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EVALUATION

Merit and Needs-Based Scholarship Program (MNBSB) Evaluation Report

March 12, 2013

This report was produced for review by the United States Agency for International Development (USAID) by Sajjad Akhtar, Ghazanfar Hoti, Imran Khan, Ahmad Jameel and Muhammad Danish. It was prepared by Management Systems International (MSI) under the Independent Monitoring and Evaluation Contract (IMEC).



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Contracted Under No. GS-23F-8012H and Order No. AID-391-M-11-00001

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DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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- University officials the team met and interviewed during field visits including Vice Chancellors, Deans, Heads of Departments, Registrars, Financial Aid Officers, and Members of Institutional Selection Committees;
- Current students and alumni at the 11 universities who gave their time in filling out the surveys as well as those who participated in group discussions;
- The Program Coordinator and other officials associated with the management of MNBSP at the Higher Education Commission and
- USAID officials responsible for MNBSP.

PROJECT SUMMARY

The Merit and Needs-Based Scholarship Program (MNBSB) project is designed “*To enable the academically qualified, yet financially needy, Pakistani students to continue university studies in select private and public universities of Pakistan in the fields of agriculture and business administration.*” and also “*To enhance the institutional capacity of the Higher Education Commission of the Government of Pakistan and local public and private sector universities in designing and implementing need and merit based scholarship Projects.*” Table 1 summarizes basic project details.

TABLE 1: MERIT AND NEEDS-BASED SCHOLARSHIP PROGRAM: PROJECT SUMMARY

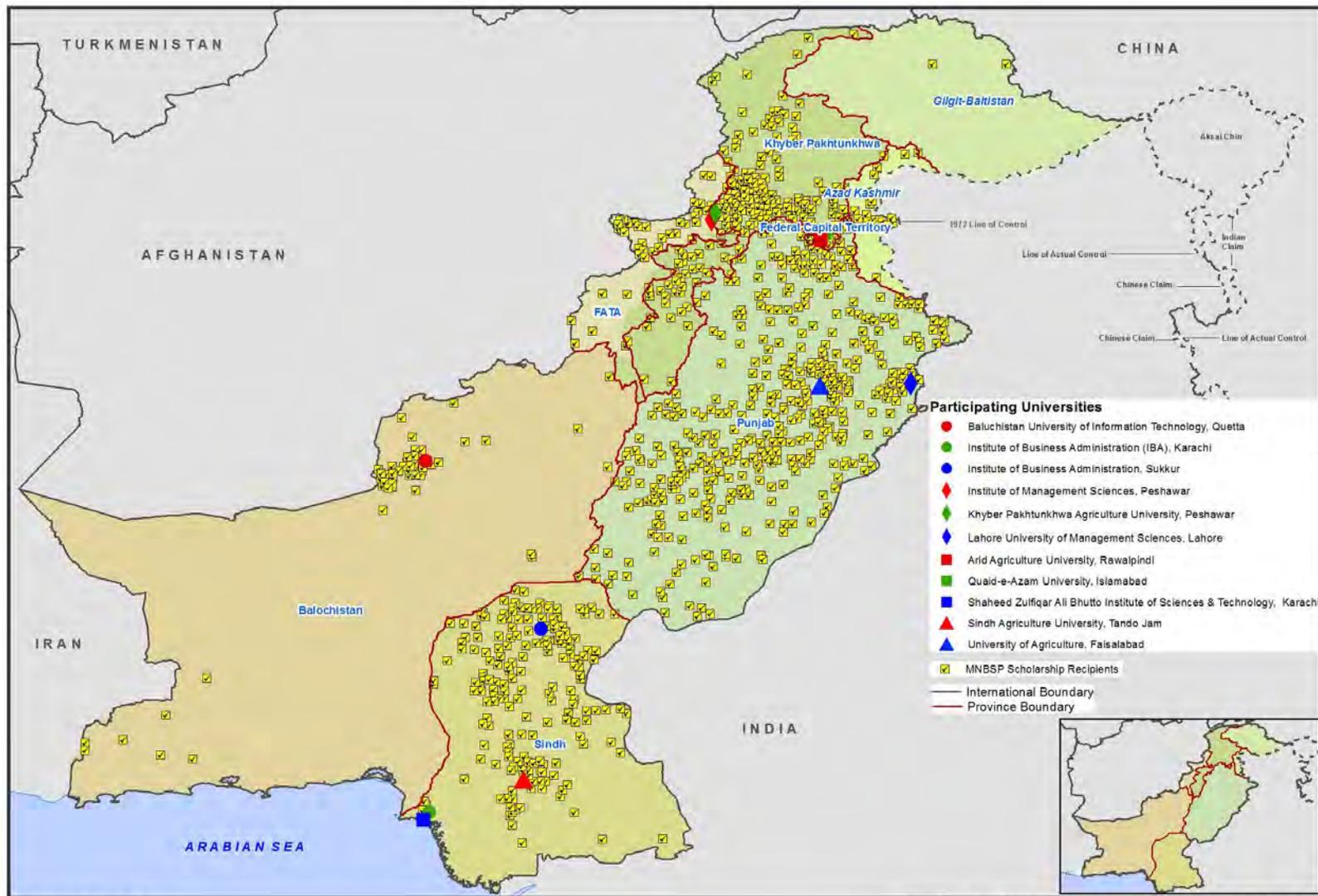
USAID Objectives Addressed	The project contributes to USAID’s Development Objective (DO) 4: Improved access to high quality education. It also contributes to Intermediate Result (IR) 3: Increased access to scholarships.
Implementing Partners	Higher Education Commission (HEC), Government of Pakistan (GOP).
USAID Activity Number	391-G-00-04-01023-00
Project Dates	July 2, 2004 to June 30, 2010. ^a Extended to March 16, 2016. ^b
Project Budget	USD 13.1 million
Project Location	All provinces of Pakistan

a. Limited Scope Grant Agreement (LSGA) between USAID and HEC.

b. Program Implementation Letter No. 13: USAID funded Merit and Needs-Based Scholarship Program (No-Cost Extension). 2011

The map of Figure 1 shows the geographic distribution of scholarship recipients and the location of the 11 participating universities.

FIGURE I: LOCATIONS OF SCHOLALRSHIP RECIPIENTS AND PARTICIPATING UNIVERSITIES



July 16, 2012 - MSI Pakistan

Boundaries and names representation are not necessarily authoritative.

GLOSSARY

ROI	Return on Investment is the calculation of how profitable an investment is or can be. It is a simpler form of cost-benefit analysis when both costs (investment) and benefits (financial returns) are measured in monetary terms. It is defined as $ROI = (\text{net benefits} / \text{net costs}) \times 100$.
NPV	The Net Present Value of an investment is the present value of the stream of cash inflows associated with the investment over time minus the present value of the investment costs.
Chi-Square	The chi-square (χ^2) test is used to determine whether there is a significant difference between the expected frequencies and the observed frequencies in one or more categories. It is used in the report to test whether the delay in graduation is related to specific university.
Opportunity cost	Opportunity cost is the cost associated with the opportunities an individual sacrifices by taking a particular decision. For example, one opportunity cost of choosing to attend university is the earnings an individual could have earned had he/she started work instead of attending university.
Gross Enrollment Ratio (GER)	Gross Enrollment Ratio (GER) is the 'total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school year.' ¹
Higher Education	In Pakistan, higher education refers to education above grade 12, which generally corresponds to the age bracket of 17 to 23 years. ²

¹ <http://www.uis.unesco.org/Library/Documents/eiguide09-en.pdf>, page 9

² World Bank, Country Summary of Higher Education, available at: http://siteresources.worldbank.org/EDUCATION/Resources/278200-1121703274255/1439264-1193249163062/Pakistan_countrySummary.pdf

ACRONYMS

Participating Universities

AUP	Agricultural University - Peshawer
BUTEMS	Balochistan University of Information Technology, Engineering and Management Sciences
IBA-K	Institute of Business Administration - Karachi
IBA-S	Institute of Business Administration - Sukkur
IMS	Institute of Management Sciences
LUMS	Lahore University of Management Sciences
QAU	Quaid-Asam University
SAUT	Sindh Agriculture University Tandojam
SZABIST	Shaheed Zulfikar Ali Bhutto Institute of Science and Technology
UAAR	University of Arid Agriculture – Rawalpindi
UAF	University of Agriculture Faisalabad

Other Acronyms

BBA	Bachelor of Business Administration
B.S.	Bachelor of Science
FATA	Federally Administered Tribal Areas
GDP	Gross Domestic Product
GER	Gross Enrollment Ratio
GOP	Government of Pakistan
HEC	Higher Education Commission
HIES	Household Integrated Economic Survey
IMEC	Independent Monitoring & Evaluation Contract
ISAC	Institutional Scholarship Award Committee (in universities)
KII	Key Informant Interview
KP	Khyber Pakhtunkhwa
MBA	Master of Business Administration
MDG	Millennium Development Goals
MNBSP	Merit and Needs-Based Scholarship Program
M.Phil.	Master of Philosophy
M.S.	Master of Science
MSI	Management Systems International
MTDF	Medium Term Development Framework, 2011-15
Ph.D.	Doctor of Philosophy
PKR	Pakistani Rupee
PSLM	Pakistan Social and Living Standards Measurement Survey
ROI	Return on Investment
SMC	Scholarship Management Committee (in HEC)
SOP	Standard Operating Procedure
SOW	Statement of Work
USAID	United States Agency for International Development
U.S.	United States
USD	United States Dollar

EXECUTIVE SUMMARY

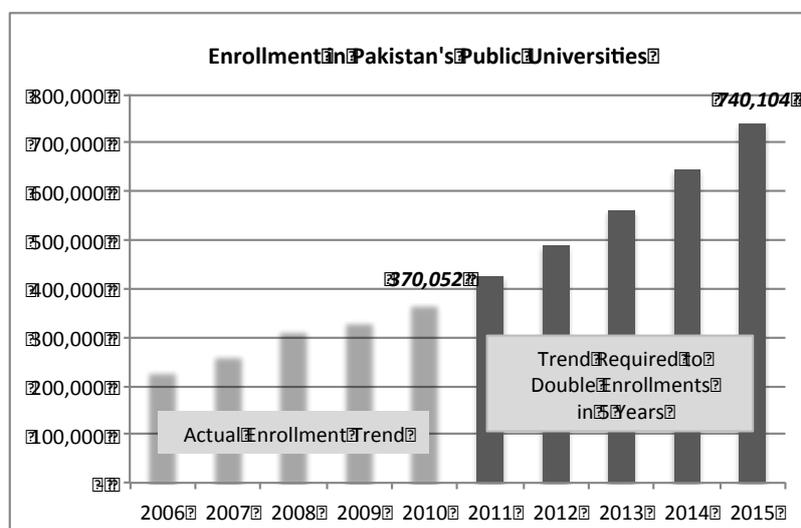
In terms of education, Pakistan ranks among South Asia's lowest performing countries and is unlikely to achieve the Millennium Development Goal (MDG) of universal primary education by 2015. Pakistan's poor performance in education persists despite a vast body of research that demonstrates a clear link between education and poverty alleviation, attainment of long-term development goals, and sustainable economic growth. In other words, the relative lack of educational opportunities in Pakistan does more than just minimize job opportunities; its poor performance in education is a key contributor to the nation's ongoing political and social instability.

In terms of higher education, Pakistan's expenditure level has been declining in recent years. Only 20 percent of the faculty in Pakistan's higher education institutions has Ph.D. degrees. Universities are poorly governed and the management structures and practices are ineffective. A lack of sufficient facilities in remote/rural areas prevents most rural students from pursuing higher education. Girls have been particularly disadvantaged; Pakistan scored 0.85 on the 2008 Gender Parity Index in tertiary enrollment.

The Development Problem

According to Pakistan's Higher Education Commission (HEC)³, only 7.8 percent of the eligible population has access to higher education. This is significantly lower than most South Asian countries and places Pakistan into the peer group of sub-Saharan Africa. A key objective outlined in Pakistan's 2009 Education Policy is increasing the nation's access to higher education from 7.8 to 10.0 percent by 2015.

Achieving this goal in the context of a rapidly shifting demography will be particularly challenging. Over 35 percent of Pakistan's population is currently under the age of 15 and the percentage of the population eligible for higher education is growing every year. In light of these demographics, achieving its objective will require Pakistan to double higher education enrollments in the next five years, a significant acceleration of the current higher education enrollment trend.



