

## Approaches to Attain Campus Sustainability: A Case of Pakistan Public Universities

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This paper aims to explore the decision making for approaches to the campus sustainability with respect to the assistance of these approaches to the academic activities such as teaching and learning, research, and the quality of higher education in Pakistan perspectives. The nature of inquiry to approaches was qualitative that dictated the research questions under the grounded theory approach. The sample was selected based on the purposive sampling technique as the participants, academic administrators, had insightful knowledge on academic and non-academic activities of the campus sustainability. To gain deeper understanding on the approaches to the campus sustainability, nine participants showed interest to voluntarily participate in one-on-one audio recorded interviews. These interviews were transcribed and analyzed based on the thematic analysis that produced three themes: decision making for campus security, decision making for campus maintenance, and decision making for facilities. The findings showed lack of improvement in security arrangements regarding the prevailing threat of terror to the educational institutions in Pakistan. The findings also highlighted that hostel and transport facilities are supportive to the students but there is a lack of recycling and reusing regarding the meal facilities in hostels. This study was conducted to a limited number of Pakistan Public Universities. Thus, the findings cannot be generalized. However, these findings have the characteristic of transferability to the public universities only and not to the private ones. The findings showed that these approaches can help or hinder the academic activities.

**Keywords:** Decision Making; Campus Sustainability; Campus Maintenance; Campus Facilities

### INTRODUCTION

Campus sustainability is a combination of two words: sustainability and campus. The word campus represents higher education institutions (HEIs) and universities. This combination includes a number of activities. For example, according to Emanuel and Adams (2011), these activities are: ecological, economic, institutional and energetic. Further exploration of these activities consists of sub-activities such as food and recycling, green building, transportation, endowment transparency, investment priorities, administration, student involvement, shareholder engagement, climate change and energy. Though the list of the activities seems exhaustive, it does not present the entire activities, as Mitchell (2011) stated that campus sustainability activities include the local, regional and global responsibilities to protect and enhance the health and well-being of humans and ecosystems.

There are three functions of campus sustainability (Nixon, 2002). Firstly, it helps an institution understand where it stands with regards to sustainability objectives: academic, administrative, operational and financial. These objectives can include voluntary declarations, charters or environmental management system, self-defined sustainability policy or widely accepted sustainability regulations. Secondly, it determines that how incorporation of campus sustainability can strengthen the institutional brand. Thirdly, it helps in creating a culture of shared understanding and the commitment among all the stakeholders. Thus, campus sustainability not only directs the institutions but also determines their success focusing on environmental, institutional, societal and the economic progress. There are different ways of promoting campus sustainability at HEIs (Krizek, Newport, White, & Townsend, 2012). For example, grassroots' level efforts where sustainability is promoted by the champion or committee on ad hoc basis. Then at executive level where sustainability is accepted as a business case. At this level, campus leadership

accepts the efforts of campus sustainability because of enhancing efficiency, cost savings and brand reputation. Finally, campus sustainability is discussed among the visionary campus leaders including the highest-level executives who promote sustainability vision and makes efforts at the campus level. Here, strategic plans support campus sustainability efforts by considering its economic and environmental benefits.

Campus sustainability is greatly important at the decision making levels of HEIs (Loorbach, 2007). As decision making not only protects the natural environment but also creates and keeps a strong connection between the society, academia and natural environment (Brown, 2010). The HEIs for such relationship bear a greater responsibility to promote campus sustainability to transform academic and society (Ferrer-Balas et al., 2008). Thus, decision making is needed to improve the physical environment that includes the campus ecosystem, safety and security (Wikström, 2010). The maintenance of physical environment can only be assured if appropriate decision making is done for such activities (Mosey, Wright, & Clarysse, 2012). This paper is an effort to explore the decision making for approaches to the campus sustainability with respect to the assistance of these approaches to the academic activities such as teaching and learning, research, and the quality of higher education in Pakistan perspectives.

