

ALTERNATE USE OF PUBLIC ASSETS: A CASE STUDY OF AIOU

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ABSTRACT

This case study aims to investigate the economic potential of the under-utilized assets at the regional campuses of the Allama Iqbal Open University. As the operational and academic activities of the AIOU are now being digitalized, the physical infrastructure developed in the different regional offices across Pakistan is now less utilized. This case study aimed at documenting the under-utilized physical assets of the AIOU in selected regional campuses and to suggest the alternate usage of these assets. For finding alternate usage, we have considered location of the regional campus, population of area, nearby industry clusters and stakeholders' responses. Based on these factors, we have developed three revenue generation models are developed to enhance the utilization rate of the regional campuses.

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INTRODUCTION

The Allama Iqbal Open University (AIOU) was established in 1974 through an Act of the Parliament with the objective to adopt the distance learning as a tool for mass education. It was the first open university in the Asia and the second one in the world established under the theme of distance education. The philosophy of distance learning was gaining momentum at that time with the establishment of the UK Open University in 1960s. The idea of distance education was to design and offer educational programs to those who were unable to join the existing educational institutions for variety of reasons i.e. age, disability, poverty, job nature etc.

The AIOU has four academic faculties; Sciences, Social Sciences, Arabic and Islamic Studies and Education which are further divided into 46 academic departments. It offers academic programs and courses from matriculation to PhD in different disciplines through Open and Distance Learning (ODL) and face to face modes across Pakistan. Presently AIOU offers around 50 academic programs starting from matric, intermediate, ADC, BS, PGDs, M. Phil and PhD. Its present enrollment of students is around 10,27,000 in Autumn 2022 semester. The AIOU has its own printing press and has published more than 1,000 textbooks for students of different levels. The present faculty at its main campus is around 250 of which more than 90% are PhDs.

The objectives of the AIOU as described by the AIOU Act 1974 are following;

- To provide educational facilities to people who cannot leave their homes and jobs.
- To provide facilities to the masses for their educational uplift as it may determine.
- To facilitate training of teachers as per new trends and technologies
- To utilize latest technology for the advancement and dissemination of knowledge

To achieve these objectives, the AIOU had established regional campuses/offices in 42 different cities across Pakistan to facilitate the students. The traditional strategy of the distance-based education was to establish the regional campuses across Pakistan which were used for educational activities as per the academic and administrative directions from the main campus, Islamabad. The main campus at Islamabad was used to plan and organise the educational programs and courses with the help of the regional centres to facilitate students. Accordingly, the role of the regional offices was to act as the mode of delivery of educational contents in the form of organizing workshops, tutorial meetings, conducting examinations and correspondence with the students.

However, with the passage of time, new technologies have emerged and, in 2018, the digitalization of AIOU was started to streamline the various operational and academic activities. A modern AAGHI Learning Management System (LMS) was developed to virtually offer educational instructions and class activities. The LMS was also designed to conduct online classes, e-submission of students' assignments and online tutorial guidance to the students. At AIOU Islamabad, two major departments are working to deliver the educational contents in online mode: Institute of Educational Technology and the Institute of Computer Technology (ICT). Both institutes are working to convert the existing manual operations into the digital mode. These digital activities include development of e-books, e-classrooms, lecture recording, database of resource persons etc.

Now, with this online environment, the traditional role of regional campuses is minimized as the allocation of tutors and appointment of resource persons (class teachers) is being conducted through online system at the main campus, Islamabad. Along with this, classes are now held in online mode and course assignments can be submitted in online portal. Additionally, admissions forms, course books, course assignments, fee collection and related activities are now digitalized. Since 1974, the AIOU has made huge investments in the physical infrastructure across the Pakistan with regional centers in 42 different cities. These regional centers/campuses have classrooms, seminar halls, offices, computer labs and spaces for parking, gardens etc. A large majority of these regional campuses is in the small cities across the four provinces and the

GB/AJK.

With the development of digital tools, the efficiency and effectiveness of existing brown assets of the AIOU has decreased and there is a dire need to reassess the true potential of these regional centres. Since the ownership and management of these regional campuses' rests with the AIOU, the operational and maintenance expenditures of buildings are being borne by the AIOU. This case study deals with assessing the future of these regional campuses buildings of the AIOU that has been established under the old version of distance education philosophy. This research study attempted to survey the existing facilities at these regional campuses and identify the under-utilized assets. Once identified, the financial valuation of these under-utilized resources is conducted, and the alternate utilization strategy is developed in this study. The suggested alternate strategy will observe the existing legal and administrative structure of the AIOU with an objective to optimize the use of assets.

1.1 Research Questions:

This case study has following major research questions;

- i. What is the capacity utilization of the regional offices of the AIOU?
- ii. What is the economic potential of the regional assets of the AIOU?
- iii. How financial inflows can be generated through the optimal use of regional assets of AIOU?

1.2 Research Objectives:

This study has the following objectives;

- Identification of the under-utilized assets at the regional campuses of the AIOU
- Valuation of these under-utilized assets at the regional campuses of the AIOU
- Analysis of different scenarios for the alternate use of under-utilized assets

LITERATURE REVIEW

This case study is developed within the academic framework of dead capital as elaborated by Hernando De Soto in his book 'Mystery of Capital'. The phrase dead capital refers to a class of physical capital which is underutilized in an economy and remains unproductive. De Soto argued for identification of dead capital within the government and private sector and called for developing legal, institutional, and financial strategies to enhance the utilization of dead capital with the active participation of stakeholders and private sector. In most cases of dead capital, the major under-utilized assets are land and buildings in developing countries which remain unproductive due to the weak regulatory and institutional framework.