To achieve its goal Pakistan must overcome some significant hurdles; the issue of affordability may be the most challenging. Data from the Household Integrated Economic Survey (HIES) suggest that far fewer than 20 percent of households in Pakistan earn more than 35,000 rupees per month. This is the threshold where higher education is thought to start becoming affordable.⁴ Income is only part of the affordability equation. The costs of higher education have also been rising steadily. Since 2005 the average cost of tuition and lodging has increased by over 50 percent.

One way to address the problem is scholarships. The HEC and its development partners have introduced scholarship programs to make higher education more accessible throughout Pakistan. Most scholarship programs cover just the costs of tuition. These programs have been most helpful for urban populations.

³ The HEC is the GOP agency with authority for higher education and is equivalent to what many countries call the Ministry of Higher Education.

⁴ 35,000 Rupees/Month is the income cutoff to qualify for HEC's Merit and Needs Based Scholarship Program.

Most higher education facilities are located in and around cities, and this gives urban students the option of attending university while continuing to live at home. Rural students, however, typically require more extensive financial support; programs that cover both tuition and non-tuition expenses. Because cultural practices across most of the nation's rural areas prioritize education of men, rural women are the most unlikely to pursue higher education unless specifically targeted for participation.

USAID's Response to the Problem

In 2004 the United States Agency for International Development (USAID) and HEC developed the Merit and Needs-based Scholarship Program (MNBSP.) The objectives of MNBSP are:

To enable the academically qualified, yet financially needy, Pakistani students to continue university studies in selected private and public universities of Pakistan in the fields of agriculture and business administration.

To enhance the institutional capacity of the HEC of the GOP and local public and private sector universities in designing and implementing need and merit based scholarship projects.

MNBSP scholarships are comprehensive. They include payment of tuition as well as a stipend to cover transportation, books, lodging and incidental charges. Tuition fees are paid directly to the universities and the stipends are paid directly to the students. The program initially focused on all meritorious students in need that wished to attend an eligible program at one of 11 participating institutions. In 2010, the program adopted an explicit geographical focus on students from rural or remote areas of Pakistan, especially in Northern Sindh, Baluchistan, Southern Punjab, Khyber Pakhtunkhwa (KP) and the Federally Administered Tribal Areas (FATA). In 2010 the program also required participating institutions to reserve 25 percent of all scholarships for female students. MNBSP scholarships are available in the fields of Business Administration and Agriculture, for both graduate and undergraduate studies.

MNBSP has awarded 1,807 scholarships through 11 Pakistani universities and 1,195 scholarship recipients have graduated to date (461 are still enrolled). To date USAID has invested a total of U.S. dollars (USD) 7.7 million in the program. By the time all current students complete their studies (estimated March 16, 2016) USAID's total investment is expected to reach USD 13.1 million.

Purpose of this Evaluation

The purpose of this evaluation of MNBSP is to provide USAID/Pakistan with an independent performance-cum-process evaluation to help improve the performance of MNBSP and its contribution to USAID/Pakistan's development objectives. The scope of the evaluation was defined through twelve specific questions, which are listed in the next section that outlines overall conclusions. The evaluation used a mixed methods approach to collecting and analyzing data. A number of instruments were adopted to gather primary information from stakeholders and MNBSP beneficiaries. Secondary data was captured from program documentation and other relevant sources. All sources are defined in the body of the report.

Conclusions

Based on findings detailed in the body of the report, the evaluation team reached the following main conclusions (some additional conclusions are outlined in the body of the report):

Evaluation Question	Main Conclusions
<p><i>(1) To what extent do the alumni/current students of the MNBSP contribute to the achievement of the goals and objectives of the U.S. government’s development strategy in Pakistan?</i></p>	<p>MNBSP is directly contributing to USAID’s development strategy.</p> <ul style="list-style-type: none"> The program provided scholarships to 1,807 students, 1,195 of whom have graduated to date. Accounting for estimated dropouts, about 1,604 (1,243 men and 361 women) students will receive MNBSP-supported degrees. Few scholarship recipients could have financed their education from personal resources. A majority (96 percent) of a sample of 605 alumni and current students who provided data reported that they would not have been able to continue their education without the MNBSP scholarship, a different scholarship, or a loan. Only three percent reported that they could have financed their degrees from personal resources. Most scholarship recipients (89 percent) understood that the U.S. provided the funding for the MNBSP. Furthermore, large majorities of MNBSP scholarship recipients view the U.S. and the American people favorably (74 percent and 84 percent, respectively) and they are much more likely than Pakistanis in general to have a favorable view the U.S.
<p><i>(2) How relevant is the current MNBSP to the priority needs of the HEC and public universities? Is the number of scholarships awarded in the disciplines of Agriculture and Business Administration appropriate?</i></p>	<ul style="list-style-type: none"> The MNBSP focus on agriculture is consistent with the expressed priorities of HEC as articulated in the Medium Term Development Framework (MTDF). However, neither the MTDF nor HEC officials mentioned scholarships supporting study in business as a high priority. University officials suggested that HEC should expand the MNBSP to cover additional fields of study. However, the evaluation team found it difficult to get officials to prioritize specific fields into which the MNBSP should expand. Shifting MNBSP support from degrees in business to degrees in the alternative priority fields could reduce the total number of degrees the MNBSP could support with current funding by about three percent, from an estimated 1,095 to 1,064, scholarships due to differences in costs between business and alternative programs.
<p><i>(3) To what extent has the MNBSP achieved the planned outputs and outcomes as defined in the implementing agreement with the HEC?</i></p>	<ul style="list-style-type: none"> MNBSP has met most, but not all, of its planned output and outcome targets. The program met its target for scholarship awards but did not meet targets for degrees awarded (because the targets did not account for dropouts.) The program has not yet achieved the target for female participation or for developing an online application system. Achieving the target of 25 percent female participation may require special efforts to publicize the program among prospective female students and/or consideration to increase female participation from urban areas. If USAID desires to target female students from “remote/vulnerable” as opposed to “rural” areas, a more robust definition of “remote/vulnerable” may better serve this purpose. District-wise Human Development Index and/or Deprivation Indices can be the basis for defining “remote”/ “vulnerable”/ “disadvantaged” areas.
<p><i>(4) To what extent do scholarship recipients graduate on time?</i></p>	<p>Recipients of MNBSP scholarships overwhelmingly graduated on time. The low incidence of delayed graduation is consistent with the incidence of delays among the entire student body.</p>

Evaluation Question	Main Conclusions
<i>(5) To what extent does the beneficiary selection process meet the transparency requirements agreed with USAID?</i>	Participating universities do appear to be implementing the MNBSP selection process in a transparent manner and in accordance with the Standard Operating Procedures (SOPs). The combination of objective and subjective criteria appears to be an effective approach to identifying truly needy students and the universities are applying the criteria transparently. The multi-layered application and selection process (i.e. financial aid offices, Institutional Scholarship Award Committees (ISACs), Scholarship Management Committee (SMC)) reduces the ability for any one person to influence the decision.
<i>(6) To what extent do applicants meet the criteria for scholarship awards?</i>	Based on self-reported income from the application process (and validated by the universities through the verification and selection process) a vast majority of scholarship recipients appear to satisfy the monthly income criterion for eligibility. Since the program did not specify the preference for geographic focus until 2010, and even then did not specify the focus areas precisely, it is difficult to determine the extent to which the project met this criterion. However, specifying a geographic focus in 2010 did appear to influence the distribution of scholarships towards the focus areas.
<i>(7) What is the Return on Investment of the MNBSP?</i>	Keeping in mind the caveats mentioned above, the evaluation concludes that USAID's investments in higher education through the MNBSP program have generated private economic returns to scholarship recipients well in excess of public investments in scholarships (i.e. a return on investment of 230 percent). Due to higher post-degree incomes, returns to master degrees and degrees in business administration generate greater returns than bachelor degrees or degrees in agriculture, respectively.
<i>(8) How well is the payment mechanism working?</i>	A substantial number of MNBSP scholarship recipients (alumni as well as current students) were dissatisfied with the payment process – largely due to delayed payments. Delayed payments caused significant hardship to these students with limited financial resources to meet expenses (e.g. covering living expenses, paying tuition expenses at Sindh Agricultural University Tandojam (SAUT) and University of Agriculture Faisalabad (UAF) when scholarship payments arrived late). Establishing financial aid offices in some universities appears to have improved the performance of the payment mechanism.
<i>(9) Would students have dropped out of the program if they had not received a MNBSP scholarship?</i>	Although more data are required for a definitive answer, the significant difference in the percentage of current students and alumni who could not have continued their education with the MNBSP scholarship suggests that the income criterion established in 2010 may be effectively targeting needy students.
<i>(10) How do students perceive their employment preferences and prospects?</i>	MNBSP scholarship recipients who are currently enrolled are overwhelmingly optimistic about their job prospects after they graduate. They largely prefer public sector jobs in rural areas – a preference that is much stronger among those studying agriculture. MNBSP may, therefore, be an effective way to build skills in rural areas of Pakistan – particularly in agriculture.
<i>(11) Are MNBSP alumni productively employed in fields related to their academic preparation?</i>	Alumni of the MNBSP program are largely employed in fields related to their academic preparation. However, it took graduates several months to find their first job (and significantly longer for women than for men) and relatively high unemployment persists, especially among graduates with degrees in agriculture. MNBSP graduates are, on average, earning salaries commensurate with their peers with similar education and experience.

Evaluation Question	Main Conclusions
<p>(12) To what extent are the alumni of the MNBSP positioned to assume positions of leadership in academia, government, industry, business</p>	<p>Since it is premature to assess whether MNBSP graduates have reached their employment potential, and in the absence of robust indicators of potential, the findings for this question are inconclusive. What the evaluation did conclude is:</p> <p>The MNBSP scholars have performed reasonably well academically, and this academic performance may be significant when viewed from the perspective of their relatively weak academic backgrounds as a result of attending public sector institutions located in remote areas.</p> <p>The university officials viewed the prospects of MNBSP scholars progressing in their professions at par with the rest of the students.</p>

Key Recommendations

- In consultation with HEC, reconsider the fields of study and the allocation of scholarships across supported fields of study in future scholarship programs.** Scholarships in business administration are not consistent with current HEC priorities as articulated in the MTDF. However, scholarships in business support other HEC initiatives such as small business innovation research grants; the office of research, innovation and commercialization; and business incubation centers. The MTDF also emphasizes study in scientific, technological and engineering fields that are not covered under the current MNBSP.
- Increase outreach to women.** Achieving the target of 25 percent female participation may require special efforts to publicize the program among prospective female students and/or consideration to increase female participation from urban areas.
- Consider modifying eligibility criteria for women.** If USAID desires to target female students from “remote/vulnerable” as opposed to “rural” areas, a more robust definition of “remote/vulnerable” may better serve this purpose. District-wise Human Development Index and/or Deprivation Indices can be the basis for defining “remote”/ “vulnerable”/”disadvantaged” areas.
- Identify and resolve causes of delayed payments.** Improvements in the payment mechanism are required to minimize the significant hardships delayed payments currently cause scholarship recipients. USAID could influence the speed of payment by helping identify and resolve bottlenecks and by trying to influence policies at specific universities that require students to pay tuition even when the scholarship is delayed.
- Ensure that the scholarship covers all education expenses.** The scholarship award should cover all education related expenses (e.g. research expenses) of the students and should be awarded for the entire duration of the degree program.

INTRODUCTION

Pakistan ranks among South Asia's lowest performing countries on many education indicators and is unlikely to achieve the MGD of universal primary education by 2015.⁵ Pakistan's poor performance in education persists despite a vast body of research that demonstrates a clear link between education and poverty alleviation, attainment of long-term development goals, and sustainable economic growth. In other words, the relative lack of educational opportunities in Pakistan does more than just minimize job opportunities; it is also a key contributor to the nation's ongoing political and social instability.

