transfer as well as the practical application of knowledge and ideas" (p.2), aiming to the application of knowledge and skill created in HEIs to apply for the progress of the society. But, for the transfer of creative knowledge and skills, HEIs have to have some institutional arrangements, such as transfer-friendly funding format, transfer office, incentive, and network to transfer partner (p.11). Engle et al. (2017) suggest that since sustainability is a critical issue and contested in nature, HEIs need to have a shared understanding to support their mission across institutional efforts. IAU (2017) forwards three recommendations that universities have to play in achieving the SDG agenda of HEIs:

a report the sustainability initiatives by the HEIs and call for stakeholders to engage and to get involved

b support from university authorities to integrate the Sustainable Development Goals with institutional strategy throughout the university

c avoid working in silos, and to be more efficient, the many existing sustainability networks in higher education should cooperate more closely (pp.25–26).

Despite the ambiguity, misconception, and knowledge gaps, some universities have been engaged in implementing sustainable agenda integration into the curriculum, research, and campus activities (Ruiz-Mallén and Heras, 2020). A survey of 167 universities of five continents has indicated that the most commonly used method of incorporating SD in HEIs is through the lecture method (Leal Filho et al., 2019), and a few of the universities have followed methods such as enhancing the capacity of teaching faculties and empowerment of students, and through transdisciplinary research activities (Lozano et al., 2013). The researchers, hence, suggested the following different stages to infuse SDG in university activities. In the first stage, they have to prioritise operational optimisation; in the second stage, organisational transformation more focused on influencing the behaviour of teachers, students, and other stakeholders; and in the final stage, building the system by changing vision and value to inculcate sustainable culture throughout the university [Ruiz-Mallén and Heras, (2020), p.53]. At all of these stages, there should be good governance at the universities. It supports to drive the sustainability agenda to achieve according to the goals with collective efforts (Torfing and Ansell, 2016).

Both the university system and the SDG agenda are complex. Therefore, to implement such development goals, a broader approach requires fundamental changes in the governing structure of the universities (Bauer et al., 2018). There is a need for transformation in the inner dimensions and capacities of the HEIs (Wamsler, 2020). Since the SDGs are challenging, and not legally binding, stakeholders (whether they are university leaders, professors, or deans) have to have a clear implementation plan to support achievement of the SDGs and enable themselves to track progress

(van der Heijden et al., 2015). Besides holistic and organisational orientations to embed SD culture at higher education, Bauer et al. (2020) suggest five governance equalisers:

a politics: binding as many stakeholders as possible to legitimise SDG at HEIs

b profession: priority for the development of interdisciplinary and cross-sectoral ideas for SDG at HEIs

c organisation: HEIs have to set goals and activities to implement SDG

d knowledge: all actors have to know the cause behind involvement in SDGs and mutually decide about their own future goals to go with

e visibility: HEIs have to make sustainability efforts visible to the internal and external public (p.157).

Leal Filho (2020) prescribes three concrete actions to implement sustainability in HEIs:

a creation of funding for SDGs research

b integration of SDGs in teaching program

c "More use of the know-how and technical competence from universities by UN agencies, donor bodies, and governments in the design and implementation of programs related to the delivery of the SDGs" (p.510).

3 Method

This research is the first of its kind to assess SDG 4 in the context of Nepalese universities. In Nepal (a least developed country), investment in higher education and research is the lowest in the SAARC region. On the other hand, the quality of output from the investment in higher education has remained in question for many years. This section of the paper is divided into two parts: the context of research, and the method followed in this research.

3.1 The research context

The development of higher education in Nepal had its earliest beginnings with the establishment of TriChandra College in Kathmandu in 1918. In 1959, the first university in the country, Tribhuvan University, was established. A total of 11 universities, six deemed medical universities, and 1,432 colleges (147 constituent, 538 community and 747 private) are offering higher education programs in management, science, humanities, engineering, medicine, law, agriculture, education, and forestry streams (UGC, 2020a). To date, the University Grants Commission (UGC) has accredited 49 HEIs (UGC, 2020a). The gross enrolment rate is around 16.92%, and the graduation rate is 27.20% (UGC, 2020a). Since their establishment, universities are contributing a lot to the social, cultural, and economic development of the nation.