### LITERATURE REVIEW

HEIs are required to play a pivotal role in educating and training the youth (Gough & Scott, 2007). The significance of training youth can be reflected in their practical and social adjustment. The obligation and role of HEIs in this process is indispensable, as Cortese (1992, p. 3) states, "universities bear profound responsibilities to increase the awareness, knowledge, technology and tools to create an environmentally sustainable future. Universities have all the expertise necessary to develop the intellectual and conceptual framework to

achieve this goal". It implies that these institutions bear the obligations to maintain a balance between environmental, social, and economic areas. Regardless of lack to recognize their social role, HEIs are models and thus need to practice sustainability in their functions (Scott, 2016). Consequently, HEIs bear the moral and social responsibility to provide well qualified and trained human capital to organizations, industries, governments, and other institutions for prosperity and well-being of the nation (Clugston & Calder, 1999; ULSF, 2009).

HEIs have been in a state of flux due to the changing ideological and philosophical governance foundations (Bleiklie & Kogan, 2007). Thus, HEIs have become the subject to shift from mode one to mode two (Geuna & Muscio, 2009). According to mode one, the purpose of HEIs is to teach and research; while to mode two the purpose is to teach, research and transfer the impact of research on economy and society (Hogan, 2014). It is this transition that have required HEIs to transform the decision making for the purpose of mode two that is aligned with campus sustainability (Brundtland GH, 1987). The nexus of campus sustainability and decision making of HEIs has drawn the attention of researchers and scholars to make these campuses sustainable (Conceição, Ehrenfeld, Heitor, & Vieira, 2006; Velazquez, Munguia, Platt, & Taddei, 2006). Thus, campus sustainability has become an inevitable part of HEIs in the current era. Being the integral part of HEIs, campus sustainability addresses the issues in the major functions such as academics, physical facilities (Alshuwaikhat & Abubakar, 2008), administration and financial resources to meet the institutional objectives (Canning, 2015). This study aims to explore the non-academic side of campus sustainability that enables HEIs to conduct academic activities. According to Kurland (2011), these activities include that how buildings are maintained; land is efficiently used; the natural resources such as water, food, wastes are used; the beautification of the campus is maintained; students' co-curricular activities are held and on-campus facilities such as hostel facility and transportation facility are provided. These activities are considered at priority to provide the conducive teaching and learning environment (Levy & Marans, 2012; Mitchell, 2011). Studies (Kajikawa, 2008; Lozano, Lozano, Mulder, Huisinigh, & Waas, 2013) have shown that campus sustainability demands development and maintenance of every aspect of campus to adequately support academic activities. Atherton and Giurco (2011) are of the view that lack of maintaining these activities have underestimated the concept of campus sustainability. Empirical studies (Conceição et al., 2006; Disterheft, Caeiro, Azeiteiro, & Filho, 2014) have shown lack of attention and effort to maintain these activities. According to Brinkhurst, Rose, Maurice, and Ackerman (2011), despite the more literature on the operational activities, HEIs showed lack of interest to reduce the impact of operations on campus sustainability.

Initiatives, activities and operations to maintain the campus for the purpose of campus sustainability are directly or indirectly linked and directed by sustainability policy (Clugston & Calder, 1999; Cortese, 2007). Though policy on sustainability plays an important role but it is not the only reason to make an effort for sustainable practices at HEIs.

Ralph and Stubbs (2014) conducted a study to evaluate that how many factors support to move for sustainability and found commitment of academic administrators on top of all the supporting factors. However, it is unexplored that what are the reasons to employ these factors for campus sustainability. This commitment for campus sustainability is vital to reduce the pollution caused by the utilization of resources at HEIs, since HEIs are considered as small cities (Viebahn, 2002). Thus, every university regardless of its geography needs to devise an environmental management system (EMS) and environmental impact assessment (EIA) to regulate, monitor and assess operational activities at campuses (Viebahn, 2002). It raises the question that how EMS and supportive factors make an enabling environment for the promotion of campus sustainability.