Academically, this study is based on the asset monetization theory as elaborated by Hull (2010) that involves attaching the monetized value to the various classes of assets. The objective of monetization of assets is to increase the efficiency of the assets and stabilizing the revenue streams associated with these assets. In contrast to the idea of privatization, the asset monetization approach attempts to optimally manage the revenue streams of the public sector assets efficiently without changing the ownership status. Kurtz (2016), for example, has suggested to use the asset monetization approach for controlling the local govt. deficit and ensuring revenue streams. Another study by Gurubisic et al. (2009) has stressed using the appropriate asset valuation approach for managing the public sector assets. Similar theme was suggested by Deter & Folster (2008) for unleashing the hidden wealth of cities by reassessment of existing physical resources.

This study applies the field study approach as suggested by Udry (2003) for surveying and documenting the under-utilized assets at the regional centres of the AIOU. There are many researchers like Bon & Dent (1998), Andrew & Pitt (2000) & White (2011) who have called for

using the mixture of traditional and modern techniques for valuing the public sector assets. This practice of fair market valuation of public sector assets is gaining momentum as various researchers have used to measure the asset monetization gains. For this study we have used the replacement cost methodology for valuing the fixed assets of the regional campuses. The replacement cost methodology as advocated by Wyatt (2009) is widely used in valuing fixed assets.

Lastly, for determining the alternate economic usage, the income approach will be used widely used that involves the use of cash flows. These cash flows will be estimated based on the alternate usage of these assets as per the demand of local community and businesses. Recently, Hentschke (2021) has called for exploring multiple avenues for creating new sources of revenues for better financial management of the assets of the Higher Education Institutes (HEIs). Similarly, Setiawan et al. (2019) has called for developing better information management system for managing the assets of HEIs. Based on these studies, this case study will explore the under-utilized assets of the AIOU at the regional offices, valuing these assets based on market prices and suggesting the new approaches for the optimal usage of these assets.

There are several regional and global examples where governments have tried to unleash the potential of existing physical assets and generate financial inflows with the help of the private sector. Under the theme of revising the dead capital, the National Monetization Plan of the Indian Govt. announced in 2021 applied the philosophy of creation through monetization where it aims to monetize the govt. assets like roads, power grids, airports, seaports, railways network etc. to the interested investors through a competitive bidding process. The investors agree to pay a certain sum of money to the govt. for operating these govt. assets. Unlike privatization, monetization retains the ownership of assets with the govt. and only the right to use or operate is handed over to the investors for a long period of time. Practically, monetization is long term lease of a govt. asset to the investors for efficiently managing the asset. The objective of the asset monetization scheme is to obtain lump sum funds for building new govt. assets and enhance the operating efficiency of the existing assets by transferring the control of these assets to the private parties. In this way, the problem of funds shortage for building new infrastructure is resolved and the operational efficiency of the monetized assets is enhanced.

A similar was taken in 2014 by the Australian Govt. under the Asset Recycling Initiative (ARI) in which different govt. assets like ports, electricity transmission lines, roads, buildings etc. were leased on long term basis and investors paid around \$ 17 billion funds to the govt. for obtaining the right to use of these assets. The ARI scheme success was made on three closely linked factors; consensus of federal and state governments on the recycling of assets, incentives to the private investors and state governments and clear strategy for investing the funds obtained in ARI in new infrastructure projects. The whole scheme of ARI was designed with strong regulatory and contractual obligations for the investors to operate, maintain and develop the govt. assets.

Another such initiative was Limited Concession Scheme (LCS) of the Indonesian Govt. where it offered govt. infrastructure assets on long term lease to the interested investors. This scheme was designed on the model of operating, maintaining, and expanding the govt. infrastructure assets. The investors are compensated through concessions in fees for using the assets and a share in revenues for operating the assets. In this way, the govt. was able to engage the private sector parties for enhancing the operational efficiency of the infrastructure related assets and significant funds are generated for building the new assets.

Another useful method to enhance the utilization of existing infrastructure is the adoption of the Public Private Partnership (PPP or P3) model. The literature includes success stories on the adoption of PPP model in the education sector. For example, Farah and Rizvi (2007) checked the operational aspects of PPP in primary school education and found that apart from providing access to education, the stakeholders have different approaches for managing the assets. Generally, Govt. Depts. In Pakistan use PPP model as a transition tool for privatization that affect the working of agreed rules. Similarly, Barrera-Osorio et. Al (2011) observed that PPP model

works well in terms of increase in enrollment in schools, teacher attendance, quality education and reduce gender disparities. Another study by Afridi, M. (2018) on public-private partnership in the education sector, the author observed that such models enhance the access to education however, there is a need to restructure the terms and conditions of PPP agreements to enhance their effectiveness.

RESEARCH METHODOLOGY

This research study is based on mixed study approach using a combination of desk study and field study methods. At first step, we have taken a sample of six regional campuses (Peshawar, Faisalabad, Multan, Quetta, Sukkur and Mirpur) from across Pakistan to document the installed capacity in terms of classrooms, lecture halls, offices etc. The reason for selection of these regional campuses out of around 30 regional campuses/centers of the AIOU was to give a broader representation for each area/province. At next step, we documented the present utilization of the existing physical infrastructure in these regional campuses. We checked the utilization rate of classrooms, lecture halls, seminar rooms, offices, and other facilities. After the completion of utilization survey of installed facilities at the regional campuses, the market-based valuation of these under-utilized assets is conducted using the replacement cost methodology. This methodology uses the present cost of constructing a similar class of assets as the proxy to determine the market value of regional campuses. Once the valuation of these under-utilized assets is completed, the alternate revenue generation models are developed based on the local factors; population of a given area, nearby industry clusters, capacity of the regional offices and the skills deficiency in each area. At the end, suitable policy recommendations are made to develop long-term strategies (course offerings, industry partnerships etc.) to optimize the use of these assets at the regional campuses.