Pakistan's education indices continue to rank among the lowest in the world, and remain below regional averages.⁶ In the mid 2000s, Pakistan's adult literacy rate was 54 percent⁷ compared to 53 percent in Bangladesh, 57 percent in Nepal, 66 percent in India and 92 percent in Malaysia.⁸ Although Pakistan's Tertiary Gross Enrollment Ratio⁹ (GER) more than doubled during the 2005-2010 period, it still sits at only 5 percent, compared to Bangladesh at 9 percent, India at 15 percent, and Malaysia at 37 percent.¹⁰ Pakistan's poor performance in education is largely due to consistent underfunding. In the mid 2000s, Pakistan's spending on education amounted to 2.9 percent of Gross Domestic Product (GDP) while education spending was 2.6 percent of GDP in Bangladesh, 3.8 percent in Nepal, 3.2 percent in India and 4.6 percent in Malaysia.¹¹ Figure 2 illustrates the correlation between spending on education and adult literacy, a key education indicator.

Pakistan's expenditure on higher education has been declining in recent years, from 0.33 percent of GDP in 2007/08 to 0.23 percent of GDP in 2009/10.¹² According to the HEC of Pakistan, Pakistani universities award about 700 Ph.D. degrees per year and lack qualified research faculty; only 20 percent of the faculty in Pakistan's higher education institutions have Ph.D. degrees; universities are poorly governed, and the management structures and practices are ineffective.¹³ A lack of sufficient facilities in remote/rural areas prevents most rural students from pursuing higher education. Girls have been particularly disadvantaged, as evidenced by Pakistan's 2008-09 Gender Parity Index¹⁴ of 0.37 for degree (college & university) enrollment.¹⁵ The difference between male and female enrollment is even more acute in rural areas which have a Gender Parity Index for degree enrollment of 0.24.¹⁶

⁵ Government of Pakistan, Planning Commission, Pakistan Millennium Development Goals Report 2010, Islamabad, September 2010, Table 1.2. [<http://www.pc.gov.pk/hot%20links/PMDGs2010.pdf>]

⁶ Chapter on Education in Pakistan Economic Survey, 2009 [http://finance.gov.pk/survey/chapter_10/10_Education.pdf].

⁷ For purposes of consistency, the comparison uses the 54 percent literacy estimate from 2005. The 2010/11 Labor Force Survey reports adult literacy rates in Pakistan of 57.7 percent in 2009/10 and 58.5 percent in 2010/11. [http://www.pbs.gov.pk/sites/default/files/Labour%20Force/publications/lfs2010_11/results.pdf]

⁸ World Bank. [<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTEDUCATION/EXTDATA/STATISTICS/EXTEDSTATS/0,,contentMDK:21605891~menuPK:3409559~pagePK:64168445~piPK:64168309~theSitePK:3232764,00.html>]

⁹ The tertiary Gross Enrollment Ratio is the ratio of the number of students enrolled in universities to the number of young people in Pakistan in the age group usually enrolled in university (the five years following secondary school leaving age). It is thus the proportion of university-aged youth actually enrolled in universities.

¹⁰ World Bank. [<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTEDUCATION/EXTDATA/STATISTICS/EXTEDSTATS/0,,contentMDK:21605891~menuPK:3409559~pagePK:64168445~piPK:64168309~theSitePK:3232764,00.html>]

¹¹ Ibid.

¹² HEC. [<http://www.hec.gov.pk/InsideHEC/Divisions/Finance/Documents/Expenditure%20on%20Higher%20Education%20as%20Percent%20of%20GDP.pdf>]

¹³ HEC, Medium Term Development Framework 2011-15, page 56 & 57.

[<http://hec.gov.pk/InsideHEC/Documents/MTDF%202011-15%20FINAL.pdf>]

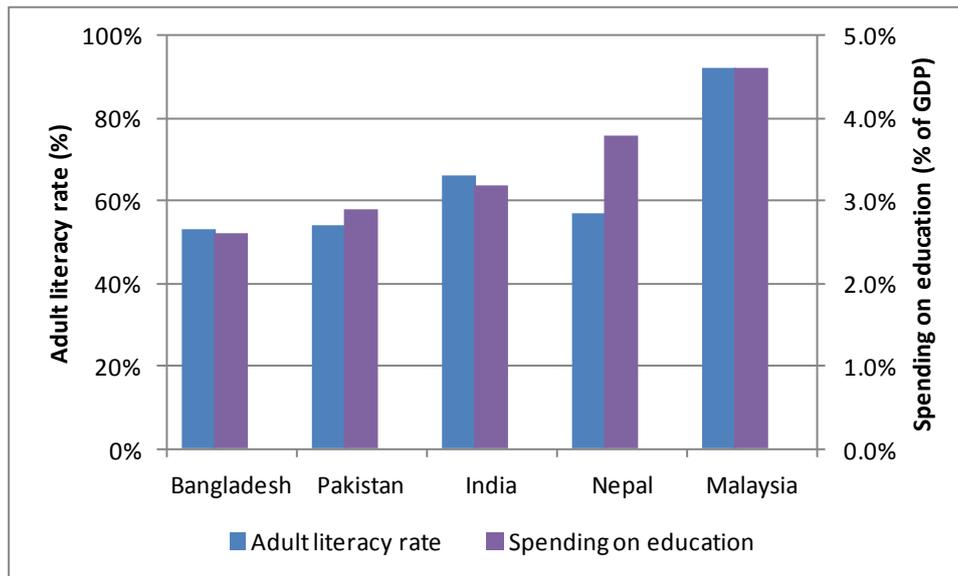
¹⁴ The gender parity index is the ratio of the number of females to males enrolled.

¹⁵ Pakistan Education Statistics, 2008-09, National Educational Management Information System, Academy of Educational Planning and Management, Ministry of Education

[<http://www.aepam.edu.pk/Files/EducationStatistics/PakistanEducationStatistics2008-09.pdf>]

¹⁶ Ibid.

FIGURE 2: LITERACY AND EDUCATION SPENDING IN SOUTH ASIA

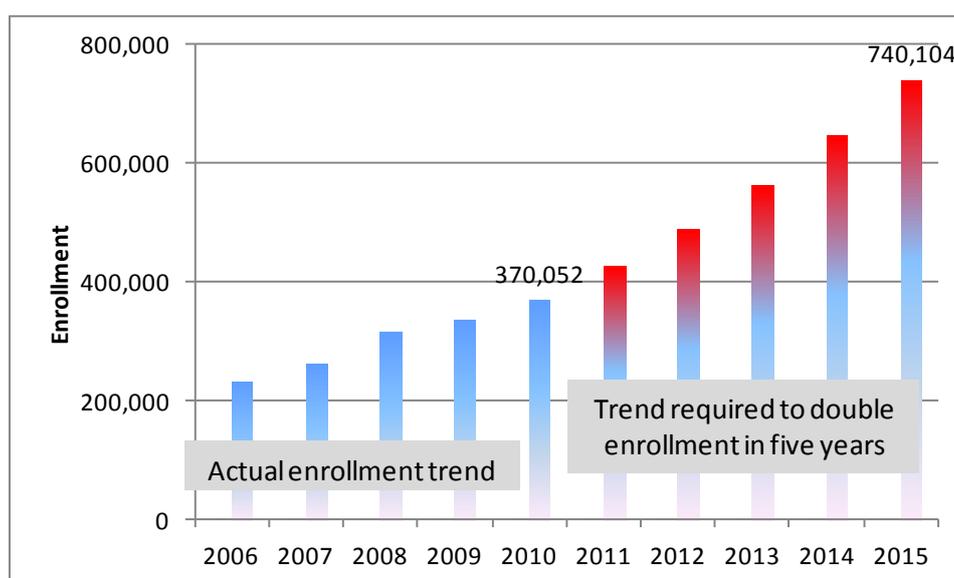


Pakistan’s HEC has prepared the second comprehensive five-year plan called the Medium Term Development Framework, 2011-15 (MTDF) to address these challenges. The MTDF identifies scholarship programs – for indigenous and foreign study – as a key initiative for increasing the number of qualified faculty members at Pakistani higher education institutions. HEC awards several scholarships to support students pursuing higher education in foreign universities. Key programs include the M.S. leading to Ph.D. program for faculty development, and scholarships for M.S./M.Phil. leading to a Ph.D.

THE DEVELOPMENT PROBLEM AND USAID’S RESPONSE

According to Pakistan’s HEC, only 7.8 percent of the population in the 17-23 age group has access to higher education. Pakistan’s 2009 Education Policy emphasizes increasing access to higher education from 7.8 to 10.0 percent by 2015.¹⁷ Achieving this goal in the context of a rapidly shifting demography will be particularly challenging. Over 35 percent of Pakistan’s population is under the age of 15. The percentage of the population in the 17-23 age group is expected to continue growing every year, reaching a peak of over 20 percent in the 2020s.¹⁸ In light of these demographics, achieving its enrollment objective of 10 percent means Pakistan will have to double the number of higher education enrollments in five years.¹⁹ This will require enrollments to grow at an annual rate of nearly 15 percent.²⁰ Figure 3 illustrates this challenge in the context of actual enrollment growth observed between 2006 and 2010.²¹

FIGURE 3: UNIVERSITY ENROLLMENT TRENDS IN PAKISTAN



Achieving the Education Policy’s ambitious target will require addressing several significant hurdles, one of the most challenging being the issue of affordability. Estimates place the total costs of pursuing a bachelor or master degree at between Pakistani Rupees (PKR) 13,000 and PKR 54,000 per month depending on the university and type of degree (Table 2).

¹⁷ National Education Policy, 2009. Ministry of Education, Government of Pakistan. Page 58. [http://www.infopak.gov.pk/National_Education_Policy_2009.pdf]

¹⁸ Woodrow Wilson Center, *Reaping the Dividend*, 2011

[<http://www.wilsoncenter.org/sites/default/files/ReapingtheDividendFINAL.pdf>]

¹⁹ HEC MTDF 2011-2015, page 5

²⁰ Based on the 2010 enrollment level outlined in HEC’s MTDF 2011-15, p. 65

²¹ Does not incorporate data or observed trends from private universities.

TABLE 2: AVERAGE MONTHLY COST OF HIGHER EDUCATION (PKR)

	Bachelors Level (4yrs)			Masters Level (2yrs)		
	Tuition	Other ^a	Total	Tuition	Other ^a	Total
Agriculture (Public)	7,110	6,312	13,422	12,984	6,312	19,296
Business Administration (Public)	8,190	7,024	15,214	8,342	6,958	15,300
Business Administration (Private)	27,958	15,458	43,416	37,083	17,042	54,125

a. Other costs include: transportation, boarding and lodging, books, and other incidental expenses.

Source: Analysis of cost data provided by HEC. The average monthly cost for university education includes tuition, lodging, transportation, books and incidentals.

Cost is only one part of the affordability equation with income being the other part. The 2010/2011 HIES reports average monthly income by quintile. Based on these data, only the 20 percent of households in the fifth quintile have average monthly incomes of more than PKR 35,000, the income level at which higher education may be affordable.²² The problem is even more acute in rural areas where none of the quintiles have average incomes above this threshold. Considering the average rural household size of 6.4,²³ the costs of a higher education relative to income clearly place a higher education out of reach of much of Pakistan's population. Given the gravity of affordability constraints and the fact that cultural practices across most of the country's rural areas prioritize education of men, women from rural areas are the least likely to attend higher education programs, unless specifically targeted for participation.

One way to address affordability is with needs-based scholarships. The HEC has introduced a number of higher education scholarship programs with donor assistance. While these programs have most likely boosted overall enrollment in higher education, the range of potential beneficiaries able to participate in many of the scholarship programs has been limited. There are several reasons, including:

- Universities generally award scholarships on the basis of merit. Needy students who are qualified to pursue higher education are generally not in the top bracket of their academic standing, and thus are unable to obtain scholarships based on merit alone.²⁴
- Many scholarship programs cover only tuition and basic expenses. Non-tuition costs, such as transportation, boarding and lodging, books and other incidentals are a significant part of the overall cost and represent a substantial barrier to students from rural areas who cannot live at home while attending university.

USAID's Response

In 2004, HEC and USAID collaborated to launch the MNBSP to introduce needs-based scholarships for higher education for the first time in Pakistan. In addition to providing scholarships in the fields of

²² 35,000 PKR/month is the income cutoff to qualify for an MNBSP scholarship.