Interconnection of operational and academic activities is not only maintained to support the academic functions but also their efficiency can be considered to generate funds (James & Card, 2012). Such a situation where the operational activities support and interlink with the academic ones and generate funds is the ideal situation of campus sustainability that is yet to take place. Moreover, campus sustainability in general and the issues of operational activities in particular are complex, diverse and imperative that have challenged the decision making of HEIs. Some of the scholars (e.g. Deng, Wang, Dai, Zhai, & Shen, 2009; Koester, Eflin, & Vann, 2006) have stated the experience of the developed countries where the wastes can be recycled or reused by the advanced technology and jobs are also offered under the operational aspects of campus sustainability. However, in the developing countries such as in Pakistan these practices are lacking (Wright, 2009). Therefore, there is a need to explore the decision-making approaches to address the issues of campus sustainability. This paper makes an effort to explore these issues in Pakistan perspectives with respect to the assistance of these approaches to the academic activities.

## **RESEARCH METHODOLOGY**

This study was conducted at Pakistani Public Universities of two cities, encoded as X and Y. Both cities contribute towards higher education greatly in terms of greater number of universities and state-of-the-art infrastructure. Additionally, modern transports in these cities facilitates both staff and students for the purpose of serving and seeking education. Thus, universities from these cities were chosen to shed light comprehensively on the approaches to the campus sustainability. The nature of inquiry to approaches was qualitative that dictated the research questions: What are the approaches/arrangements to the campus sustainability being carried out under your supervision/headship? How do you ensure that decision making for these approaches are implemented as it were planned? And are you comfortable with these approaches/arrangements? The sample was selected based on the purposive sampling technique (Creswell, 2007) as the participants, academic administrators, had these characteristics: postgraduate qualification relevant to campus sustainability, decisional role in different decision making bodies, and expertise and experience in academic and non-academic activities.

To gain deeper understanding on the approaches to the campus sustainability, nine participants showed their interest

to voluntarily participate in one-on-one audio recorded interviews. The interview data were analysed based on thematic analysis (Braun & Clarke, 2006). The analysis process was carried out in three steps. Firstly, each interview was listened and typed in Microsoft Word Application program to gain familiarity with the data. Secondly, each interview transcript was coded, and codes were rechecked to ensure their contextual understanding. Thirdly, similar codes were arranged to make themes. The relevancy of codes produced three themes: decision making for campus security, decision making for campus maintenance, and decision making for facilities.

## **FINDINGS**

This study aimed to explore different approaches to campus sustainability. Thus, we presented these approaches in themes forms. Relevant quotations and their analysis are also given below.

### **Decision Making for Campus Security**

This theme presents that decision making for campus security is the topmost priority in Pakistan because of security issues in the country in general and the security threats to the educational institutions in particular. More specifically, the educational institutions (schools) and those institutions which offer co-education (universities) are on top list of the terrorists. In such situations, if the campus is not secured then all academic and administrative activities will be abrogated. Participants stated that security is being enhanced and strengthened due to threats. As stated,

*Our vice chancellor in this regard, especially already did a lot in terms of security mechanism...But due to this security threat and this terrorist threat the more security was needed. That's why Punjab government closed all the institutions and after that no doubt our vice chancellor did a lot in terms of security measures, P-7.*

*We have the security team and there is a one of the in-charge of the security team and majority of them are from the army retired officers, P-8.*

*I am a chief security officer in this university. I look after the overall security. What I have done is that I have shift in-charges. Then I have security in-charge. The security in-charge reports to me. The shift in-charge reports to the security in-charge. This is our hierarchy, P-9.*

Above quotes showed that security decisions were considered more important than any other decisions because of the terrorism threats. These decisions are taken in a hierarchical way where juniors are empowered by the seniors. The top position is of the vice chancellor concerning to the security issues. He delegates the power to the registrar that further delegates the power to the chief security officer (CSO) and that CSO looks after all the security problems that when to change the shift, where to deploy how many persons, which place of the campus needs more security alerts than others and decisions on these problems are taken by the CSO. The CSO also sets the security guards on shift-revolving process that is advantageous not to make any stranger familiar with the inside campus activities. The most active person to maintain security is CSO who also arranges the training sessions for security guards and ensures that these guards are armed with insured weapons. As stated,