SURVEY OF BUILDINGS OF REGIONAL CAMPUSES OF AIOU

The existing state of assets being used in the regional centers of the AIOU is assessed through the field visits and through questionnaire from the staff at the regional heads.

4.1 Regional Campus Peshawar

“Regional Campus Peshawar was established in 1977. It started its operations in newly constructed state of the art campus building at Hayatabad Phase-5 Peshawar in 2004. Surrounded by the industrial, commercial and government offices, this RC is ideally located for engaging industry and commercial partners for conducting seminars, workshops, trainings and customized courses. The new campus building is equipped with digital lecture rooms, computer labs, library, examination halls, auditorium, video conference rooms and student’s facilitation desk. AIOU Peshawar Region serves five districts i.e. Peshawar, Nowshera, Charsadda, Khyber and Mohmand. Students’ enrolment in different ODL programs from matric to master’s level is around 13,817 in Autumn 2022.”



Table Details of Assets at RC Peshawar

Nature	Quantity	Facilities (Assets)
Offices	5	Five offices with necessary furniture
Classrooms	4	Four classrooms with multimedia, white board and chairs
Lecture Halls	3	Two small and one large seating capacity of 300 people.
Computer Lab	1	One lab with 20 PCs is functional.
Library	1	One small size library with around 1,000 books.
E-Conference Room	1	Used for online meetings with the head office.
Guest Room	2	Two bedrooms for visiting officers from the main campus.
Vehicles	1	One vehicle is being used by the officers for official tasks.

4.2 Regional Campus Mirpur

“The Regional Campus Mirpur was established in May, 1977 and shifted to its state of art building in 2001. The campus is located at heart of main city and comprises of an area of measuring 4 kanal and 12 marlas. The enrolment for semester spring 2022 is 13,117 and 669 tutors are associated with Regional Campus. Facilities provided in the building of regional campus include computer labs, helpdesk, auditorium, library, e-class room, conference hall, lecture rooms and offices for staff.”



Table 4.2 Details of Assets at RC Mirpur

Nature	Quantity	Facilities (Assets)
Offices	8	Five offices with necessary furniture
Classrooms	6	Six classrooms with multimedia, white boards and chairs
Lecture Halls	3	Two small & one large hall for total 300-400 students.
Computer Lab	1	One lab with 20 PCs is functional.
Seminar Room	1	A seminar room is prepared for 30 participants.

Video Conference Room	1	A video conference room for online meetings.
Guest Room	1	One guest room is developed with two beds.
Library	1	One small size library with around 1,000 books.
Servant Quarters	2	Two small servants' quarters for campus staff.
Record Room	2	Two records rooms for storing record/extra stuff.

4.3 Regional Campus Quetta

“The Regional Campus Quetta was established in 1976 and is situated in a well-equipped building on Eastern Bypass. The facilities provided in the regional campus building are helpdesk, e-class rooms, lecture halls, video conference, computer lab and library for local students.. Overall, enrollment of students in Spring 2022 semester was 5,397 of which 57% were females.



Table 3 Details of Buildings

Nature	Quantity	Facilities (Assets)
Offices	7	Seven offices with necessary furniture & equipment.
Classrooms	4	Four classrooms with multimedia, white boards, chairs
Examination Halls	3	Two small & one large halls for total 300-400 students.
Computer Lab	1	One lab with 20 PCs is functional.
Seminar Room	1	A seminar room is prepared for 20-30 participants.
Video Conference Room	1	A video conference room for online meetings.
Committee Room	1	Used for conducting meetings with tutors/staff.
Reading Room	1	Used for multipurpose activities etc.
Guest Room	1	One guest room is developed with two beds.
Library	1	One small size library with around 1,000 books.
Cafeteria	1	One small size cafeteria for students and staff.
Record Room	1	One record room for storing record/extra stuff.

4.4 Regional Campus Sukkur

“The Regional Campus Sukkur was established in August 1984 and was shifted to its own state of art building on 31st March 2022 located at National Highway opposite to the Begum Nusrat Bhutto Women University, Rohri, Sukkur. The Sukkur Regional Campus serves four districts i.e., Sukkur, Ghotki, Khairpur Mirs, & Kashmore. Facilities provided by RC include computer labs, helpdesk, auditorium, library, e-class room, conference hall, lecture rooms. The enrollment for semester Spring 2022 was 2,818.”



Table Details of Building at RC Sukkur

Nature	Quantity	Facilities (Assets)
Offices	8	Eight offices with necessary furniture & equipment.
Classrooms	2	Two classrooms with multimedia, white boards & chairs
Multipurpose Halls	2	Two halls for total 200-300 students.
Kitchen	4	Used for making tea for officers/staff.
Seminar Room	1	A seminar room is prepared for 20-30 participants.
Video Conference Room	2	Two video conference rooms for online meetings.
Committee Room	1	Used for conducting meetings with tutors/staff.
Green Room	1	Used for multipurpose activities etc.
Guest Room	5	Five bed rooms are developed for visiting officers.
Digital Library	1	Library with computers for students use.
Cafeteria	1	One small size cafeteria for students and staff.
Store	2	Two stores for storing record/extra stuff.

4.5 Reginal Campus Faisalabad

“The Regional Campus Faisalabad was established in 1979 in the industrial city of Faisalaabd and shifted to its state of art building in 2007 at Millat Town. The regional campus serves the five tehsils; Jaranwala, Tandlianwala, Samundri, Chak Jhumra and Faisalabad. There are 8,891 registered tutors associated with regional campus. As per enrolment for Semester spring 2022 is 20,056. The building of regional campus has computer lab, library, video conferencing room and e-class room.”



Table 5: Details of Building

Nature	Quantity	Facilities (Assets)
Offices	4	Four offices with necessary furniture & equipment.
Classrooms	4	Four classrooms with multimedia and chairs.
Examination Halls	3	Two small & one large halls for total 300-400 students.
Computer Lab	1	One lab with 20 PCs is functional.
Staff Hall	3	Three staff hall for tutor/staff meetings.