²³ Household Integrated Economic Survey (HIES) 2010-11, Government of Pakistan, Statistics Division, Federal Bureau of Statistics, Islamabad, September, 2011. [<http://www.pbs.gov.pk/content/household-integrated-economic-survey-hies-2010-11>]

²⁴ Sardar and Sardar, 2003. Funding Proposal for a Merit and Needs-Based Scholarship Program, For Pakistani Scholars Attending Local Universities.

agriculture and business administration, the MNBSP was also designed to assist the HEC and its partner institutions develop the capacity to award and manage needs-based scholarship programs at both the undergraduate and graduate level. The stated objectives of MNBSP are:

- To enable the academically qualified, yet financially needy, Pakistani students to continue university studies in selected private and public universities of Pakistan in the fields of agriculture and business administration.
- To enhance the institutional capacity of the HEC of the GOP and local public and private sector universities in designing and implementing need and merit based scholarship projects.

In an effort to build on the success of MNBSP, HEC established aggressive targets through the MTRDF. By 2015, HEC intends to start awarding 5,000 scholarships annually and providing another 10,000 needy students with affordable loans every year.²⁵ However, unless Pakistan’s domestic educational expenditures increase sharply, the only way for HEC to achieve its targets will be with a significant expansion of financial support from its development partners.

MNBSP initially focused on all meritorious students in need who wished to attend an eligible program at one of the 11 participating institutions. In 2010, the program guidelines adopted an explicit geographic focus on students from rural or remote areas of Pakistan, especially in northern Sindh, Balochistan, southern Punjab, KP and FATA. In 2010 the program also introduced a requirement to reserve 25 percent of all scholarships for female students.

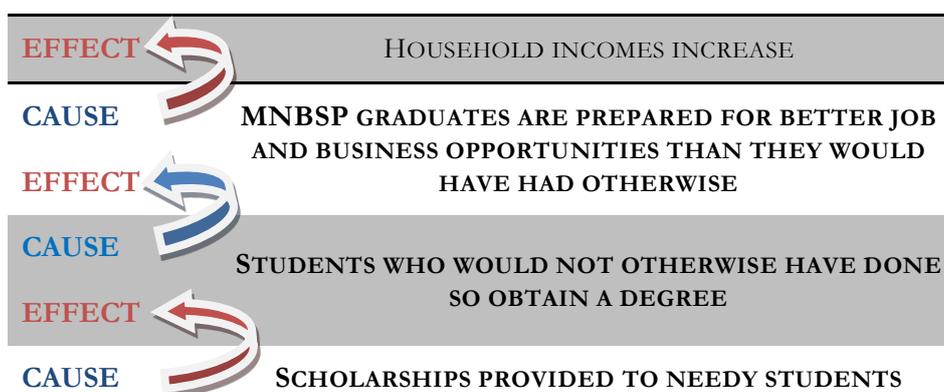
MNBSP scholarships are comprehensive. They include payment of tuition as well as a stipend to cover transportation, books, lodging and incidental charges. Tuition fees are paid directly to the universities and the stipends are paid directly to the students.

MNBSP contributes to USAID/Pakistan’s *Development Objective 4: Improved Access to High Quality Education*, and falls under *Intermediate Result 1.3: Increased Access to Scholarships*. The Mission-level strategic framework evolved during the course of the project’s implementation. When it was initially launched in 2004, the project responded to USAID’s *Strategic Objective 3: Increased knowledge, training, and infrastructure provided to develop high quality education program for girls and boys throughout Pakistan* under *Intermediate Result 3.5: Increase access to higher education*.

The MNBSP Development Hypothesis

College degrees prepare students for more productive careers. By providing scholarships to students who would not otherwise have been able to afford a higher education, the program aims to increase household income levels and contribute to poverty alleviation.²⁶ Figure 4 illustrates the MNBSP development hypothesis.

FIGURE 4: THE MNBSP DEVELOPMENT HYPOTHESIS



²⁵ MTRDF, op cit page 79.

²⁶ The PC-1 links the MNBSP to the overall objective of poverty alleviation.

Project Implementation

MNBSP was launched in July 2004. The project's initial scope allocated funding for 1,000 scholarships. A decline in value of the PKR relative to the USD stretched the available funds to 407 additional scholarships which were approved in 2009. In preparation for the 2010-11 school year USAID augmented funding for MNBSP and added another 400 scholarships, bringing the cumulative total of scholarships awarded to 1,807.²⁷ Of the 1,807 scholarships awarded, 1,195 students have graduated, 461 are still attending classes and 151 dropped out of the school. At the time of this evaluation, USAID has invested a total of USD 7.7 million in the program. The program's ongoing scholarships and programmatic components are expected to be complete by March 16, 2016. By that time, USAID's total investment in MNBSP is expected to reach USD 13.1 million.

The project is implemented through the HEC in cooperation with 11 Pakistani universities. Nine institutions are public and two are private. Four institutions focus on agriculture and seven on business administration. Table 3 lists the participating institutions.

TABLE 3: PARTICIPATING UNIVERSITIES

	Agriculture	Business Administration
Public	<ol style="list-style-type: none"> 1. University of Agriculture, Faisalabad (UAF); 2. Agricultural University Peshawar (AUP); 3. Arid Agriculture University, Rawalpindi (AAUR); 4. Sindh Agriculture University, Tandojam (SAUT); 	<ol style="list-style-type: none"> 1. Institute of Business Administration, Sukkur (IBA-S); 2. Balochistan University of Information Technology, Engineering, and Management Sciences (BUIITEMS); 3. Institute of Management Sciences, Peshawar (IMS); 4. Quaid-e-Azam University, Islamabad (QAU); 5. Institute of Business Administration, Karachi (IBA-K)
Private		<ol style="list-style-type: none"> 1. Lahore University of Management Sciences (LUMS) 2. Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology (SZABIST)

Partner universities accept enrollment applications based on merit. Applications are scrutinized and shortlisted by financial aid offices in each university. Shortlisted applicants are interviewed by the members of the university's ISAC.²⁸ All scholarship awards are approved by the HEC SMC, a committee that includes representatives from each of the 11 participating institutions, the HEC and USAID.

Table 4 and Table 5 illustrate the distribution of the MNBSP scholarship awards by degree type, participating institution, and sex.

²⁷ Program Implementation Letter #12: USAID Merit and Needs-Based Scholarship Program, page 15.

²⁸ The response to evaluation question #8 provide more details on the selection process.

TABLE 4: ALUMNI AND CURRENT STUDENTS (BY DEGREE LEVEL)

	Alumni	Current Students	Total
M.Sc./MBA (Business Administration)			
Male	598	185	783
Female	179	40	219
Sub-Total	777	225	1,002
B.Sc./BBA (Agriculture)			
Male	328	182	510
Female	90	54	144
Sub-Total	418	236	654
Total	1,195	461	1,656²⁹

The table does not include the 151 students who dropped out of their programs prior to completing their degrees.

TABLE 5: ALUMNI AND CURRENT STUDENTS (BY INSTITUTION)

University	MBA/MSc		BBA/BSc		Total
	Male	Female	Male	Female	
UAF	145	23	105	23	296
AU-KPK	82	35	111	30	258
SAUT	125	15	69	14	223
UAAR	63	37	28	22	150
QAU	72	14	0	0	86
IBA-S	29	13	52	11	105
IBA-K	57	31	33	19	140
IMS-P	78	16	55	7	156
BUIITEMS	44	20	16	6	86
LUMS	58	5	35	9	107
SZABIST	30	10	6	3	49
Total	783	219	510	144	1,656

The table does not include the 151 students who dropped out of their programs prior to completing their degrees.

²⁹ MNBSP awarded 1,807 scholarships but 151 students dropped out of the program.

PURPOSE OF THE EVALUATION

USAID's supports education in Pakistan in pursuit of specific development objectives articulated in the strategic plan. The midterm evaluation of MNBSP, with four years remaining in the agreement with HEC, will help improve the performance of MNBSP and its contribution to USAID/Pakistan's development objectives.

The recently released MTRDF articulates a new strategy and priorities for HEC. The evaluation will also assess the extent to which the MNBSP, designed in 2004, remains relevant to the priorities of the GOP, HEC, and the 11 participating institutions. As part of this question, the evaluation will determine the extent to which the mix of fields of study and degree types fits within HEC's broader portfolio of scholarships.³⁰

At the process level, the evaluation will explore aspects of the implementation process to better understand whether the MNBSP was implemented as planned and whether it is producing desired outputs.

Evaluation Questions

In consultation with USAID, Management Systems International (MSI) developed a comprehensive analytical framework comprised of 12 specific questions to assess process, outcomes and the causal contributors to outcomes. The specific questions are:

1. To what extent do the alumni/current students of the MNBSP contribute to the achievement of the goals and objectives of the U.S. Government's development strategy in Pakistan?
2. How relevant is the current MNBSP (e.g., mix of degree types, field of study) to the priority needs of the HEC and public universities? Is the number of scholarships awarded in the disciplines of Agriculture and Business Administration appropriate?
3. To what extent has the MNBSP achieved the planned outputs and outcomes as defined in the implementing agreement with the HEC?
4. To what extent do scholarship recipients graduate on time?
5. To what extent does the beneficiary selection process meet the transparency requirements agreed with USAID?
6. To what extent do applicants meet the criteria for scholarship awards?
7. What is the Return on Investment of the MNBSP?
8. How well is the payment mechanism working?
9. Would students have dropped out of the program if they had not received a MNBSP scholarship?
10. How do students perceive their employment preferences and prospects?
11. Are MNBSP alumni productively employed in fields related to their academic preparation?
12. To what extent are the alumni of the MNBSP positioned to assume positions of leadership in academia, government, industry, business?

³⁰ Other HEC scholarship programs include the merit-based Indigenous Ph.D. Fellowship Program and Higher Education Opportunities for Students of Balochistan and FATA and the needs-based scholarships programs HEC-Japanese Needs-Based Scholarship Program (HEC-JNBS) and Financial Support for Meritorious Needy Students. [<http://www.hec.gov.pk/INSIDEHEC/DIVISIONS/HRD/SCHOLARSHIPS/Pages/Scholarships.aspx>].

RESEARCH DESIGN AND EVALUATION METHODOLOGY

The evaluation used a mixed methods approach that collects evidence through a variety of methods and sources to triangulate findings. Data collection methods and sources included:

- surveys of and group discussion with male and female MNBSP scholarship recipients currently enrolled in school,
- surveys and group discussions with male and female MNBSP scholarship recipients who have graduated,
- interviews with university officials at all 11 participating institutions,
- key informant interviews (KII) with officials of HEC,
- KII with officials of USAID,
- secondary data from the 2010-11 Pakistan Social and Living Standards Measurement (PSLM) and HIES, and
- a database maintained by HEC of all MNBSP scholarship recipients.

MNBSP Scholarship Recipients

The evaluation team developed two questionnaires to collect data from MNBSP scholarship recipients: one for current students and one for alumni. The team pre-tested the alumni questionnaire with a sample of program alumni in MSI's Islamabad office under the oversight of the project's economist and survey coordinator. The team conducted a pre-test of the student questionnaire by visiting two participating universities located in the Islamabad/Rawalpindi area. The results of pre-testing led to minor modifications of both survey instruments. The team then translated both questionnaires into Urdu prior to deployment. Annex 1 and **Error! Reference source not found.** Annex 2 contain the questionnaires for current students and alumni, respectively. The team also conducted group discussions with samples from both populations. The following sections describe MSI's approach to the surveys and group discussions.

Alumni Survey

1. The HEC supplied contact information (i.e. email addresses, telephone numbers and postal addresses) for alumni. The evaluation team eliminated records with incomplete contact data to obtain the population of alumni from which to select samples for surveys.
2. The team determined that a random sample of 286 alumni was required to estimate population parameters with a maximum five percent margin of error at a 95 percent confidence level. MSI did not select a sample of this size but instead contacted all alumni on the final list with the aim of completing at least 286 surveys.
3. MSI first deployed the survey by email, contacting the 443 alumni for whom email addresses were available.³¹ An elaborate process of checks and controls (unique token numbers) was established to administer the online survey. The team conducted a dummy pre-test online to verify that the electronic transmission system was running smoothly. Only 32 of the 443 alumni contacted by email in the first stage responded to the online questionnaire, a significantly lower response rate than expected.
4. MSI administered the second stage of the survey by telephone for those with telephone numbers, and by mail for those who had only postal addresses. All of the sub-samples of alumni were mutually exclusive, i.e. those who responded by email were not contacted by telephone or mail. The telephone and mail surveys were conducted simultaneously. Initially the phone interviews

³¹ Most of the alumni with email address also had telephone numbers and postal addresses.

were conducted in-house and later contracted out to the project's subcontractor Voice Tel Tech. Of the 739 alumni contacted by telephone, 282 alumni agreed to participate. MSI also received 32 completed questionnaires in response to the online survey, 22 from group discussions, and 22 from the mail survey. After eliminating duplicate³² response and incomplete questionnaires, MSI obtained 286 completed questionnaires from alumni. Annex 3 summarizes responses by mode of contact.