For a decade, a wide range of debates has been initiated from different corners of society to transform universities to improve the quality of teaching and research. The major problems that Nepalese universities are facing mostly related to quality, research, the capacity to grow, and governance. To date, only a few HEIs have been accredited.

Universities have weak mechanisms for quality monitoring. There is no system of quality and performance audits at universities. For example, Tribhuvan University (TU) has such a megastructure that it has created a severe challenge to coordinate, monitor, and maintain quality (Tribhuvan University, 2018). Class-room teaching widely practices disseminating the knowledge gained by the teachers. Most of the universities have virtually failed to implement their academic calendar. The curriculum is less frequently revised to make it market relevant. Concerning research outcomes, Nepal ranked in the 109th position in terms of research and development, and ranked 87th among 140 countries in research institution prominence (GII, 2019). Whatever research activities are conducted is based on the individual capacity of the researchers. Interdisciplinary and trans-disciplinary researches are hardly in practice. With regard to infrastructural capacity, most of the HEIs suffer from financial constraints to build new classrooms, libraries, science labs, and online libraries and to buy digital equipment to apply in research and teaching, so as to enhance the teaching and research capacity of teachers. Finally, centralised structure, political appointment of university authorities, politicised student, teacher, and employee unions, and lack of coordination among academic and administrative offices are attributed to the weak governance of HEIs.

In Nepal, the initiative for quality education began with the start of the Second Higher Education Project (SHEP) in 2007 by the UGC. One of the vital reform components of SHEP was to assure and accredit HEIs' quality. Next, the Higher Education Reform Project began with the completion of SHEP. The main objective of HERP is to ensure systemic institutional reforms; improve the quality, relevance, and efficiency of higher education; support underprivileged students for equitable access; and promote research, innovation, and academic excellence (UGC, 2019).

The 2000s decade remained full of challenges for the country from the perspective of implementation of Millennium Development Goals (MDGs) (2001–2015) and to eradicate extreme poverty and hunger. Nepal was one of the 189 countries committed to the achievement of MDGs during the United Nations Millennium Summit in 2000. At the time of signing the Millennium Declaration, the country was suffering from political instability and undergoing severe conflict between the Maoist rebels and the state, which was settled later, following the signing of the 2006 Comprehensive Peace Accord (CPA) between the Maoists and the government. The government candidly admitted that, due to the gaps and disharmony between macroeconomic policies and sectoral policies at the beginning of the MDG period, the role of different sectors was not clearly defined in the MDGs (NPC, 2016). However, during MDGs (2000–2015) Nepal's higher education enrolment rate (GER) reached 14%, and 46 HEIs were accredited and added value to higher education (MoEST, 2019).

Nepal ratified the SDGs and set the milestones to reach the status of a developing country in 2030. The SDGs proposed a set of 17 goals and 169 targets, and more than 230 indicators, to be achieved during the period 2016 to 2030, and it prescribes a framework for the planet, people, and their prosperity (NPC, 2017). The set of milestones include: eliminating poverty; ensuring inclusive and equitable education and promoting life-long learning for all; achieving gender equality and empowering all women and girls, ensuring access to affordable, reliable, full, and productive employment and decent work for all; and building resilient infrastructure, promoting inclusive and sustainable industrialisation, and fostering innovation (NPC, 2017).

Nepal is a signatory of different conventions related to SDG 4, such as Incheon Declaration 2015, Agenda for Sustainable Development 2030: Transforming our World,

the parent document of the Sustainable Development Goal 4 (SDG 4); and Education 2030: SAARC Framework for Action. In 2019, the Ministry of Education, Science and Technology (MoEST) published a document entitled, 'Sustainable Development Goal 4: Education 2030: Nepal National Framework' (MoEST, 2019). One of the objectives of this framework is to strengthen the institutional capacity to enhance delivery of the education sector (p.X). The implementation strategy of SDG 4 aims to bring all three levels of government – federal, province and local – together in line with the constitutional provision of cooperation, coexistence, and coordination. The framework simultaneously guides province and local governments to develop SDG 4 implementation plans at the province level, and action plans at the local level (p.XI). With regard to higher education intervention, the national framework has four strategies:

a Expanding the access in tertiary education by reducing disparities in terms of economic status, geographical location, marginalisation, and vulnerabilities

b Ensuring balance in production of both general higher education and technical higher education

c Developing a credible system of credit recognition, equivalence to facilitate higher mobility and exchange in higher education

d Ensuring advance research and innovation system in higher education to gain competitive economic opportunity.