Video Conference Room	1	A video conference room for online meetings.
Committee Room	1	Used for conducting meetings with tutors/staff.
Multipurpose Room	1	Used for multipurpose activities etc.
Guest Room	2	Two guest rooms are developed for visiting officers.
Library	1	One small size library with around 1,000 books.
Store	2	Two rooms for storing record/extra stuff.

4.6 Regional Campus Multan

“The AIOU started its services in city of shrines back in November 1976. It was the first regional campus established soon after the establishment of university. The Regional Campus is situated in its own two buildings comprising of 14 Kanal & serves two districts Multan & Khanewal. This Regional Campus is equipped with 19 classrooms, a library, video conference facility for online classes and RD Conference, training sessions / online meetings of tutors, a spacious auditorium, two computer labs and girls hostel facility for students of far-flung areas. As per enrolment for semester spring 2022 semester was 13,465 students.



Table 6: Details of Buildings

Nature	Quantity	Facilities (Assets)
Offices	9	Nine offices with necessary furniture & equipment.
Classrooms	19	Nineteen classrooms with multimedia and chairs.
Examination Halls	3	Two small & one large halls for total 300-400 students.
Computer Lab	2	Two labs with around 50 PCs are functional.
Staff Hall	3	Three staff halls for tutor/staff meetings.
Video Conference Room	1	A video conference room for online meetings.
Committee Room	2	Used for conducting meetings with tutors/staff.
Meeting Room	1	Used for multipurpose activities etc.
Kitchen	1	One kitchen for serving tea etc.
Library	1	One library with around 2,000 books.
Store	2	Two rooms for storing record/extra stuff.
Girls Hostel	1	One girl hostel for 20-30 students.

Operational Expenditures of Regional Campuses 2022-23:

Sr. No.	Regional Campus	Allocated Developmental Budget Rs. in Million	Non-Developmental Budget	Major heads for budget utilization
1	Peshawar	24		Salaries to staff, tutor payments, utilities charges, fuel charges, advertisement etc.

2	Mirpur	20.2	Salaries, tutor payments, utilities charges, fuel charges, advertisement etc.
3	Faisalabad	50.4	Advertisement, Salaries to staff, tutor payments, utilities charges, fuel charges, advertisement etc.
4	Multan	30.2	Tutor payments, utilities charges, fuel charges, advertisement, staff salaries etc.
5	Sukkur	9.8	Utilities charges, fuel charges, advertisement, salaries, staff etc.
6	Quetta	9.4	Salaries to staff, tutor payments, utilities charges, fuel charges, advertisement etc.
Total		144	

This table reflects the present non-development budget allocation to the above-mentioned regional campuses of the AIOU. The budget is used for tutor payments, staff salaries, utilities payments, conduct of examinations etc.

MARKET VALUATION OF BUILDING OF REGIONAL OFFICES/CAMPUSES

After the completion of survey of utility of existing assets at the regional offices, the market-based valuations are conducted to know the present value of these assets. Once the market-based valuation is completed, the next step of developing alternate usage models of these assets will be explored.

Table 5.1: Market Valuation of Assets at Regional Campuses

Regional Campuses	Total Area (Land + Building)	Market Price of Land Rs. Million (A)	Covered Area including basement (Square feet)	Cost of Construction (Rs. in million)	Market Value* (Rs. in million) (B)	Total market value (A)+(B)
Peshawar	4	72	21,900	17.47	175.20	247.2
Mirpur	4.5	56	24,700	12.79	197	253
Faisalabad	12.7	203.2	29,800	29.44	238	441
Sukkur	8	96	23,500	202.33	255	351
Multan	10	140	32,600	92.24	260	400
Quetta	10	110	27,500	18.74	200	310

*Market valuation is based on replacement cost method. This method attaches a market value to the assets based on their replacement cost. The replacement cost method incorporates the present cost of different factors for developing a similar asset of same size. The present (2022-2023) cost of construction per square feet for similar buildings is around Rs. 8,000.

Land valuation is based on the price of land in the vicinity of the Regional Campus in each city. The estimates for land pricing are obtained from Zameen.Com.

Table 5.2 Land Valuation of Regional Campuses

City	Area (Kanal)	Market price Per Kanal	Estimated market price
Peshawar	4	18,000,000	72,000,000
Mirpur	4.5	12,500,000	56,250,000
Multan	10	14,000,000	140,000,000
Faisalabad	12.7	12,000,000	152,400,000
Sukkur	8	12,000,000	96,000,000
Quetta	10	11,000,000	110,000,000

TOTAL			626,650,000
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These estimates are based on the average price of land per kanal in the vicinity of the regional campuses. These may be the minimum figures as the local economic conditions and other real estate factors may help to get the higher market price of land.

SUGGESTIONS REGARDING ALTERNATE USAGE OF ASSETS AT REGIONAL CAMPUSES OF AIOU

To determine the possible optimum usage of these assets, we conducted interviews of the relevant officers at these regional offices, representatives of the chamber of commerce in the concerned city, heads of academic departments within AIOU and the senior management at the main campus of the AIOU for soliciting multiple options for optimally using these assets. Some responses were obtained through questionnaire via email. The set of interview questions is attached in the annexures.