*Due to the current security situations in the country we have ensured weapons.... Universities are equipped with the state-of-the-art weapons. State-of-the-art means recommended weapon by the government and not the banned ones, P-9.*

Bad security situations need appropriate and timely decision making for security measures. The participants shared that the weapons provided with the security guards are insured. Moreover, the security cameras' connections are installed in the VC and CSO's offices. While, the cameras are installed at various places of the campus to keep an eye on the campus activities for security purposes. As the participants stated,

*And hundred plus security cameras are being placed already, P-7.*

*What I have done is that I have set state-of-the-art security cameras, implemented at different places, P-9.*

The security measures (security guards with weapons and cameras) are admirable efforts from the university decision making bodies to secure the campus. However, there is a big gap of communication if any emergent incident regarding security takes place. The security guards do not have any other gadget/tool to communicate with their colleagues than the mobile phones. Here the participants attributed this gap to the lack of funds. As stated,

*...this communication is a gap, P-6.*

*But the thing is when we talk about the fund, when we consider this situation..., P-7.*

Based on the above quotes, the security guards cannot communicate in emergency situations. Thus, there is an urgent need to address this gap of communication. The university decision making bodies need to plan to take precautionary measures because of the security situation in the country and the universities participated in this study are situated in the heart of the cities that are more sensitive in comparison of the universities situated at distant places. Additionally, there is a need to plan to secure and generate sufficient funds to ensure campus security for the purpose of academic activities. This theme showed that decision making for campus security is inappropriate due to the lack of finance and communication.

### **Decision Making for Campus Maintenance**

This theme threw light on the arrangements for campus maintenance. The ways of deciding on these arrangements were expressed. For instance, the participants stated that campus maintenance is one of the essential elements of operational aspects of campus sustainability that includes the management of building, land, parks, energy, water, and cleanliness. The participants also expressed that various departments look into this aspect of sustainability. Among these, the engineering department was considered the most significant department with respect to the sustainability of the buildings—the construction and maintenance in a way that will not affect the natural environment. The engineering department is also responsible to maintain and sustain other facilities such as water management and electricity at the campuses. As stated,

*...being head I am responsible for all those things. And I am pretty much well aware of it. You know the campus where you are still sitting, it is in the mid of the city—very fragile condition, P-6.*

*...we have also the engineering cell in which three to four engineers are available for the infrastructure, for the building, development, for construction and the other engineering problems. They look after other engineering problems like the building material, like the sanitary, like the electricity supply, water supply, gas supply, P-7.*

*There is engineering department that continuously replenishes any defect or any difficulty regarding building even in faculty housing, they control of the university, P-8.*

Based on the quotes, engineering department has a pivotal role to play to maintain the campus buildings. The infrastructure is developed and maintained under maintenance which is done by the engineering department. In Pakistan, sustainable buildings and their maintenance is seriously needed now than ever before because of the unpredictable changes in the weather specifically in East-Asia. Additionally, being a developing country, Pakistan needs to maintain the university buildings (hostels, lecture rooms, halls, libraries and laboratories) on the long-term basis because of its weathers which are very intensive. In the summer, it is too hot and winter too cold. When buildings are maintained in such a way that supports to maintain the temperature then academic activities will be carried out in a bearable physical environment. The participants stated that weather conditions are observed when buildings are constructed and maintained by the engineering department. Thus, the environmental sustainability in buildings is considered among the priority of the university decision making bodies. The following quotes shed light on the seriousness and the integrity of the concerned personnel. As stated,

*...when the new management took charge of this university at that time the basic problem was that the quality, planning and development, maintenance of the buildings and beautification of our campuses, P-5.*

*What we do is that there is a monthly basis meeting of all the heads with the chief executive. And it is done on monthly basis. In these meetings all the problems related to planning and development of the buildings, maintenance, construction ... are discussed. This discussion did not exist before 2011, P-9.*