5. MSI worked with the participating universities to identify and recruit group discussion participants from among alumni and university officials for KIIs. The evaluation team developed interview guides for group discussions and KIIs on the basis of the evaluation Statement of Work (SOW).³³ Participation rates in the alumni group discussions were poor (22 students). Alumni attributed low participation rates to schedule conflicts and work commitments.

Current Students

1. HEC supplied a current student database to the evaluation team containing information on 468 students who were currently studying under MNBSP scholarships. This constituted the population of current students for the survey.
2. MSI administered the current student survey on-campus with randomly selected students at each participating university. The evaluation team notified each of the 11 participating universities in advance of campus visits for survey administration. A total of 336 current students responded to the questionnaire.
3. The evaluation team conducted group discussions with current students at all 11 participating universities. The questions/issues for the group discussions were based on the evaluation SOW. The discussion groups were restricted to a maximum of 12 participants (men or women). Information collected from the 338 current students that participated in group discussions is included in the analysis and used to triangulate findings.

Participating University Officials

The evaluation team conducted KIIs with university officials using the following approach:

1. In accordance with HEC and USAID recommendations, MSI requested interviews with the following officials from each institution: Vice-Chancellor, Registrar, heads of relevant department(s), members of ISACs/SMCs and officials in the financial aid offices.
2. The evaluation team developed a set of semi-structured questions based on the evaluation SOW for these interviews. Four sets of KII pre-structured interview questions were prepared according to the different positions, responsibilities and levels of experience for each role.
3. Although the evaluation team made arrangements well in advance, not all selected officials were available for the interviews at each institution. In the case of IMS, the position of director (equivalent to Vice Chancellor in other universities) was vacant so the team interviewed the Joint Director. In the case of IBA-K, neither the Director nor the Dean were available due to prior commitments.
4. In total, the team completed interviews with 19 university officials.

Annex 5 contains the interview guides developed for the KIIs.

³² MSI obtained questionnaires from some respondents through telephone interviews who also completed online surveys after the cutoff date.

³³ Annex 4 reproduces the evaluation SOW for MNBSP.

HEC and USAID Secondary Data

The evaluation team extracted a rich set of data from the Program Implementation Letters issued by USAID since the program's inception in 2004. The evaluation also made extensive use of information contained in USAID's Performance Management Plan documents and the HEC PC-1 document³⁴, the standard planning document for GOP. The HEC database of alumni and current students provided a starting point to contact alumni and select current students.

The Evaluation Team

- **Team Leader:** *Sajjad Akhtar*. Education: Ph.D. (Economics), Southern Methodist University, USA; M.A. (Economics) Boston University, USA, with specialization in quantitative techniques and education economics. Dr. Akhtar brings 25 years of evidence based policy research experience with him to the team. During the last three years he has worked as a consultant for WB, DFID, British Council and GIZ. He has conducted a number of evaluations in the education sector in Pakistan, ranging from WB's Punjab Education Sector Project to DFID's Business Case for Education Fund for Sindh.
- **Evaluation Specialist (Field Team):** *Ghazanfar Ali Khan Hoti* is a full-time staff member of Independent Monitoring and Evaluation Contract (IMEC) Evaluation Unit with expertise in bank examining and project evaluations. He has worked as a consultant with the Independent Evaluation Group of the World Bank in Washington DC. He holds a Master's in Public Administration (Economic Policy Management) and Master of Science (Operations Research) from Columbia University, USA.
- **Economist:** *Imran Khan* is a full-time staff member of the IMEC Survey Unit with expertise in econometric analysis and impact evaluations. He has worked as an economist with the USAID-funded Competitiveness Support Fund. He holds a Master's in Public Administration/ International Development from the Harvard Kennedy School, USA.
- **Education Sector Specialist:** *Mr. Ahmad Jameel* has considerable experience in the issues of tertiary education in Pakistan and worked as a consultant in the evaluation of MNBSP. He has also been associated with the training and management of university staff under USAID programs.
- **Survey Coordinator:** *Muhammad Danish* is a full-time coordinator of the IMEC Survey Unit. His expertise includes survey design, questionnaire development, sampling, survey implementation, data processing and initial data analysis. He has conducted various thematic and sector surveys including surveys on prospects of UK based school level qualifications in Pakistan for the British Council, British Council Partnership mapping study (Education and Technical Skills Programs).

³⁴ GOP Planning Commission pro forma for development projects.

FINDINGS AND CONCLUSIONS

Question 1: Contribution to Development Objectives

Evaluation Question: To what extent do the alumni/current students of the MNBSP contribute to the achievement of the goals and objectives of the U.S. government's development strategy in Pakistan?

Findings

The USAID results frameworks under which the MNBSP was designed and implemented document the goals and objectives of USAID/Pakistan's development strategy in Pakistan. In 2004, USAID designed the MNBSP to contribute to two specific elements of the results framework in USAID's strategic plan:

- Strategic Objective (SO) 3: Increased knowledge, training, and infrastructure provided to develop high quality education programs for girls and boys throughout Pakistan.
 - Intermediate Result (IR) 3.5: Increase access to higher education

At the time of the evaluation, MNBSP was contributing to four elements of a new USAID results framework:

- Development Objective (DO) 4: Improved Access to High Quality Education.
 - IR 1.3 Improved Educational Opportunities
 - IR 1.1.3: Increased Access to Scholarships
- Cross Cutting Objectives
 - IR 3: Improved public perception of U.S.

With respect to the objectives of increasing access to higher education and improving educational opportunities, the findings rely on the results of the surveys of MNBSP alumni and current students. MNBSP has awarded scholarships to 1,807 Pakistani students, 1,195 of whom have graduated to date. Surveys of 286 alumni and 338 current students asked whether respondents would have been able to continue their studies without the MNBSP scholarship. A large majority (440 or 73 percent) of the combined sample said that they would not have been able to continue their education if they had not received the MNBSP scholarship (Table 6). For these students, the MNBSP increased access to higher education. Extrapolated to all scholarship recipients, this result suggests that the MNBSP scholarship gave 1,171 students who would otherwise not have been able to pursue a degree program access to a higher education.³⁵ Most of those who said they could have continued their education without the MNBSP scholarship reported that they would have had to rely on other scholarships or loans. Only three percent of the total sample said they could have continued their education with their own resources (i.e., personal savings.)

³⁵ Estimated as the sum of the number of current alumni (1,195) and the estimated number of future alumni (461 current students multiplied by the average dropout rate of 11.22 percent equals 409 future graduates) multiplied by 0.73 (the proportion of all students who reported that they would not have completed their degrees without the scholarship.)

TABLE 6: ACCESS TO EDUCATION AND SCHOLARSHIPS

Able to continue education without scholarship	Men	Women	Both sexes
No	329 (72%)	111 (77%)	440 (73%)
Yes	128 (28%)	33 (23%)	161 (27%)
Alternative sources of financing for those who could have continued their education			
Other scholarship	19 (4%)	6 (4%)	25 (4%)
Personal savings	14 (3%)	7 (5%)	21 (3%)
Student loans	26 (6%)	6 (4%)	32 (5%)
Personal loans	45 (10%)	12 (8%)	57 (9%)
Other	46 (10%)	7 (5%)	53 (9%)

Percentage for sources of funds do not necessarily sum to 100 percent because respondents could select more than one response.

Of the 161 students who said they could have continued their education without the MNBSP scholarship, only 25 (15 percent) said they would have financed their education with a different scholarship (Table 6). These results suggest that only 15 percent of MNBSP recipients knew of other scholarship programs for which they were eligible. There was no significant difference between male and female respondents in either access to education or access to scholarships.

The surveys of alumni and current students also asked respondents whether they knew who financed the MNBSP scholarships and about their perceptions of the U.S. and of the American people. A majority (89 percent) of scholarship recipients understood that the U.S. provided the funding for the MNBSP (Figure 5). Although the surveys did not assess *change* in opinions about the U.S. or the American people, a comparison with the results of the 2011 Pew Global Attitudes Project survey³⁶ show that MNBSP recipients' views of the U.S. are much more positive than those of Pakistanis in general. The Pew survey concluded that only 12 percent of Pakistanis have a favorable view of the U.S. compared to 74 percent of MNBSP scholarship recipients (Figure 6). It is not possible, however, to attribute the high opinion of the U.S. to the MNBSP program because neither the evaluation nor the Pew samples are representative of Pakistan's population.

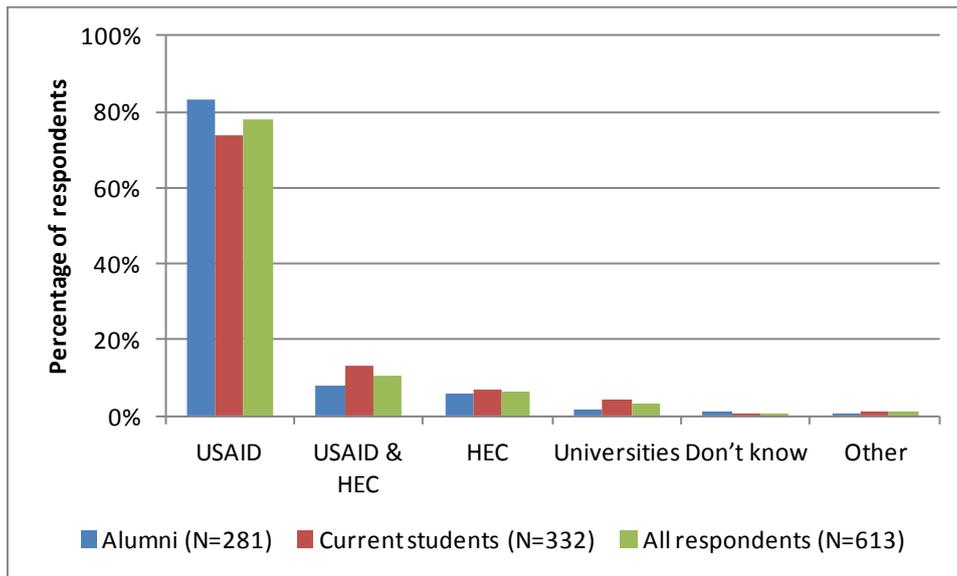
Conclusions

MNBSP is directly contributing to USAID's development strategy. The program has improved access to scholarships and higher education for meritorious but financially disadvantaged students. An estimated 1,604 students (1,243 men and 361 women) will receive advanced degrees with the help of MNBSP.³⁷ An estimated 1,171 of these graduates (908 men and 263 women) would not otherwise have been able to attend university. Most scholarship recipients (89 percent) understood that the U.S. provided the funding for the MNBSP. Furthermore, large majorities of MNBSP scholarship recipients view the U.S. and the American people favorably (74 percent and 84 percent, respectively) and they are much more likely than Pakistanis in general to have a favorable view the U.S.