6.1 Regional Campus Peshawar

- i. A detailed discussion was held with the Regional Director (RD) AIOU Peshawar on the existing situation of the building along with the issues and opportunities.
- ii. The RD highlighted that due to conversion of workshops and tutorial meetings in online mode, most existing classrooms and halls in the building are less utilized and only admission & exam related activities are planned here.
- iii. He also urged that the main campus should create skills-oriented courses that may facilitate the surrounding Hayatabad Industrial Area.
- iv. A key point was that effective linkages should be developed with the private sector for internships opportunities, job placements and commercial training.
- v. Following courses and programs may be started in the regional campus;
 - a. Diploma in Import-Export Management
 - b. Diploma in Logistics management
 - c. Short courses on E-Commerce, Office management
 - d. BS Program in English, Accounting & Finance, BBA
 - e. Short-training programs with collaboration of SMEDA, KPK GOVT.

Along with the regional campus, a visit was made to the Sarhad Chamber of Commerce, KPK, Peshawar to explore the possibility of building linkages with the Regional Campus Peshawar. The interviews conducted there are summarized here.

- i. The officials at chamber highlighted the potential of gem industry, border trade with Afghanistan, SMEs in the Peshawar city, IT industry etc.
- ii. A key point raised by the officials at the chamber of commerce was the lack of trained professionals in import and export management as majority of trade with the Afghanistan is conducted through Peshawar.
- iii. A representative of the SMEDA in the chamber's office also highlighted the issue of lack of training facilities to the traders and businesses of Peshawar and urged that AIOU should develop coordination in this area.
- iv. Another possible option was creation of Pakistan Product Display through AIOU's regional offices across country for the promotion of indigenous products and services.

6.2 Regional Campus Mirpur

- i. The RD briefed on the existing state of affairs of the assets within the building and stated that due to conversion of workshops and tutorial meetings in online mode, the majority of existing classrooms and halls in the building are less utilized and only exam related activities are conducted here.
- ii. She also urged that AIOU main campus should create skills-oriented courses that may facilitate the surrounding industrial labors. These courses may be tailored as per the industrial and commercial needs of the AJK and Mirpur.
- iii. A key point was that effective linkages should be developed with the private sector for internships opportunities, job placements and commercial training. Since Mirpur has a high rate of labor migration to Europe, special courses can be started to train the youth to gain professional jobs in the international market.
- iv. The RD informed that a close collaboration among the regional campus, local industry, and the faculty members from the AIOU main campus can create an attractive set of diplomas, short-courses and trainings.
 - a. Language related Diploma Programs (TEFL, IELTS ETC.)
 - b. BBA, BS Accounting & Finance, BS English, BS Computer Sciences
 - c. Short courses on hospitality management, office management etc.

Along with the regional campus, a visit was made to the Mirpur Chamber of Commerce, AJK, Mirpur to explore the possibility of building linkages with the Regional Campus Mirpur. The interviews conducted there are summarized here.

- i. The chamber of commerce seeks to build a positive and constructive educational relationship with the AIOU Mirpur Campus. Since Mirpur is a small city with most of the SMEs are working in the retail, tourism, pharmaceutical and foam industry, there is a strong demand for trained manpower in these industries.
- ii. The official chamber highlighted the potential of foam industry, tourism potential in AJK, SMEs in Mirpur city, foreign travels etc.
- iii. After the development of dry port in Mirpur, there is a strong demand for import-export professionals in both goods and service industry.
- iv. A representative in the chamber's office also highlighted the issue of lack of training facilities to the traders and businesses of Mirpur and AIOU regional campus can play its role in this regard.
- v. Another emerging area is the tourism sector AJK that requires a trained workforce in the areas of tour guides, travelling, hospitality, logistics, food, accommodation, adventure sports, tourism marketing etc.

6.3 Regional Campus Sukkur

- i. A detailed response was provided by the Regional Director (RD) AIOU Sukkur on the existing situation of the facilities in the regional campus building by examining the capacity of classrooms, halls, offices and auditorium.
- ii. The regional campus is ideally located on the main GT Road and in close proximity of the small and medium industries area along with some big names in nearby surroundings; Olper Milk, Continental Biscuits, Oxford Knitwear, Fauji Fertilizers, OGDCL etc.
- iii. He also urged that AIOU main campus should develop skills-oriented courses related to entrepreneurship, agri-business, e-commerce, logistics, healthcare, IT etc. that may facilitate the surrounding industrial labors. These courses may be customized as per the

industrial and commercial needs of Sukkur, Khairpur, Ghotki, Kashmore and surrounding SMEs and agricultural businesses.

- iv. The management of the regional campus also stressed that effective linkages should be developed with the private sector for internships opportunities, job placements and commercial training. Since Sukkur is a predominately agricultural area, special courses can be started to train the youth in marketing agricultural products including rice, wheat, fruits, dates etc.
- v. The most desired courses to be offered at the regional Campus Sukkur may;
 - a. Diploma in Agri Products Marketing & Sales
 - b. Short-courses on IT, Logistics, office management etc.
 - c. BBA, BS English, BS Accounting & Finance
 - d. Industrial trainings with the collaboration of Sindh Govt. and SMEDA
- v. A similar response was provided by the officials at the Sukkur Chamber of Commerce to explore the possibility of building links with the Regional Campus Sukkur.
- vi. The chamber of commerce seeks to build a positive and constructive educational relationship with the AIOU Sukkur Campus as there exists a significant skills deficiency in the Sukkur and nearby areas in labor force.
- vii. Two major industrial areas exist in the vicinity of Sukkur: SITE Sukkur and Special Economic Zone Khairpur. The regional campus may play its role in the development of skilled industrial labor force.
- viii. They also highlighted the issue of lack of industrial training facilities to the traders and businesses of Sukkur and AIOU regional campus can play its role in this regard.