3.2 Methods

There is no structural arrangement to embed the culture of SDGs in Nepalese universities. This paper follows a descriptive and qualitative approach, based on discussions among the stakeholders and responses from the high-level universities' authorities. Literature has been collected from scattered sources. For the focus group discussion, the items have been selected to predict the likelihood of HE for SD from recent literature and government policy documents. The stakeholders mainly presented their viewpoints and arguments on the quality of education and research and governance at universities. The opinion of different stakeholders was collected and analysed to develop an understanding of how to improve the quality of HEIs to achieve SDGs. As of date, no research has been undertaken to assess higher education for sustainable development in the case of Nepalese universities. In fact, at the university level, SDG 4 has not been precisely conceptualised in the previous two reform processes.

Discussions among the stakeholders were held without referencing the SDG. It was just an attempt to explore whether higher education for sustainable growth is rhetoric or reality in the Nepalese context. The following items were considered for discussion with stakeholders (e.g., Giesenbauer and Müller-Christ, 2020; Scharmer, 2019; Leal Filho, 2000; IAU, 2017): HEI governance, quality of education and research, employment of graduates, industry-academia dialogue, industry-based research, value to the society, entrepreneurial, national development priorities, capacity development of teachers, field-based learning, development of research culture, agriculture and engineering, multi-disciplinary and trans-disciplinary curricula and research, ICT strength, digital contents in the curricula, inclusiveness, and underprivileged students. All these items are interrelated and easy to assess and explain HE for SD. The complexities and ambiguities are identified by the items such as the interest of leadership in HE for SDG 4,

government policies, rigid university structure, knowledge-doing gap, holistic framework, and institutional integration and coordination.

Stakeholders from different sectors were invited to Microsoft Team and Zoom for discussion and to put their views and opinions on the current status of universities, and to suggest how the university should move forward to improve the quality of education, research, and governance. The main criteria for inviting stakeholders were- experienced and incumbent high-ranking university officials, policy makers, and industry leaders employing university graduates and are familiar with the strengths and weakness of the graduates. Similarly, professors, educationists, representatives from research-based industries, the national level professional councils and associations responsible for fixing the educational standards, and union leaders of the university and campuses were invited. The discussions were scheduled on six different dates: 5 October, 8 October, 16 October, 18 October, 20 October and 4 November 2020. Altogether, 111 participants have contributed in the discussion programme.Most of the stakeholders, invited in the discussions, were high-ranking university officials; representatives from professional councils; representatives of university teachers' association, public campus association, and private campus association; representatives from ministries and constitutional bodies; members of the Federation of Chamber of Commerce and Industry and member of Tourism Board; a representative from private and public sector industries; Hotel Association of Nepal; and representative of Entrepreneur Association.

To collect the views from the high-ranking university authority, the researchers asked a question: *how is your university prepared to engage in SDG 4 activities?* The responses collected from stakeholders and high-ranking university authorities are presented in italicised sentences.

4 Preparedness of HEIs for SDG4

This section is divided into three sections:

a quality of education and research

b quality of governance

c preparedness of HEIs for SDG 4.

Presentation and interpretation in both these sections are solely based on the opinion of stakeholders and conversation with high-ranking university officials.

4.1 Quality of education and research

The National Education Policy 2019 mandated HEIs to improve the teaching and research quality and internationalise higher education, develop quality curricula, and follow international teaching pedagogy to attract both national and international students [MoEST, (2019), policy 10.15 and 10.20]. The quality issues indicated by the stakeholders during discussions were as follows:

a Link curricula to the market, lack of employability skills of the graduates, connect academia to the industry, conduct industry-based research, improve vocational training, enhance communication and professional skills of the graduates, and find

the whereabouts of the graduated students (e.g. tracer study). One stakeholder said that *"I don't value the examination score, whether they have graduated or are dropouts; what I do value is whether he or she diagnoses the problem, has verbal and written skills, as well as management skills"*. In reality, HEIs are less focused on developing job-creating skills, and more on job-seeking skills.