The above quotes present the comparison of current and previous management with respect to planning, development and maintenance of the campus. The current management is well-aware on the issues of university development and maintaining its efficiency. Thus, developing and maintaining any type of campus operations like building, parks and playgrounds of the campus are integral, important and supportive to regulate the academic activities. Maintenance of playgrounds is also important to arrange extra-curricular activities. These aspects are a source of aesthetic pleasing that inspires the stakeholders to work in a motivated way. Campus beautification is one of the most important features that is maintained by a team of gardeners who work regularly. As stated,

*So far as all those gardeners and all others are concerned, we take advantage of their expertise. I mean I am interested in plantation. Some of my gardeners, they are very expert in it. What do they do they just keep on and inform me what they are doing? This is not right time,*

*actually, you know, in the foggy weather you won't able to see things that much good, P-4.*

*To maintain it, there is a large body of gardeners maintained and provost and others who you see, for example, for plantation there is a separate department which provides or which nurtures the nurseries and the nurseries of course are produced on the different sides of the campus for the beautification. And beautification of course also depends upon how the buildings are maintained, P-3.*

The quotes show that decision making on the campus beautification is carried out by a team of gardeners who manage and look after the gardening of the campus. These gardeners are experts and experienced in their work to perform their duties. Thus, the recruited team of gardeners understand the type of plantation and flowering according to the weather conditions in Pakistan and maintain it. The essence of well-arranged plantations and gardens on the campus are not only a source of campus beautification but their arrangements prevent the air pollution and help in regulating the human behaviour. The participants stated that the vice chancellor gives autonomy to the officers who look after the plantations, flowering and gardens. Accordingly, these officers empower these workers in order to bring efficiency in their work. Regarding the ways of arranging these flowers and gardens, the participants stated that these are arranged in tandem with the campus buildings. That's how the symmetrical arrangement of buildings and lands contribute towards the environmental sustainability of the campus.

Campus cleanliness is also an associated feature of campus sustainability. The workers in team form do the cleanliness of different sections of the campus on daily basis, as stated,

*...this resident officer's duty is to make all the arrangements regarding to cleaning, regarding to watering, regarding to gardening. All these functions are performed by the resident officer.... And we have gardeners as well as we have the sweepers. These sweepers are also monitored by one supervisor...basically the staff for cleaning are sweepers, P-4.*

*For cleanliness we have supervisors with small teams, P-7.*

The above-mentioned quotes have described that decision making for the activities of campus beautification and cleanliness are carried out in a hierarchical way, just as the decision making for campus security is done. There is an officer who can be called as a state officer or the resident officer who has two supervisors: one for looking after the cleanliness and other for the campus beautification. They accordingly monitor the performance of the sweepers and gardeners. An interesting feature of decision making on these aspects is that all these supervisors and state officers are under the supervision of the academic administrators who is empowered by the vice chancellor. The supervision of these supervisors is non-academic side of campus sustainability that is fundamental to regulate the academic activities. Thus, these approaches ensure the progress towards campus sustainability.

This theme has showed that decision making on the campus maintenance is a combination of various arrangements such as maintenance of the buildings, parks, land, and energy. These arrangements collectively create an enabling environment for

academic activities. The decision making of these arrangements for the stated activities is pre-requisite to conduct academic activities, as this is what the infrastructure is developed and maintained. The theme has presented that these arrangements are sufficient and maintained periodically for the efficiency of the system.

### **Decision Making for Facilities**

In this final theme the participants expressed their views on the decision making for the facilities that are arranged for students and academics. These facilities are of two types: transport facility and hostel facility. Transport is provided to the students and staff though partially. Students are charged partially for transport and rest of the budget is provided by the university, since PPU are not operated as an enterprise or as a corporate. About transport, the participants stated as,

*In fact, to coup up with the problems we have developed our policy. That policy has been filtered and adopted and generated from Punjab Government Transport Rule as we are autonomous body, P-8.*

*...we provide transportation and for transportation we have the transportation department and it is managed by that department, P-6.*