6.4 Regional Campus Faisalabad

- i. A detailed response was provided by the Regional Director (RD) AIOU Faisalabad on the existing situation of the building and the capacity of classrooms, halls, offices, meeting rooms, lab, and auditorium.
- ii. The RD briefed that digitalization of tutor appointments, workshops and other affairs have greatly reduced the students' footprints in the regional campus building as most of the tasks are performed online.
- iii. He informed that the regional campus Faisalabad is fully equipped in terms of resources; classrooms, lecture halls, computer lab, meeting room etc. for starting any academic program with the collaboration of the main campus Islamabad.
- iv. He emphasized that since Faisalabad is an industrial city with the largest concentration of textile factories, the AIOU main campus develop create skills-oriented courses that may enhance the skills deficiency specially in the textile designing, marketing, exports, IT, e-commerce, agricultural products etc.
- v. A key point was that effective linkages should be developed with the private sector for internships opportunities, job placements and commercial training. As Faisalabad is a major export hub of Pakistan, special courses related to the import-export, logistics, marketing, e-commerce may be started to train the youth for industrial jobs.
- vi. The RD informed that a close collaboration among the regional campus, local industry, and the faculty members from the AIOU main campus can accurately assess the needs for local courses and diplomas which can be developed to minimize the post-degree unemployment scenarios.
- vii. The suitable academic programs for the regional campus Faisalabad may be;

- a. Diploma in Import-Export management, e-Commerce, Logistics etc.
 - b. Short courses on textile design, office management etc.
 - c. BBA, BS English, BS Accounting & Finance
 - d. Commercial trainings with the collaboration of textile industry and SMEDA
- viii. Similar responses were provided by the officials at the Faisalabad Chamber of Commerce & Industries to explore the possibility of building linkages with the Regional Campus Faisalabad.
- ix. The chamber of commerce seeks to build a positive and constructive educational relationship with the AIOU Mirpur Campus. As Faisalabad is the textile hub that plays a major role in the textile exports of \$ 20 billion, there exists a higher need for launching export, marketing, logistics and design related courses.
- x. The officials also liked the idea of collaboration with the AIOU regional campus for conducting short-training, courses, workshops for export related certifications and standardizations.
- xi. Along with that, agriculture-related SMEs also exists in the surroundings of Faisalabad and special courses on product development, marketing, exports, logistics etc. may be developed and conducted in the regional campus building.
- xii. Another possible area is the provision of extra space to the small-scale IT entrepreneurs for short courses against a pre-defined fee for enhancing the building utilization.

6.5 Regional Campus Quetta

- i. A detailed response was provided by the Regional Director (RD) AIOU Quetta on the facilities available in the building of the regional campus i.e. class-rooms, halls, offices, computer lab, meeting room, and auditorium.
- ii. The RD briefed on the impact of digitalization of workshops and the creation of sufficient space for accommodating industrial training, short-courses, and other academic programs to efficiently utilize the resources at the regional campus.
- iii. He stressed that since Quetta is the largest city in Baluchistan, there exists an abundance of opportunities for introducing job-specific short-courses, diplomas and academic degrees for enhancing the skills of the local population.
- iv. There is a consensus on building effective linkages with the private sector for internships opportunities, job placements and commercial training. Since Quetta is a huge trade hub for import and export to Afghanistan and Iran, the courses related to international trade, exports, logistics, safety management etc. may help the local trading community.
- v. A key factor in Baluchistan is the low level of literacy among the public so the technical courses may be created in local language or Urdu for easy understanding and course fees should be affordable for a larger section of community.
- vi. The ideal courses to be started at the regional campus Quetta are;
 - a. Diploma in Logistics, Import-Export, Office Management
 - b. Short courses in local language or Urdu on mineral development, agri-products etc.
 - c. BS English, BBA, BS Accounting & Finance, BS Computer Sciences
- vii. Another response was received from the Quetta Chamber of Commerce for building a close relationship with the AIOU regional campus for industrial and commercial training.
- viii. The Chamber officials highlighted the potential for trained manpower to develop and

market the traditional products of Baluchistan i.e. shawls, shoes, clothes, fruits, dates etc.

- ix. Similarly, there exists a lot of potential in the development of trained manpower for managing import and export businesses in Quetta as Afghanistan and Iran are at proximity.
- x. In the same way, the Baluchistan lack trained manpower for exploring mineral and metals as the province has abundance of natural resources. The regional campus AIOU may play its role for arranging specific courses and programs in this regard.

6.6 Regional Campus Multan

- i. The regional campus Multan is the largest regional campus of the AIOU in terms of facilities, classrooms, lecture halls, offices, meeting rooms, computer labs, hostel and other facilities.
- ii. The RD highlighted the potential of the regional campus and called for developing job specific courses & industry oriented academic programs for enhancing the utilization of resources at regional campus.
- iii. Multan is the largest city in the Southern Punjab and a significant industry has developed around the city especially in rice processing, flour mills, fruits packing, textiles, pharmaceuticals etc.
- iv. The RD informed that the regional campus Multan is equipped with all necessary facilities to offer academic programs and short courses for industrial and commercial labor force.
- v. The RD emphasized that a close collaboration among the regional campus, local industry and the faculty members from the AIOU main campus can create a suitable set of diplomas, short-courses and trainings.
- vi. The most suitable academic programs for the regional campus Multan are;
 - a. BBA, BS English, BS Computer Sciences, BS Accounting & Finance, BS Economics
 - b. Diploma programs in Logistics Management, Import-Export, E-Commerce etc.
 - c. Short courses on office management, IT, business laws, marketing etc.
 - d. Commercial trainings with the collaboration of SMEDA and Govt. of Punjab
- vii. The response received from the Multan Chamber of Commerce & Industries was also positive as they seek to build a constructive educational relationship with the AIOU Multan Campus.
- viii. The chamber highlighted the skills deficiency in the growing population and stressed the need for launching job specific courses to generate maximum employment.
- ix. There is an acute shortage of healthcare workers, agri-business workers,
- x. A special request was made by the Chamber officials to offer space for conducting training and offer courses on certification and standardizations.