b Teachers are not well trained to engage in quality teaching and research. They are less capable to undertake applied research and commercialise it. *"We are zero in research and development"*. Recruitment of teachers should be based on their capacity to teach and engage in research activities. There is a need to upgrade both the teaching and research skills of university teachers, and that should be linked to career development. HEIs lack enough financial resources to motivate teachers to engage in research and development programs. Very few teachers are involved in designing courses.

c The recently published free competition examination result for the post of lecturer by the Tribhuvan University Service Commission (TUSC) shows a grim picture of the quality of higher education in our universities. In the free competition examination for 160 vacancies for lecturers, only 63 candidates passed out of 1,573 candidates who appeared in the examination (TU Service Commission, 2020). The worst scenario is yet to come, i.e., the TUSC cancelled the examination of 240 candidates, because they were found to be engaged in malpractices during the examination. This indicates that either qualified graduates are not attracted to join university jobs, or the quality of higher education has deteriorated. This scenario depicts a picture of: where is the quality of teachers, and how does it impact the quality of graduates that the university produces? Just a university degree is not enough to enter into the industry.

d Theory-based teaching in the classroom makes it difficult for the placement of graduates in the job market. Our graduates have been failing to come out from the HEIs with a product in their hands that they can sell in the market. That product could be a kind of project or an innovative idea to add value in different sectors. For this, both curriculum and teaching pedagogy have to be improved.

e There is no provision of regular quality audits to assess the quality of teachers and researchers. Neither there is a system of disclosure of teaching and research quality in HEIs. One stakeholder explains that *"unless teachers are accountable to their duties, the smart curriculum cannot deliver to the students. We are very weak in curriculum teaching, learning, and evaluation"*.

f Graduates are less confident in the application of the knowledge they gain from HEIs. With this method of teaching, fewer graduates learn instrumental knowledge. Particularly, those who study in management and engineering streams have to have instrumental skills urgently. Very few have developed the capacity to solve problems applying digital skills, statistical tools, artificial intelligence (AI), and algorithms. University teachers are working for private colleges, curricula are not updated timely, teacher training is neglected, and monitoring of the quality of teaching is grossly ignored.

g *"Universities' research should be linked to national development priorities and goals"*, another stakeholder argues. There is seldom inter- and intra-university

collaboration and coordination. Whatever research and publications are done are solely from the personal efforts of the researchers. In this situation, research institutes, universities, and individual researchers have to build trust with the central and local governments, industries, and international organisations to get funded. Due to a poor industry-academia network, the chance for commercialising research is slim. To develop a research culture at HEIs, both theory and research stream courses have to be offered at the graduate level. "Never take research as a luxury". The widespread belief among graduates is that research needs huge money. However, small research can also have a huge impact. The challenge is how to make universities a thoughtful and thinking platform. There are some research institutes run by the universities hardly contributing to the field of research and development.

h If students are allowed to take multidisciplinary courses, it will help to develop their research horizon. The majority of students are not engaged in thoughtful research activities. Very few students have been honestly engaged in graduate research works. Plagiarism is rampant when writing a graduate thesis. None of the universities have been carefully handling this issue from a long time back. "We are very weak in teaching, research, and evaluation".

i HEIs are weak in applying ICT strengths for the benefit of our students and researchers. The curriculum does not provide enough digital content for the students and teachers. Priority should be given to programs on entrepreneurship development. Internationally recognised curricula and pedagogy are required to attract foreign students to study at universities. Centres of excellence for teaching and research in technical and management fields are lacking.

4.2 Quality of governance

The best part of university governance is that they have clearly defined law, by-laws, rules, and regulations. Some of the universities have their short-term, medium-term, and long-term strategies. However, the problem lies in the implementation. Most of the stakeholders had some exposure to foreign universities either as students or visitors. They have complained about the governance of universities is not in an international standard at par. In terms of design and implementation of the academic calendar, the appointment process of university officials, and the recruitment and promotion practice of teaching faculty they have some reservations.

a In many cases, universities are not taking examinations and publishing results in time. They are facing difficulties in implementing their academic calendars. There is neither system of regular performance evaluation of university teachers by the immediate head nor by students. A tendency among academic leaders to take credit for good performance and attributing bad performance to others prevails. There is no clearly defined accountability and the system of reward and punishment.