*In this campus we have four APVs in head office and four vans, round about eight cars and three allocated cars. One is allocated to the Vice Chancellor. I am the in-charge transport in this campus. I have one supervision staff.*

*Then I have drivers, P-9.*

The quotes present that there is a policy that regulates the transport of PPUs. This policy is translated under the autonomy of university. The purpose of the policy is not to disturb the natural environment. The transport department decides on the needs and challenges of university transport. Following this policy, the arrangements to meet these challenges are made by the transport committee that consists of chairman, supervisors and drivers. The chairman has direct control over the drivers and the supervisors. Thus, the main decision maker is the chairman and the drivers and supervisors are the major participants who provide input (transport problems) to the chairman who addresses these issues. The chairman decides about that how the monitoring of the transportation and maintaining the vehicles, which buses to allocate for which routes and how many drivers are to be hired and assigned the jobs for fetching students to the university and sending them back to home. Students can avail this opportunity to reach in time in the classes and meet the learning objectives. Thus, transport supports to conduct academic activities well in time.

The hostel facility at PPUs is more related to the hygienic aspect of health that is provided to the students who come to these universities from far areas. Based on the characteristic that selected universities for this study are situated in two major cities, students from far areas are facilitated with the hostel facility. The expenses are borne by the students, but they are offered this facility. Decision making for this facility is done as stated below,

*We have one hostel superintendent and that hostel superintendent is monitored by the chairman hall council. And all the suggestions and all the elementary work is performed by the hostel superintendent regarding to the food, P-5.*

*...chairman hall council finalizes the budget for lightening and for cleaning and for greenery and also for the safety of the students, P-7.*

The quotes show that decision making for hostel management consists of three major personnel: chairman hall council (CHC), hostel warden (HW) and hostel superintendent (HS). The CHC is the final authority who decides on the maintenance of the hostels. He delegates the powers to hostel warden and hostel superintendent who perform the hostel activities where food is prepared and provided to the enrolled students for which students are charged. Though the study found that hostel facility is a good initiative but there is no such system of food waste recycling or reusing of the leftovers. The participants did not share any practice related to recycling or reusing of the food. Thus, it concludes that decision making for hostel facility is found but there is lack of recycling and reusing the food wastes at PPUs.

When the participants were asked about their satisfaction regarding the approaches to decision making for campus sustainability, they said that to be satisfied in this country is difficult because of complex problems that are not addressed. One of them is the lack of inappropriate criteria to recruit the university top management which needs to be revised in order to regulate campus sustainability in a smooth way, as stated,

*Refinement is required at every level. There is no end for the refinement of such processes, P-8.*

*...to be satisfied is very difficult option in this country or in this university...it has more complex problems as well, P-3.*

*I am of the opinion that the new philosophy that the vice chancellor should be the professor vice-chancellor but should not be from that particular university because it is naturally difficult for a person to detach himself from the previous findings or from the previous thirty forty years long relationships and if he is not in detachment probably he is not making decisions on merit or on the either side, P-4.*

*But the thing is how can we define what should be the vice chancellor degree to govern the institution it is the most important factor, P-2.*

The participants' viewpoints indicated one of the major issues in regulating PPUs that is the recruitment process of the university top management. It is surprising finding that the participants linked their satisfaction with the recruitment process of the university management. Based on the quotes, lack of satisfaction of the participants links with their perceptions about the university management. This perception indicates lack of cooperation of management to the participants. Moreover, it highlights to further investigate the reasons of such recruitment process and the impact of such recruitment process on the campus sustainability at PPUs. This theme found transport and hostel facilities supportive to the internal stakeholders (students, staff and academics) with the main problems of lack of recycling and reusing the leftovers and the foods and lack of satisfaction.

This study found that decision making is done for different approaches to facilitate the stakeholders to run the academic activities. Decision making maintains the campus, ensures the campus security within the available resources, and makes the campus clean and beautiful. The study also found that the

security issues are on top of the major concerns by the university top management. Problems were highlighted in the decision making approaches to campus sustainability such as gap of communication among the security guards for campus security, lack of satisfaction of the participants, lack of recycling and reusing regarding the meal facilities in hostels, financial constraints to improve the security, and recruitment process of university management to maintain a cooperative relationship between the faculty and university authorities.