³⁶ Pew Research Center, Global Attitudes Project, U.S. Image in Pakistan Falls No Further Following bin Laden Killing, June 21, 2011 [http://www.pewglobal.org/files/2011/06/Pew-Global-Attitudes-Pakistan-Report-FINAL-June-21-2011.pdf]

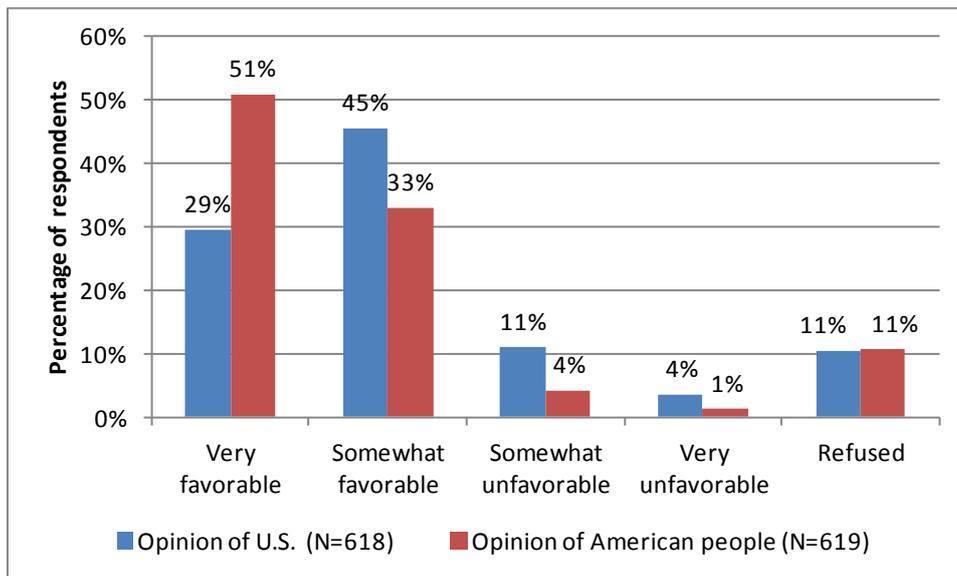
³⁷ Estimated by applying the observed dropout rate among alumni (11.22 percent) to the 461 current students and adding to the 1,195 current alumni. The estimate accounts for the fact that most students drop out in the first year of their programs. HEC reports dropout rates for a class only when the class has graduated. The evaluation team therefore calculated dropout rates only for alumni (i.e., those who had completed their degrees.) Applying this dropout rate to all current students (for whom HEC has not yet reported any dropouts) yields an estimate of the anticipated number of dropouts that accounts for the fact that most dropouts occur in a student's first year.

FIGURE 5: PERCEIVED SOURCE OF MNBSP FUNDING



Source: MSI survey of MNBSP alumni and current students.

FIGURE 6: PERCEPTIONS OF THE U.S. AND THE AMERICAN PEOPLE



Source: MSI survey of MNBSP alumni and current students.

Question 2: Consistency with HEC Priorities

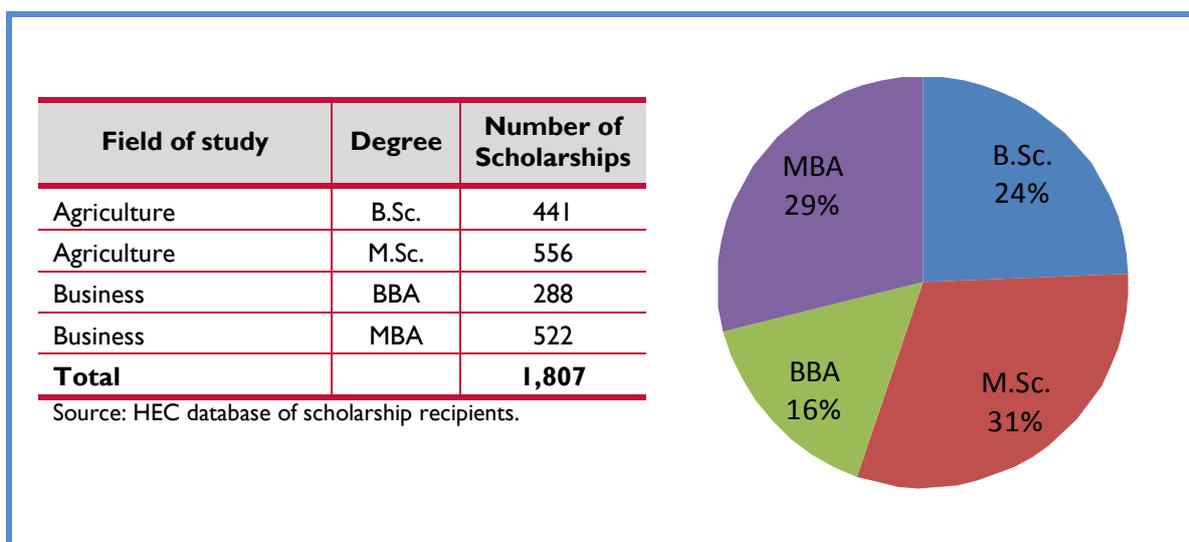
Evaluation Question: How relevant is the current MNBSP (e.g., mix of degree types, field of study) to the priority needs of the HEC and public universities? Is the number of scholarships awarded in the disciplines of Agriculture and Business Administration appropriate?

Findings

MNBSP scholarships supported study for Bachelor of Science (B.Sc.) and Master of Science (M.Sc.) degrees in agriculture and Bachelor of Business Administration (BBA) and Master of Business Administration (MBA) degrees in business. Figure 7 summarizes the mix of fields of study and degree types for scholarships awarded under the MNBSP. Among program alumni, 53 percent studied

agriculture and 47 percent studied business administration. Among current students, 63 percent are studying agriculture and 37 percent are studying business administration.

FIGURE 7: MNBSP SCHOLARSHIPS BY DEGREE TYPE AND FIELD



The evaluation team’s interviews with HEC officials, including the Advisor of Human Resource Development, confirmed that the MTDF accurately reflects HEC priorities. The priorities outlined in the MTDF include:

- HEC feels there is a need to support meritorious students and that there is a need for more funding for needy students who meet the merit requirements for pursuing higher education.
- HEC’s priority is to significantly increase enrollment in undergraduate and postgraduate degree programs, especially in *agriculture, scientific, technological and engineering* fields.”
- The MTDF does not characterize business administration as a current HEC priority.

The evaluation team also asked officials at the 11 participating universities whether they believed the MNBSP should be expanded to cover additional fields of study or degree programs. While none of the university officials found any conflict between the priority needs of the HEC and of their universities, they all believed that the HEC should expand the MNBSP to cover additional fields of study. However, the evaluation team found it difficult to get officials to prioritize specific fields into which the MNBSP should expand. In general, most wanted support in all fields relevant to their university. Table 7 summarizes universities’ priorities for fields of study into which HEC should expand the MNBSP.

TABLE 7: UNIVERSITY PRIORITIES FOR EXPANSION OF MNBSP

University	Fields
BUIITEMS	Engineering, Bio Tech and Telecom, Mathematics, Social Sciences
IBA-K	Computer Sciences
SZABIST	Media Sciences
UAAR	Information Technology, Veterinary Sciences
IMS	Computer Sciences
AUP	Bio Technology
UAF	Agricultural Engineering and Agriculture Marketing
IBA-S	Information Technology
SAUT	Agriculture
QAU	Economics
LUMS	Economics, Computer Sciences, Engineering

Source: MSI interviews with university officials.

Table 8 maps the universities' priority fields for expansion of MNBSP onto the HEC priorities as outlined in the MTDF.

TABLE 8: HEC AND UNIVERSITY PRIORITIES FOR EXPANSION

HEC Priority Fields	Number of universities with matching priorities	Associated fields of study
Agriculture	2	Agriculture Marketing and Agricultural Engineering
Scientific	3	Veterinary Sciences and Bio Tech (2)
Technological	7	Computer Sciences (3), Information Technology (2), Telecom, Media Sciences
Engineering	2	Agricultural Engineering, Engineering

At USAID's suggestion, the evaluation team conducted an analysis of the implications (in terms of number of scholarships) of shifting MNBSP emphasis from degrees in business to degrees in the HEC and university priority fields documented in Table 8. Table 9 summarizes the results of the analysis. The analysis allocates USD 6.2 million across the 11 participating universities based on their respective shares of the current MNBSP scholarship funds. The difference in the number of degrees supported is due to differences in costs between business and alternative programs. The evaluation team obtained program costs from universities' websites or through direct communication with the universities. The team obtained stipend amounts from Program Implementation Letter No. 12: USAID Merit and Needs-Based Scholarship Program.

Conclusions

- The MNBSP focus on agriculture is consistent with the expressed priorities of HEC as articulated in the MTDF. However, neither the MTDF nor HEC officials mentioned scholarships supporting study in business as a high priority.
- Shifting MNBSP support from degrees in business to degrees in the alternative priority fields identified by the HEC and participating universities would reduce the total number of degrees

the MNBSP could support by about three percent, from an estimated 1,095 to 1,064 scholarships.

TABLE 9: IMPLICATIONS OF SUPPORTING ALTERNATIVE FIELDS OF STUDY

University Name	Number of Scholarships in Business	Alternative fields	Number of Scholarships in Alternative Fields
QAU (Masters)	69	Computer Sciences, GEO Physics	69
IBA-S (Bachelors)	61	Computer Sciences (Bachelors)	67
IBA-S (Masters)	63	Computer Sciences (Masters)	40
IBA-K (Bachelors)	20	Computer Sciences (Bachelors)	25
IBA-K (Masters)	12	Computer Sciences (Masters)	20
IMS (Bachelors)	49	Computer Sciences (Bachelors)	50
IMS (Masters)	25	Computer Sciences (Masters)	25
BUIITEMS (Bachelors)	52	Engineering , Bio Tech, Telecom (Bachelors)	52
BUIITEMS (Masters)	38	Engineering , Bio Tech, Telecom (Bachelors)	38
LUMS (Bachelors)	39	Engineering, Computer Sciences	35
LUMS (Masters)	12	Engineering, Computer Sciences	16
SZABIST (Masters)	29	Media Sciences (Masters)	46
Total	469		438
Degrees in agriculture	626		626
Grand Total	1,095		1,064

a. The number of degrees in agriculture do not change because agriculture is a continuing priority for HEC.

Recommendations

In consultation with HEC, reconsider the fields of study and the allocation of scholarships across supported fields of study in future scholarship programs. Scholarships in business administration are not consistent with current HEC priorities as articulated in the MTDF. However, scholarships in business support other HEC initiatives such as small business innovation research grants; the office of research, innovation and commercialization; and business incubation centers. The MTDF also emphasizes study in scientific, technological and engineering fields that are not covered under the current MNBSP.

Question 3: Achievement of Planned Outputs and Outcomes

Evaluation Question: To what extent has the MNBSP achieved the planned outputs and outcomes as defined in the implementing agreement with the HEC?

Findings

Only the USAID Project Implementation Letter No. 12 of October 4, 2010, an informal document titled “Performance Monitoring and Evaluation Plan Year Wise and Time Wise” and the project quarterly and annual reports contained any mention of planned outputs and outcomes. Many of the results statements referred to expenditure rather than to meaningful results indicators. Table 10 summarizes the key results indicators the evaluation team gleaned from the project documents and the progress HEC reported against these indicators as of March 31, 2012.

TABLE 10: ACHIEVEMENT OF MNBSP TARGETS

Deliverable/Outcomes ³⁸	Target	Actual (as of March 31, 2012)
1,807 needs-based scholarships in 11 participating universities	1,807	1,807
Number of men	b	1,426
Number of women	b	381
1,807 students completed their undergraduate/graduate degree from program participating institutions	1,807	1,195 ^a
Number of men	b	926
Number of women	b	269
Establishment of Office of Advancement and Office of Communication at HEC	2	2
Online submission of needs-based scholarship application	1	0 ³⁹

- a. HEC did not report 1,195 graduates. MSI had to work with HEC to update records to arrive at an accurate count of graduates. This number reflects graduates to date, 461 students are still studying.
- b. USAID did not specify specific gender disaggregated targets in the initial agreement but, in October 4, 2010, established a target that at least 25 percent of remaining scholarships should go to women. HEC never reported these indicators disaggregated by sex.

Number of Scholarships Awarded

According to HEC records, the MNBSP has awarded scholarships to 1,807 students through 11 participating universities. The actual distribution of scholarships across the participating universities was not as originally allocated for a variety of reasons.⁴⁰ In the case of AUP, additional slots were provided for students affected by 2005 earthquake. UAAR, IBA-K, LUMS and SZABIST were unable to utilize the slots allocated to them due to an insufficient number of applications and these were reallocated to other universities. Although the distribution of scholarships across universities deviated from the planned distribution, program officials provided justifications to USAID during implementation for each change to the initial plan. Table 11 summarizes the planned and actual number of scholarships by university and field of study.

³⁸ *Ibid* page 21

³⁹ The Program Coordinator of MNBSP for HEC reported that the Management Information System application has been developed but not implemented.

⁴⁰ Program Implementation Letter No. 12: USAID Merit and Needs-Based Scholarship Program, page 15.