b By their acts, universities are autonomous. However, to create new positions of teachers and administrative staff, the state-funded universities have to get approval from the government. The appointment of the vice-chancellor and other high-ranking officials has taken 6 to 14 months. Although universities have provisions and defined processes for such appointments, these provisions are not based on a performance plan and academic excellence. In ten universities, vice-chancellors are appointed by

the chancellor (prime minister). Accordingly, almost all high-ranking positions, including deans, directors, assistant deans, campus-chief, and assistant campus-chiefs are divided and decided, in some universities, by candidates' political affiliation. Except approving these, there is no role of the university senate in such appointments. The autonomous status of universities is not performing well as per their goals for being.

c Very few university officials are engaged in discussing the international trend of business and education. Policies and practices to attract and retain talented faculty are required. At our HEIs, we often hear about strikes, lock-downs, and misbehaving with the teachers. One stakeholder complains that "Political activism cannot run a university; there must be a chain of command. We won't get the results we need unless we strengthen our governance system."

d University structure is complex, bureaucratic, and centralised. University campuses are scattered in different parts of the country. Most of the decisions are made at the central office. Local campuses have limited authority to decide on and access to the resources. Online communication between the central office and also among the different campuses is difficult creating communication barriers. Unproductive units of the universities should be closed. Lack of education management information system (EMIS) barricading good governance. Few universities have to detail records of students. The big university (e.g., Tribhuvan University) needs to restructure into the provincial set-up for smart governance.

e The leadership capacity of some universities' authorities is weakened by their frequent meetings to make political consensus with university unions, and the government in the matter of appointments. One education expert said that "if we wait for political commitment and consensus in the matter of universities, it is better to enjoy the status quo and forget about bringing change to the outdated university governance". One high ranking government official argued that "the university cannot operate in a bureaucratic system like the government ministries, and thus it is not good to discourse bureaucratically by the academic leaders".

4.3 Preparedness of HEIs for SDG 4

a In a brief conversation between researchers and a vice-chancellor regarding the SDGs issue, he said, "Our universities have not shown concerns to reform HEIs, embedding SDGs culture in the real sense. We have both complexity and ambiguity in HEIs, especially to implement SDGs. Our university system structure is highly bureaucratic for SDG, and at the university level, there is no discourse on this agenda. In my university, I have a plan to introduce courses on agro-forestry, development studies, and environmental studies. Some institutional arrangements are there in school level education; in the case of HEIs, SDG 4 is just limited to government policy document".

b The vision statement of a technical university states, "AFU envisions being a pre-eminent university for building Nepal into a food secure, economically vibrant, environmentally sustainable, and socially equitable nation" (http://www.afu.edu.np/). When researchers asked to elaborate on the vision statement, the Chief of Planning

Division responded with, "well, we have addressed about SDG in our vision statement; however, we do not have an operating system to implement this vision".

c Another university's chief of planning responded with, "we never had discourse in linking our vision to SDG; we have a vision document, but just to say, and university officials are not interested in implementing it; our university authorities spend most of their tenure deciding on the appointment of officials".

d One university runs academic and research programmes with a community engagement approach. Although not explicitly linked to the SDG4, few of the socially valued programmes, such as providing credit to skill, outreach programmes, and quality enhancement policies, are in execution. The top-ranked officials said that "although we have not explicitly acknowledged the SDG 4 in our policy documents, some initiatives are in operation to support it. The environment of trust is needed to integrate SDG4 into the university's structure. It is lacking".

e Vice-chancellor of a university states that "without enough financial back-up sustainability agenda cannot enter in the structure of the university. Our main concern should be to make HEIs sustainable through quality, access, and equity. However, in the lack of enough financial resources and coordinated actions of the university authorities sustainability agenda cannot materialize. We never discussed how to integrate with sustainable agenda into our policy and practice. To implement the sustainable goal, either state or students have to finance. Although the state has a national level policy of higher education and SDG4, there is no mechanism to monitor to know the status of their implementation".

f Registrar (the second high-ranked university authority) from another university clearly responses that "we never had any discourse on integrating SDG4 framework to our university structure. There is a course offered to teach sustainable development. We are severely affected by university politics and disorders. Most of the time, we are hanged-on to settle these issues".

From these conversations, it appears that SDG 4 is merely a government policy agenda not so clearly endorsed by the HEIs. Neither universities have conceptually and operationally adopted it in their plan and policy documents explicitly, nor they have a plan to do so shortly.