Box 2 A Comparative Analysis of Open Universities in other Developing Countries

National Open University of Nigeria:

The National Open University of Nigeria (NOUN) was established in 1983 and was first of its kind in West Africa. This university was mandated to launch educational programs in ODL mode across the country. The NOUN has also developed e-courseware, audio/video support and e-classrooms for students. The course material and assignments are developed to help students facilitate self-learning in an easy way. The university is adopting digital methods to enhance the quality of courses and access to the remote areas.

Indra Gandhi National Open University: The Indra Gandhi National Open University (IGNOU) was established in 1985 and presently has almost 7.1 million students making it largest university in the world. The IGNOU has developed market-oriented courses and continues to provide ODL courses across India. The IGNOU has developed online learning portal and has also developed a network of 67 study centers across India. The IGNOU has started its decentralization process with dividing the operations in five major regions of India for efficient management. At present, India has almost 17 open universities offering courses and programs to a wider set of population.

Anadolu University Turkey: The Anadolu University Turkey is granted the status of national ODL providing university in 1982. The Anadolu University has developed faculties in arts, sciences, business, humanities etc. and is offering courses across Turkey and Turkish speaking diaspora. The university was created with a mandate to provide access to the students in rural areas for enabling them to study the latest courses. The Anadolu University has also adopted the digitalization methods to enhance its access to courses and programs across Turkey.

WORKING MODELS FOR ALTERNATE USAGE OF REGIONAL CAMPUSES

Based on the field visits of regional centers of the AIOU and the discussion with the staff, management and other stakeholders, we have developed following proposals for optimal use of the spare capacity of the regional campuses;

7.1 Campus Based Model

This model works on the assumption that AIOU decentralizes its academic activities to the regional centers for starting the academic activities based on local demand for different certificates, diplomas, and degrees. For this purpose, each regional campus may start BS level programs and PGD diplomas for meeting the needs of local economy and industry. Such academic programs may adopt the evening or weekend classes within the ODL framework of learning. Another possibility is to start face to face classes of BS level programs in science subjects. However, it will require development of labs and approval from HEC.

Table 7.1 Estimated Revenues from Campus Based Model

City	Programs	Estimated Enrolment	Fees Per Semester	Total Revenues
Peshawar	5	1,000	24,000	24,000,000
Mirpur	5	1,000	30,000	30,000,000
Multan	8	1,600	32,000	51,200,000
Faisalabad	7	1,400	31,000	43,400,000
Sukkur	5	1,000	25,000	25,000,000
Quetta	6	1,200	22,000	26,400,000
Total				200,000,000

As the above working shows, the starting of academic programs in the regional campuses may generate Rs. 200 million per semester. Our working is based on starting a very limited number of BS level programs with an affordable fee structure. These programs may help the regional campuses to utilize their spare space for conducting classes. This model requires decentralization of admissions, examination, teaching and student support at the regional level for the smooth

flow of academic activities. However, the necessary academic support from the main campus may be sought for books, teaching methodology, course assignments and final papers.

7.2 Rental Model

This model seeks to estimate the rental income associated with the spare capacity of various facilities developed within the regional campus. Within the framework of Public Private Partnership (PPP), the rental model assumes that qualified private sector entities may use the extra capacity of the regional campus for their own academic activities. For rental income purposes, private schools, colleges, and sub-campus of major universities may be invited to use the spare capacity of the regional campus against a fair market rent.

Table 7.2 Estimated Revenues from Rental Model

Regional Campus	Area (Kanal)	Market Rent Per Kanal	Estimated Rent (Rs.)
Peshawar	4	120,000	5,760,000
Mirpur	4.5	50,000	2,700,000
Multan	10	110000	13,200,000
Faisalabad	12.7	85000	12,954,000
Sukkur	8	80,000	7,680,000
Quetta	10	65000	7,800,000
Total			50,094,000

This model estimates the Rs. 50 million potential revenues in rental model. The rental model assumes that the spare capacity of a regional campus may be utilized for rental purposes with a third party. For this purpose, private schools, colleges, or sub-campus of local universities may be contacted for utilizing the building in an optimal manner against market rent. As these regional campuses are constructed to work as educational institutes, the ideal rental partners can be the educational bodies. However, the option of working as a sub-campus of a professional body or as a training center of a private firm may also be considered.

7.3 Pay as You Go (PAYG) Model

Another possibility is to develop a pay as you go pricing model which charges a specific fee for utilizing a particular service in the regional campus. This model requires attaching pricing tags to different facilities (classrooms, lecture halls, e-classrooms, library, auditorium, computer labs, offices etc.) available in the regional campus. The users may utilize the facility against a specified set of charges. This model can be suitable for guest speakers lectures, conducting entry tests, training workshops, computer-based courses, performing arts etc.

Table 7.3: Estimated Revenues from PAYG Model

	Classroom	Lecture Hall	Auditorium	Computer Lab	Meeting Room	Seminar Room	Total
Rate per Hour	3,000	5,000	10,000	6,000	5,000	8,000	
Peshawar	12,960,000	7,200,000	2,520,000	2,160,000	5,400,000	480,000	30,720,000
Mirpur	12,960,000	7,200,000	1,440,000	1,512,000	3,600,000	576,000	27,288,000
Multan	10,080,000	10,800,000	2,880,000	1,296,000	5,400,000	960,000	31,416,000
Faisalabad	5,760,000	10,800,000	2,160,000	1,080,000	5,400,000	864,000	26,064,000

Sukkur	8,640,000	7,200,000	1,800,000	864,000	5,400,000	480,000	24,384,000
Quetta	10,800,000	600,000	1,440,000	1,296,000	3,240,000	480,000	17,856,000
Total	61,200,000	43,800,000	12,240,000	8,208,000	28,440,000	3,840,000	186,168,000

This model attached the monetary value to the different sub-parts of the buildings at the regional campuses for their usage by the public or institutions. We have developed these estimates based on an average usage of 20 days for classes and lecture halls with 4 to 6 days for auditorium/seminar rooms/lab in a month against a pre-defined fee. This model seeks to retain the ownership and control of the building with the local administration of the AIOU and proposes a flexible model based on the usage of different resources in the building. However, this model requires active management on the part of team of the regional campus and responsive staff to timely respond to the requests for booking of these facilities for the private sector.