TABLE II: SCHOLARSHIP ALLOCATIONS AND AWARDS BY UNIVERSITY

University	Program	Length of Program (years)	Number of Scholarships		
			Allocated in Agreement ⁴¹	Actually Awarded	Difference Awarded-Versus-Allocated
AGRICULTURE					
UAF	BS	4	127	133	6
	MS	2	172	175	3
AUP	BS	4	113	147	34
	MS	2	130	136	6
SAUT	BS	4	105	105	0
	MS	2	151	142	-9
UAAR	BS	4	80	56	-24
	MS	2	102	103	1
Total Agriculture			980	997	17
BUSINESS ADMINISTRATION					
QAU	MBA	2	86	88	-2
IBA-S	BBA	4	75	75	0
	MBA	2	45	48	3
IBA-K	BBA	4	76	53	-23
	MBA	2	101	94	-7
IMS	BBA	4	70	77	7
	MBA	2	88	97	9
BUITEMS	BBA	4	15	22	7
	MBA	2	67	75	8
LUMS	BBA	4	56	52	-4
	MBA	2	77	65	-12
SZABIST	BBA	4	0	9	9
	MBA	2	71	55	-16
Total Business Administration			827	810	-17
Grand Total			1,807	1,807	0

Number of Students Completing their Programs

According to HEC records, 1,195 scholarship recipients had completed their degrees by March 31, 2012, 461 scholarship recipients are still enrolled and scheduled to complete studies by 2016 and 151 had dropped out of the program (a dropout rate of 11 percent).⁴² The fact that the target number of scholarships and degrees awarded are equal in the Program Implementation Letter implies that USAID and HEC did not anticipate any dropouts (i.e. an implied graduation rate of 100 percent). All 12 university officials interviewed by the evaluation team who responded to the question considered the dropout rate for MNBSP to be well within normal parameters. Based on dropout rates experienced to date, MNBSP is on track to graduate 1,604 students – 1,243 men and 361 women.

⁴¹ Ibid.

⁴² The dropout rate is calculated as: (number of dropouts) / (number of alumni + number of dropouts) because the percentage of dropouts is only completely observable among those who have completed their degrees.

Table 12 summarizes the number of degrees awarded to MNBSP scholarship recipients by field of study, degree type, and sex.

TABLE 12: DISTRIBUTION OF ALUMNI BY FIELD AND DEGREE LEVEL

	Agriculture		Business Administration		Total
	Male	Female	Male	Female	
Bachelor	205	57	123	33	418
Master	286	89	312	90	777
Total	491	146	435	123	1,195

Establishing Offices of Advancement and Communication at HED

HEC established both an Office of Advancement and an Office of Communication.

Online Submission of Scholarship Applications

Students and key officials at two locations (SAUT and BUTTEMS) complained of extraordinarily lengthy and cumbersome application forms that asked for too much information and supporting documentation and suggested instituting online applications to relieve the students of the burden of completing hard copies. HEC’s 2010 work plan included developing online application forms. The MNBSP Program Coordinator at HEC stated that software for online submission of scholarship applications has been developed. However, the software application has not yet been provided to universities due to a lack of reliable internet access at various locations.

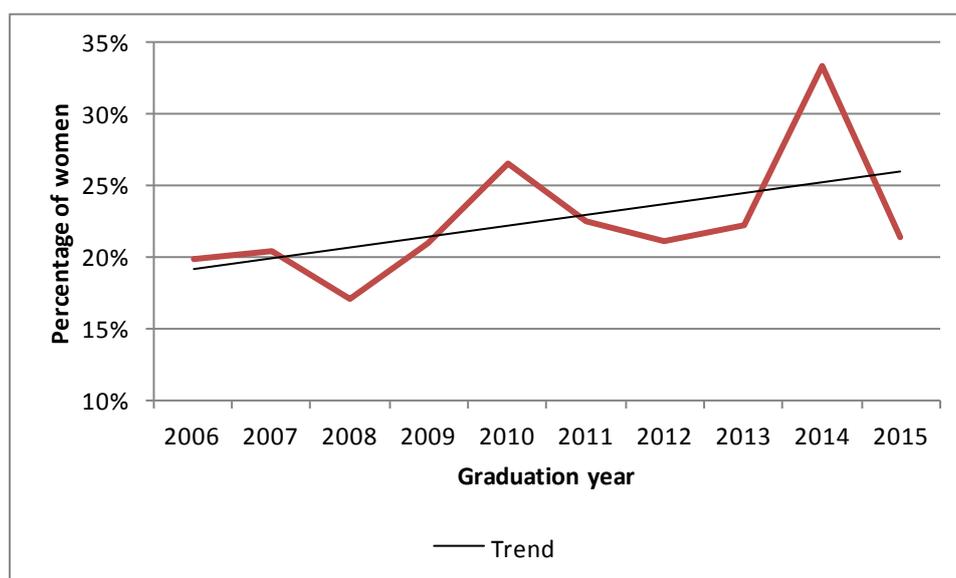
As an indication of the status of the MNBSP Management Information System, the HEC Program Coordination Unit took considerable time and effort to retrieve information requested by the evaluation team. The team experienced numerous issues of data quality and retrieval throughout the evaluation process and during the process of contacting alumni for survey purposes. As one consequence of the poor quality of the HEC data, the evaluation team was not able to compare characteristics of scholarship recipients to characteristics of all applicants.

Female Participation in MBNSP

Female participation was always an implicit objective for MNBSP. However, it was not until the Program Implementation Letter No. 12 of October, 2010 that USAID established explicit targets. In particular the letter stated: *“This activity will ensure that at least 25% of the awarded scholarships go to women, especially those coming from remote and vulnerable areas of Pakistan, who are financially needy, and meet admissions criteria of the selected 11 partner universities.”*

Although there is substantial variation from year to year in the percentage of scholarships awarded to women, the general trend is increasing (Figure 8). Some of the participating universities face challenges attracting female applicants. The acting Director at IMS expressed concern that the program’s requirement to select candidates from remote/rural areas makes the 25 percent female participation benchmark too high, citing the difficulty of finding qualified females in remote/rural areas, particularly in agriculture. He also mentioned that the rural focus has worked against qualified deserving urban candidates, particularly women. The Vice Chancellor of BUTTEMS voiced a similar concern and suggested including urban poor in the MNBSP scholarship program.

FIGURE 8: TREND IN WOMEN'S PARTICIPATION



The evaluation team found no evidence that universities gave particular attention to increasing female participation in the program, or took any special measures to attract female students. One university official interviewed (a department head and ISAC member) was unaware of the 25 percent female participation target. USAID also appeared not to stress the target. During a meeting of HEC SMC in June, 2011, USAID expressed concern over low female enrollment, but has never disagreed with scholarship award decisions on this basis.⁴³

TABLE 13: FEMALE SCHOLARS AS PERCENTAGE OF TOTAL

University Name	Female Students as a Percent of Total Program Students ^a	Female Alumni as a Percent of Total Program Alumni
BUIITEMS	28%	34%
IBA-K	25%	37%
SZABIST	33%	20%
UAAR	24%	43%
IMS	18%	11%
AUP	18%	23%
UAF	22%	13%
IBA-S	21%	22%
SAUT	14%	10%
QAU	27%	12%
LUMS	24%	12%
Total	22%	23%

a. Current students include all students currently enrolled in an MNBSP-supported program.

⁴³ HEC, Minutes of 9th SMC Meeting dated June 2, 2011.

Conclusions

- USAID’s agreement with HEC did not contain a comprehensive Performance Management Plan with well articulated outputs and outcomes. Nevertheless, MNBSP has met most, but not all, of the few planned outputs and outcomes mentioned in the agreement and other project documents. The program met its target for scholarship awards but did not meet targets for degrees awarded because of an unrealistic assumption that 100 percent of scholarship recipients would graduate. MNBSP appears to be on track to award 1,604 degrees.
- The program has not yet achieved the target for female participation. The findings suggest that more effort may be required on the part of HEC to communicate the explicit female participation target throughout all levels of program administration. Relaxing the rural focus of the program may also enhance the ability to attract eligible female applicants.
- In terms of programmatic infrastructure, HEC has developed new offices for advancement and communications but has not yet deployed an online system for applications that could substantially streamline the application process.

Recommendations

- **Increase outreach to women.** Achieving the target of 25 percent female participation may require special efforts to publicize the program among prospective female students and/or consideration to increase female participation from urban areas.
- **Consider modifying eligibility criteria for women.** If USAID desires to target female students from “remote/vulnerable” as opposed to “rural” areas, a more robust definition of “remote/vulnerable” may better serve this purpose. District-wise Human Development Index and/or Deprivation Indices can be the basis for defining “remote”/“vulnerable”/“disadvantaged” areas.

Question 4: On-Time Graduation

Evaluation Question: Do scholarship recipients graduate on time?

There are several factors that cause delays in completing degree programs. University closures due to security considerations and/or political unrest and the consequent postponement or rescheduling of exams can cause delays in graduation in Pakistan.⁴⁴ Health and family reasons or other unforeseen circumstances may also cause students to temporarily disrupt their studies. The HEC considers these factors as beyond a student’s control. The penalty for delay for any reasons other than those beyond a student’s control is the loss of the MNBSP scholarship. The survey of MNBSP alumni and discussions with university officials provided the data to answer this question.⁴⁵

Findings

Of the 284 alumni who responded to the survey, 266 (94 percent) reported that they graduated in the semester they expected to graduate. Only 18 (6 percent) said they had not graduated when expected. Table 14 summarizes reported delays by field of study, degree type, and sex. None of the possible comparisons in Table 14 across field of study, degree type or sex are statistically different. That is, neither

⁴⁴ [<http://www.pakistantoday.com.pk/2011/09/18/city/lahore/schools%E2%80%99-closure-not-a-viable-solution/> <http://www.nation.com.pk/pakistan-news-newspaper-daily-english-online/Politics/21-Oct-2009/All-Pakistan-educational-institutions-closed>], [<http://www.karachidigest.com/news/most-educational-institutions-remain-closed/>]

⁴⁵ The HEC database provides a “Program End date” and “Year of Passing”. A crosstab of these two data points found that only 2.5 percent matched which suggests data problems. The evaluation team therefore considered the results of the alumni survey more valid estimates of delays.

field of study, degree level or sex had any statistically meaningful effect on the likelihood that a student would graduate on time.

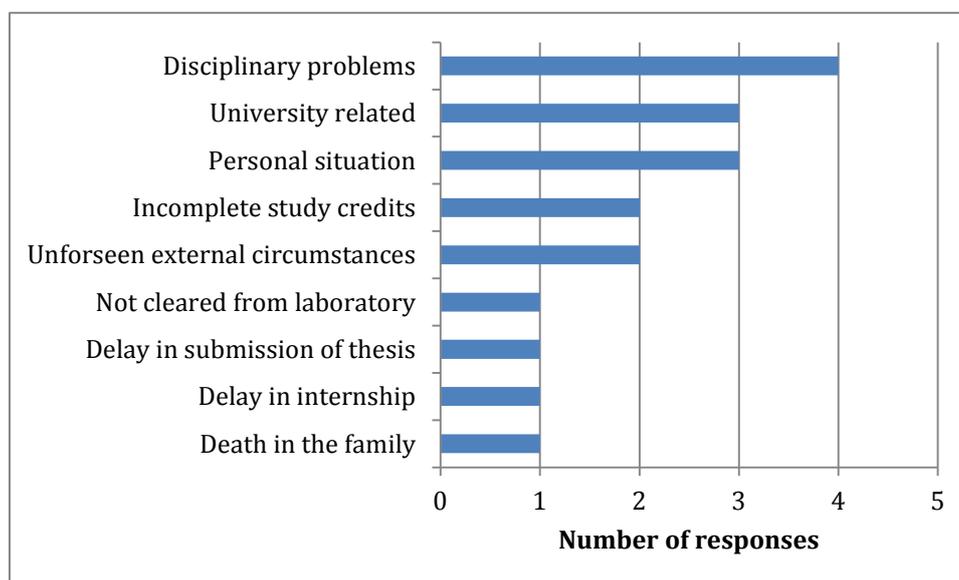
TABLE 14: PERCENTAGE OF MNBSP RECIPIENTS GRADUATING ON TIME

Degree	Agriculture		Business Administration		All Programs		Total
	Male (N=107)	Female (N=35)	Male (N=100)	Female (N=32)	Male (N=207)	Female (N=67)	Both sexes (N=274)
Bachelor	88%	93%	98%	100%	92%	96%	92%
Master	98%	90%	95%	96%	96%	93%	95%
Total	93%	91%	96%	97%	94%	94%	94%

Source: MSI survey of MNBSP alumni.