5 Discussion, implications, limitations and conclusions

Two main objectives assessed in this paper are:

a to discourse on the status of quality of education and research and governance structure of universities

b to assess the preparedness of universities for achieving SDG 4.

Universities offer undergraduate and graduate programs in environmental science, environmental engineering, water resource engineering, renewal energy engineering, sustainable water sanitation, health and development, life sciences, education, agriculture

and forestry, mountaineering management, hydro-engineering, peace and conflict, labour study, business management, economics, sociology, and more. Only a few programs teach a course on sustainable development in a very isolated manner. No doubt these programs are, directly or indirectly, related to producing quality manpower for SDGs. However, unless HEIs' quality, research, and governance are properly addressed to the local and global agenda SDG (Katehi, 2012), just offering different programs will not provide a solution. During the discussion, none of the above issues were brought up by the discussants, linking SDG to university structure and leadership, quality of education, programs, research, and conference.

To conceptualise HEIs for SDGs in the context of Nepal, we have to look it at government policies. Two policy documents revealed the importance of quality education for SDGs' success. First, the SDGs 'Status and Road Map 2016–30' (NPC, 2017), and the second, 'Sustainable Development Goal 4: Education 2030 Nepal: National Framework' (MoEST, 2019). As explained earlier, Agenda 4 linked to quality education, poverty, health and well-being, gender equality, governance, decent work and economic growth, responsible consumption and production, climate change and justice, and strong institutions (https://en.unesco.org/themes/higher-education/sdgs). The four intervention strategies (MoEST, 2019) focus on access, quality, credit transfer, research and innovation, and balanced production of technical and general HE graduates. The basic conceptualisation of HEIs for SDGs starts from the endorsement of policy and plan document related to SDG 4 by universities and cascading the ideas through strategy and plan of action, annual budget, discourse, teaching, and research at different levels of HEIs.

Whatever activities are undergoing in our universities are very scattered and disaggregated. In the case of quality of education and research, universities have a large number of students in different programs, teachers are individually involved in research activities, the curriculum is less market relevant, and a traditional pedagogy is applied in teaching. However, as stakeholders argued, there are no multidisciplinary and transdisciplinary research and teaching activities (Lozano et al., 2013), the curricula are not updated in line with SDGs agenda (IAU, 2017), and the quality of research seems very poor and has less impact in terms of offering value to the society. Teaching and learning are based on teachers' knowledge, mostly theoretical, to test memory, competing students for academic degrees, just gaining academic titles and employment, and teaching for fewer applications (e.g., Giesenbauer and Müller-Christ, 2020). Even though the government has committed to SDG as a public policy agenda for development (MoEST, 2019; NPC, 2017), it appears that in terms of integration of quality of education, research, and governance, universities are nowhere in the world-view system (Giesenbauer and Müller-Christ, 2020; Scharmer, 2017, 2019). This indicates a knowledge-doing gap (Scharmer, 2017, 2019).

Research activities are in a very nascent and learning stage. Although research activities are undergoing in different fields of knowledge related to SDG, universities have no information in the application of these research works. The problem lies in the capacity of researchers to engage in research work and the co-existence of research and teaching at universities (Humboldt, 1809). UGC provides certain funds for capacity development, such as research training, seminar participation, and publications for the university teachers. The impact of this investment for the common good (Welby, 2018) is less known. Stakeholders are highly concerned and worried about the current state of research and innovation at the university level. The government provides plans and

policies considering future generations; however, university-level research is less tied to forge knowledge for future generations (Ingold, 2020; WCED, 1987). Nor has it been strongly linked to career development, funding, and other forms of incentives for the researchers. Universities are seldom funded based on their research and development activities. Although the national framework stated to ensure advanced research and innovation system in higher education to gain competitive economic opportunity as one of the major intervention components (MoEST, 2019), university annual plan, policy, and budget are not integrated into this line (Katehi, 2012; Wamsler, 2020). Neither is there any system designed to assess the level of integration of government research framework at universities or in the ministry. Plagiarism is rampant in graduate-level research. Although some universities have formed high-level committees to control plagiarism, no correction has been made in this serious issue. Publication and application of research outputs are less in the SAARC region. University researchers have published a total of 144 original articles in refereed journals in the last four years (UGC, 2020b).