Table 7.4: Estimated Revenues Based on above Models:

RC	Campus Model	Rental Model	PAYG Model
Peshawar	24,000,000	5,760,000	30,720,000
Mirpur	30,000,000	2,700,000	27,288,000
Multan	51,200,000	13,200,000	31,416,000
Faisalabad	43,400,000	12,954,000	26,064,000
Sukkur	25,000,000	7,680,000	24,384,000
Quetta	26,400,000	7,800,000	17,856,000
Total	200,000,000	50,094,000	186,168,000

This table consolidates the revenues that can be generated from the above said models. As every model has its own advantages and disadvantages, the higher management of the AIOU should select the revenue generation model based on its legal framework, relevance to the community at the regional campus level and the appropriate training to the staff members for efficiently using the facilities in the regional campus. Another useful aspect that needs to be considered is the collaboration with the private sector at the regional level is required for successfully executing the revenue generation model.

PUBLIC POLICY RELEVANCE

This research study seeks to provide a framework for determining the capacity utilization of the public sector assets, valuation of public sector assets and developing a viable financial model for the alternate use of the existing physical capital. Specifically, this case study aimed to develop models to determine the market value of the physical assets of a public sector higher education institute and exploring the profitable opportunities that exist in the localized environment by deploying these physical assets. Based on the field visits and discussion with the relevant authorities, this study proposes the alternate usage of the existing assets that can be developed as per the regional socio-economic outlook of a given area. The key objective of this study is to bring a set of recommendations to the higher education institutes to generate higher revenues and minimizing costs by utilizing the existing assets/infrastructure.

Based on the above discussion, we can draw the following lessons for the public policy;

8.1 Ownership of Physical Infrastructure

The development of physical infrastructure for higher educational institutes should be planned by keeping in view the requirements of both public and private sector. The ownership of physical assets should be separated from the operational aspects of these institutions. There should be a central authority for retaining the ownership of govt. buildings and management. A single school

building may be used as a school in the morning and as a college or training center in the evening. By adopting this method, government can generate maximum revenues and ensure the optimal utilization of the assets.

8.2 Management of Physical Infrastructure

The real issue is the management of physical infrastructure of existing educational institutes in Pakistan. There is abundance of buildings for govt. schools and colleges in Pakistan and we need to develop a policy for optimizing their usage. At present, the management of physical infrastructure is skewed towards only govt. users. There is a lot of potential for offering these extra spaces to the private sector especially in the case of education where a lot of entrepreneurial talent is emerging who lacks resources to access large size classrooms and lecture halls. A separate Assets Management Unit (AMU) should be established in every city that should manage access to these physical assets to both public and private sector at market rates.

8.3 Monetization of Usage of Physical Infrastructure

There should be a monetized value for each segment of the physical infrastructure of educational institutes. For example, a classroom may have a daily rent of Rs. 1000 to enable the private sector to utilize the building as and when needed. Similarly, playground, auditoriums, e-classrooms, lecture halls etc. may be assigned monetized rental value for generating the maximum revenues by optimally using the physical facility. Such monetization will enable the efficient management of the physical assets of educational institutes and will help both public and private sector to access the facility.

8.4 Revenue Generation Model

For each type of physical infrastructure, the govt. should develop a revenue generation model by collaborating with the private sector and the surrounding community. There exist opportunities where the private sector can utilize the building for training of employees, research and development, back-office operations, guest lectures, research labs, assessment centers, exhibitions, product display units, book shops etc. against a specified fee. Along with this, strong collaboration with the private sector in the surroundings can be built to ensure maximum facility utilization.

Box 2 Emerging Trends in Open and Distance Learning

Rise of Online Learning Platforms: Many online learning platforms like Coursera, Udemy, edX, Skillshare, Masterclass, Khan Academy, Future Learn etc. have emerged in the last ten years offering courses in different fields; business, social sciences, computer sciences, art, humanities etc. Some of these online learning platforms have enrollments exceeding 100,000 in a single course. These online portals are offering some courses for free and charging fee against some courses. For this purpose, these online learning portals have developed partnerships with leading universities of the world and teachers are hired for conducting the course in online mode. The pre-recorded lectures are shared with students on a daily or weekly basis along with the study material. The assessment is made through MCQs and short questions which are attempted to get the certificates.

Online Learning Branches of Traditional Universities: Many universities have started to develop their online branches to offer online courses worldwide. Some high-ranking American universities like Harvard, MIT, Stanford etc. have developed their online presence by offering courses in many subjects. These courses are offered to worldwide audiences with fees ranging starting from \$ 20 to onwards. Pre-recorded lectures are shared with the students through a dedicated portal along with learning material and online discussion forums. The assessment is usually made through MCQs or short-questions format. These online branches of traditional universities are attempting to online market their unique courses and learning pedagogy.

Govt. Backed Digital Learning Portals: Different countries and organizations have developed online learning portals for people of all ages. Some examples of these portals include CampusIL of Israel, NPTEL of India, Learning Passport of Zambia, iEN of Saudi Arabia etc. These digital portals have adopted the model of offering market driven courses in science, technology, business and humanities to the vast section of population through integration of audio/video lectures, study material and assessment components. Both public and private sector bodies are developing MOOCs (Massive Open Online Courses) for educating the general public on health, sciences, IT, business, social sciences, arts etc. in order to develop their employable skills.

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