## DISCUSSION

The findings of this study increase empirical understanding on the arrangements for campus sustainability at PPUs. These arrangements are made in three areas (campus security, campus maintenance, and campus facilities) that make up operational sustainability as a construct of campus sustainability. Though the findings have shown the importance of every area to promote academic activities, still campus security is on top of all these approaches. The significance of campus security is understood in the way that if it is not ensured then no academic activity can take place. In this regard, problem of communication among security guards was found critical and attributed to the lack of finance. This finding is supported by the studies (e.g. Chernushenko, 1996; Koester et al., 2006; Uhl & Anderson, 2001) in the way that HEIs' campuses can deliver well when the operational aspect of campus sustainability is ensured. The contribution of this study is that lack of security ruins the academic activities that consequently puts a spot on the reputation and image of Pakistani higher education. Adding fuel to fire, it affects adversely the quality of higher education. Being an initial study in Pakistan it opens new line of inquiries to explore the reasons behind such uncertainty at PPUs.

Decision making on the maintenance of campuses threw light on the infrastructure of PPUs. The construction and maintenance of buildings, parks, land and plantation were found in appropriate arrangement to conduct the academic activities of teaching and learning, research and assessment. The findings have shown that transport facility is provided within the allocated budget by implementing three principles: availability, affordability and sustainability. These findings are supported with the study conducted by Leal Filho, Shiel, and do Paco (2015) to promote environmental sustainability at HEIs. Though the hostel facility was found encouraging for students but there was no initiative to evaluate the consumption of natural resources (water, electricity and food waste) being used at the campuses and hostels of PPUs. Thus, there is no initiative to save the energy or water, as Pakistan is facing energy crises. Moreover, findings have not shown any initiative to evaluate the environmental impact assessment for environmental sustainability. These findings are supported with the studies conducted by M Gonigle and Starke (2006); Winter and Cotton (2012); and Abbasi, Malik, Chaudhry, and Imdadullah (2011) with reference to take sustainable initiatives at HEIs. Lack of sustainable initiatives at PPUs indicates the negligence of environmental awareness in university operations generally and in hostel facility particularly. Such gaps cause to maximize the human impact on natural environment and minimizes the chances to generate revenues from the operational activities. This shows that importance of natural resources is overlooked at PPUs. The studies (e. g.

Karol, 2006; Mason, 2011) are consistent with these findings in terms of taking initiatives to promote environmental sustainability. This study was conducted to a limited number of PPUs. Thus, the findings cannot be generalized. However, these findings have the characteristic of transferability to the public universities only and not to the private ones. The findings showed that these approaches can help or hinder the academic activities.

## CONCLUSION

We made an effort to explore the decision-making approaches to campus sustainability to regulate the academic activities cooperatively and coherently through semi-structured interviews with the academic administrators of PPUs. The participants expressed their views on three areas of campus sustainability: campus security, maintenance and facilities. They spoke about the satisfactory arrangements such as the facilities of hostel and transport were supportive enough to save time. The participants stated that the decision making for these arrangements is carried out in committees that are formed in a hierarchy. They also shared gaps that are weakening these arrangements such as lack of communication between the security guards, lack of sustainable practices in hostel facility, lack of finance and lack of dissatisfaction (for the recruitment of university management) which was specifically their response to the satisfaction of these arrangements. We conceptualize their dissatisfaction as their perception that possibly indicates role conflict or lack of trust between the participants and the university top management. Thus, campus sustainability in decision making is observed as long as the available resources support it. However, the efficiency of the system was not found to improve the decision making for campus sustainability. Thus, there is a need to explore further that how campus sustainability at faculty level is perceived in decision making and how efforts are made. This line of inquiry will be an opportunity to extend the contributions of PPUs for the global need of sustainability at HEIs.

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