Without the support of government and donor agencies, it is difficult to integrate SDG in higher education (Leal Filho, 2020). Our universities have limited capacity to grow for SD, both in the sense of research and innovation and transfer of technology (Katehi, 2012). Most of our universities have to run with limited funding. Some universities sustain themselves by collecting tuition and affiliation fees. Given the teaching methods and curricula, industries are not so attracted to fund universities to grow for mutual benefit. HEIs cannot earn sufficiently to fund research and infrastructural development activities. The growth of HEIs for SDGs largely depends on the production of competitive students who can take a lead role nationally and internationally in knowledge and skills. However, with this capacity, universities cannot grow for sustainability by just being engaged in simple teaching and learning (Nölting et al., 2020).

Most of the high-ranked officials at universities are appointed based on their political affiliation. It has a cascading impact on the campus level appointments. Students, teachers, and administrators are politically charged. The tenure of the top-level officials is not linked with the university strategy and action plan. At the end of their tenure, some officials blame it on the political system of the country for their substandard performance. Top-level officials were found to be interested in holding positions without being accountable for their duties and responsibilities. They lack professional quality of leadership (Aldulaimi and Abdeldayem, 2020). Due to petty politics in HEIs, there is no chain of command. Most of the time, they are engaged on sorting out day-day-problems, for example, appointments and transfers, and have less time for policies and strategies. There is no system of performance-based tenure and hire and fire. In reality, universities have no exclusive plan to contribute to SDG. Decision makers are not so mindful to ensure responsible behaviour and actions related to the common good while making decisions (Emas, 2015).

Universities are autonomous to run their academic programs. In many cases, autonomy is understood in terms of 'not intervening even in the case of wrongdoing.' In their Acts, it is mentioned that they are free to run the academic program, involve in research and development, and mobilise resources. Therefore, the autonomy of universities is understood obscurely. From this discussion, it appears that university teaching and research and governance is hovering around traditional 1.0 from the perspective of world view (Giesenbauer and Müller-Christ, 2020) and lacks vertical literacy to lead to transformation (Scharmer, 2019).

By and large, some of the barriers for linking HEIs for SDGs are lack of financial support, no proper training for faculties capacity enhancement, not enough financial back-up for doing research, difficulty in changing behaviour of the actors (Waas et al., 2012), the political appointment of top officials, complex bureaucracy and rigid structures (Verhulst and Lambrechts, 2015; Blanco-Portela et al., 2018), and politicised teacher, student, and employee unions. As of now, there is no coordinated academic and administrative mechanism to implement SDG4. In fact, without the involvement and engagement of all actors, it is hard to embed SDGs in HEIs (van der Heijden et al., 2015; IAU, 2017; Engle et al., 2017).

This paper finds a big disconnect between government policy and universities' strategy and activities for SDG (Dyllick and Muff, 2016). Universities have seldom debated on linking HEIs to the SDGs (Bauer et al., 2018; Blanco-Portela et al., 2017). Neither is the university structure ready to cope with the SDGs. It seems that SDG is taken as government agenda and less concerned with the universities, and second, there is no priority to link HEIs for the SDGs with certain strategies and action at universities. At the present stage of SDG implementation, it just remains a political agenda (Weisser, 2017). Neither is there any public notice that teaching and research culture are embedded in the university system (Ruiz-Mallén and Heras, 2020; Adam et al., 2018). In this situation, it appears that our higher universities are less honest towards their social grammar of responsibilities. If it continues, universities cannot make future generations free from poverty, pollution, and pain, and even difficult to ensure the freedom, trust, and democratic society through a quality education (Ingold, 2020). That could be a big loan for our new generation to pay. Similar to the view of Adam et al. (2018), our universities are failing to embed sustainability, and thus are failing to be a part of the HE culture.

Although during the discussion with stakeholders, none of them have mentioned about SDG agenda, the researchers believe that this research initiates ideas to expand the SDG intervention discourse at universities. The UGC, as an umbrella organisation responsible for quality and access in higher education, has been involved in the higher education reform programmes for the last ten years. It has brought revealing changes in the university examination, teachers' recruitment and development system, new program development, and quality assurance and accreditation in the past. Many of the stakeholders also have suggested that UGC has to play a lead and regulating role in reforming Nepalese universities. Therefore, under the leadership of UGC, the researchers suggest incorporating sustainable agenda into the university reform agenda. For this, UGC has to develop an integrated SDGs and university reform framework that has to be implemented by all universities of Nepal. This framework clearly defines the future role of universities for sustainable development. The integrated framework comprises common good agenda, quality education requirements, governance practices, environmental requirements, the establishment of green campuses, the nature of new programme development, and so forth. To implement the SDG agenda, high-ranking officials of the universities have to have the freedom to form comfortable teams to reform universities. They should not work for the vested interest groups of people. Better work for the interest of the university to get the supports of all stakeholders in this mission.

Due to a knowledge gap between the role of universities and the social and global agenda (SDG 4), there is a wider knowledge-doing gap to implement SDG 4 (Scharmer, 2019). This paper draws the following policy implications to minimise such gaps and inculcate SDG culture in HEIs:

a The UGC has to implement the criteria of appointing high-ranking university officials. In order to inculcate SDG 4 in HEIs it can contribute by making and enforcing SDG framework.

b Universities have to initiate discourse to conceptualise SDGs in their plan and action plan to ensure teaching and research to ensure the common good.

c Operational system of the universities has to be restructured to address the challenges of SDGs achievement.

d Government and donor agencies have to support the universities to engage in future generational roles and responsibilities, and universities have to act responsibly as the 'transformation lab' with full commitment and accountability to address this public policy agenda.

e Universities have to engage in future generation teaching, research, and technology development.

f Quality of HE research and education must be in line to address the environmental, social, and economic challenges of the nation.

g The funding of universities in the future should be to minimise the gap between public policy and HEIs for SDGs.

h Universities have to decide on their grammar of responsibility to the environment, community, economic development, and global integration of higher education.

i Universities have to discourse at every level to sort out barriers and misconceptions about SDGs to initiate HEIs for SDGs.

j University officials, faculty, administrative staff, and students have to be trained to support HEIs for SDGs.

k Sustainability has to be embedded in HEI policies, plan, strategy, curriculum, behaviour, and action.

l For the implementation of HEIs for SDGs, a clear *modus operandi* is required for institutions, networking with partners, organisational culture, student participation, research, and community relationships.

m For the practical application of knowledge and skills created by universities, there should be an institutional arrangement for transfer to the community.

n A mechanism for regular feedback and reporting is imperative to ensure progress on the implementation process.

Regarding the practical implication, first, this research creates ideas to inculcate SDG culture throughout university structure and operation. Second, this research opens the floor to discourse on the future role of the university for the common good agenda. Third, with this disaggregated governance, quality of research and education, and operational structure, SDGs cannot be materialised, therefore, it is imperative to inculcate SDG 4 values and cultures in the university system following a holistic approach. Finally, looking at the world view system of university and associating it with HEIs for SDGs in Nepalese universities, it appears that Nepalese universities are not in a systemic growth track in terms of teaching, research, and governance. From the perspective of government

commitment to achieving SDG 4, it just remained a public policy agenda for HEIs and appeared to be more rhetoric than reality.

The first limitation of this research is that the viewpoints and opinions of stakeholders and university authorities could have been politically motivated or biased. Second, they might have a preconceived notion from the world-class experience and knowledge of other universities outside Nepal or poor performance outcomes of universities in the past. Third, since information is collected from scattered sources, the result of the study could be vague.

To conclude, Nepalese universities have been facing problems in funding, behavioural changes, and leadership to incorporate SDGs in their policy, planning, budget, and curriculum. Even after the ratification of SDGs by the Government of Nepal, universities are not involved in academic discourse to conceptualise SDGs. HEIs conceptualised SDG 4 as the government policy for development, rather than taking the challenge to improve the quality of teaching, research, and governance. Without further delay, as being an umbrella organisation of all universities of Nepal, the UGC has to play an important role by developing an integrated framework for university reform incorporating SDGs: 4. Universities, primarily being a sector for the development of human resources, have to be seriously discoursed on its complexity and barriers and plan to integrate SDGs into the curriculum, teaching, research, and governance shortly. In case universities fail to conceptualise and integrate the SDGs in their strategy, the nation does suffer an irreversible setback to reach the status of a developing country by 2030. Ultimately, it could be even a big blow to our education system in the future.

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