About half of the students who reported not graduating when expected attributed the delay to factors that appear to have been outside the control of students and universities. Figure 9 summarizes the reasons the 18 students who reported delays in graduation gave for the delay. Interviews with key officials of the participating universities confirmed that most of the MNBSP beneficiaries graduated on time. Officials attributed this to strict penalties for unforced delays.

FIGURE 9: REASONS FOR DELAYS IN GRADUATION



Source: MSI survey of MNBSP alumni.

Conclusions

Recipients of MNBSP scholarships overwhelmingly graduated on time. The low incidence of delayed graduation is consistent with the incidence of delays among the entire student body.

Question 5: Transparency of Selection Process

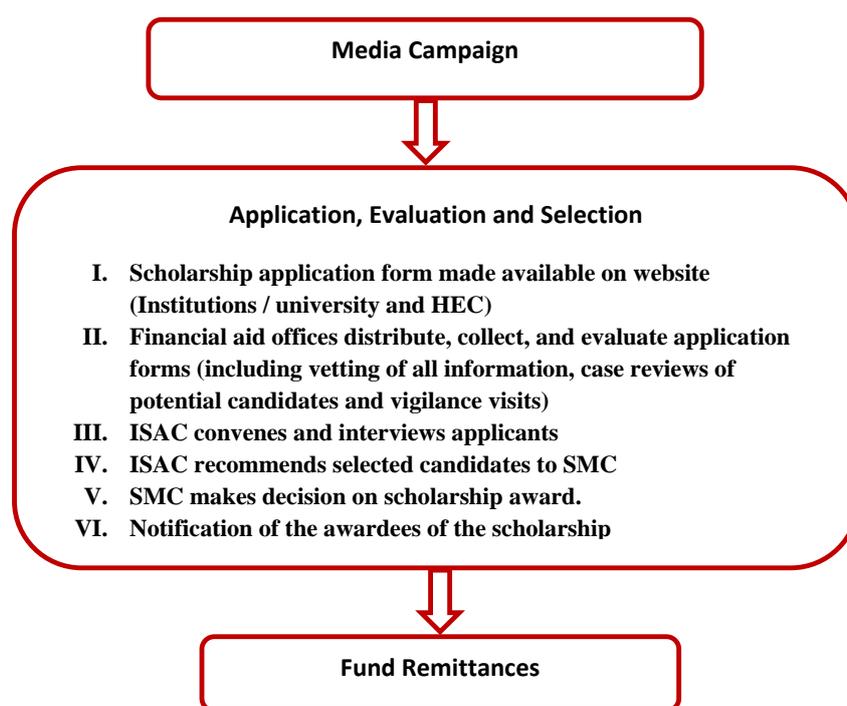
Evaluation Question: To what extent does the beneficiary selection process meet the transparency requirements agreed with USAID?

Findings

Program documents give no explicit definition of USAID transparency requirements. The approach to addressing this question involved (1) clarifying the overall application and selection processes outlined in HEC SOPs for MNBSP, and then (2) evaluating how precisely and consistently the HEC and participating universities followed the SOPs during program implementation.

Figure 10 illustrates the MNBSP SOPs for advertising, selecting scholarship recipients and disbursing scholarship funds.

FIGURE 10: MNBSP'S STANDARD OPERATING PROCEDURE (SOP)



Media Campaign

HEC published dedicated advertisements for the spring and fall semesters in all the leading newspapers of Pakistan. The advertisements contained information about the MNBSP, the names of universities participating in MNBSP and contact addresses. The advertisements were published in English, Urdu, Pashto, Siraiki, Sindhi and Balochi. In addition to newspapers, the partner universities used several other sources including banners, pamphlets and fliers on notice boards to reach out to students eligible for MNBSP scholarships.

Application

Prospective scholarship recipients must first apply to the university and be accepted on the basis of merit. Once accepted, they submit a scholarship application. In all of the 11 universities the evaluation team visited, the financial aid offices collected and scrutinized the scholarship application forms. They used the information contained in the application forms to objectively assess need based on 35 indicators and eliminated students who did not meet eligibility criteria. The application forms reproduced in Annex 6 document these criteria. The financial aid office ranked eligible applicants on the basis of the objective

criteria and compiled a shortlist of applicants equal to the number of available slots plus a waiting list to accommodate attrition from the shortlist.

The evaluation team observed the records the universities maintained that documented the selection process and found that all 11 universities maintained records in the form of evaluation sheets documenting shortlisted (and waitlisted) candidates' scores on the objective criteria.

In order to mitigate the risk of selecting students who are not needy, the universities conducted physical verifications of students' neediness by visiting their homes at the addresses provided in the application form. Universities' financial aid office staff interviewed by the evaluation team in QAU, UAAR, IMS, AUP and UAF found the physical verification to be very effective as a check on need. AUP rejected five students on the basis of the physical verification visits.

To avoid potential conflict of interest, IMS, BUTTEMS and AUP did not allow children of university staff to participate in the program.

Evaluation

In each university, the ISAC interviewed all shortlisted students. During the interview, ISAC members scored applicants on the basis of subjective criteria and combined these scores with the objective criteria score to determine a final score. The universities assigned equal weight to the objective and subjective criteria when calculating an applicant's final score. Not all of the universities maintained written records of the subjective scores or details of how the panel determined the score. Five of the universities the evaluation team visited recorded only the final score for each student. The remaining six universities (IBA-K, LUMS, AUP, IMS, LUMS and BUTTEMS) also recorded short notes on students' performance in the ISAC interview in the form of evaluation sheets and ISAC minutes.

University officials found the subjective criteria to be an effective tool for identifying needy students. All officials the evaluation team interviewed expressed the view that since Pakistan is a largely undocumented economy, it is difficult to verify financial and other information reported on application forms. During the interviews, ISAC members used various subjective parameters to assess the neediness of the students. According to the Dean of BUTTEMS, *"for the 50 percent subjective assessment to determine the neediness of a student we consider factors such as confidence level- the poor are usually less confident; prices of the watches and mobile sets they have at the moment; nutrition and health- poor are less healthy."* And also *"we also consider factors such as appearance of the student and their submissiveness which reflects their poverty."*

Selection

Most university officials that the evaluation team interviewed believed that the selection process was effective. On a four-point scale of perceived effectiveness,⁴⁶ 9 of the 19 (47 percent) university officials interviewed found the selection process to be "very effective", 9 (47 percent) found it "effective" and 1 (6 percent) found it "satisfactory". To keep the process transparent and prevent manipulation of the subjective criteria, universities used various methods to rank students. In BUTTEMS, SZABIST and IMS the ISAC members scored applicants individually and then averaged the scores. In cases of large variance between assigned scores, the committee members would take a decision on consensus. The Vice Chancellor of AUP said that he "convenes the interviews but never conducts actual interviews." According to him, his presence would influence the panel's opinion. The Vice Chancellor of UAF reported that he sat on the interviews but did not assign scores.

After the ISAC selects scholarship recipients the SMC of HEC confirms the final selection. The evaluation team is not aware of any instances where the SMC changed the selection choices of the participating universities.

⁴⁶ The scale included responses of "very effective", "effective", "satisfactory" and "unsatisfactory".

Conclusions

The evaluation team found no documented USAID “transparency requirements”. However, the participating universities do appear to be implementing the MNBSP selection process in a transparent manner and in accordance with the SOPs. The combination of objective and subjective criteria appears to be an effective approach to identifying truly needy students and the universities are applying the criteria transparently. The multi-layered application and selection process (i.e. financial aid offices, ISAC, SMC) reduces the ability for any one person to influence the decision.

Question 6: Applicants’ Eligibility

Evaluation Question: To what extent do applicants meet the criteria for scholarship awards?

Findings

The MNBSP SOPs for 2010 specify the overall criteria for selecting applicants. The criteria include:

- *Financial need:* The Project Implementation Letter No. 12 of October, 2010, defines the financially poor as those with household income that is less than PKR 35,000 per month.
- *Geographic area:* The preferred geographical areas on which the MNBSP should “focus” are FATA, KP, southern Punjab, Balochistan, and northern Sindh.
- *Gender:* The SOP (2010) specifies at least 25 percent of MNBSP scholarships should be awarded to financially needy women, especially from remote and vulnerable areas of Pakistan.

To answer this question the evaluation team investigated the extent to which MNBSP scholarship recipients meet these criteria. This question uses only data from scholarships awarded since 2010 when these criteria were established.

Financial Need

Prior to 2010, participating universities used subjective assessments of need.⁴⁷ However, the Program Implementation Letter No. 12 of 2010 established an objective maximum eligibility threshold of PKR 35,000 in monthly income. Of the 307 scholarship recipients who received their scholarships prior to 2010 and for which the evaluation team obtained income data, 10 percent reported monthly incomes greater than PKR 35,000. Of the 96 recipients who received their scholarships after 2010 and for which the evaluation team had income data, only one reported a monthly income greater than PKR 35,000 on the application form. The evaluation team does not know whether the university ultimately determined that actual income was below the threshold.

Geographic Area

The SOPs do not define the districts that constitute southern Punjab and northern Sindh. The evaluation team’s analysis defines southern Punjab as the districts of Bahawalnagar, Bahawalpur, Dera Ghazi Khan, Mianwali, Multan, Muzaffargarh, Rahim Yar Khan, Rajan Pur and Vehari. Similarly, it defines northern Sindh as the districts of Dadu, Ghotki, Jacob Abad, Kashmore, Khairpur, Kambar Shahdadkot, Larkana, Naushehro Feroze, Qamber, Shikarpur, and Sukkur.

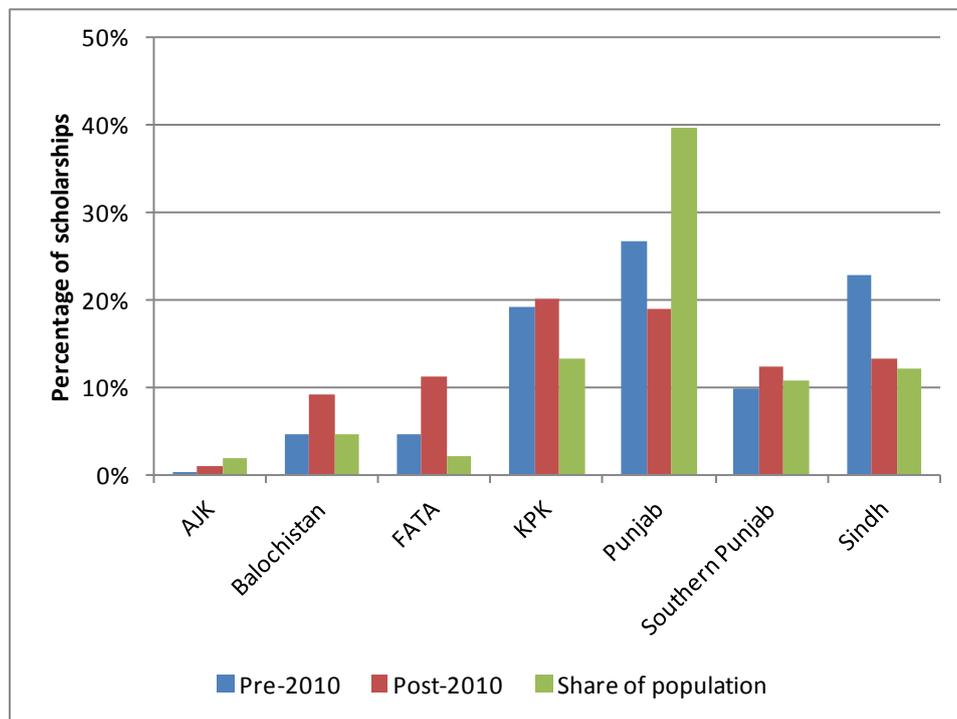
- Of the 128 scholarships awarded in Punjab, 53 (41 percent) went to students from districts within southern Punjab. These scholarships represent 16 percent of the total scholarships awarded since 2010.
- Of the 179 scholarships awarded in Sindh, 102 (57 percent) went to students from districts within northern Sindh. These scholarships represent 17 percent of the total scholarships awarded since 2010.

⁴⁷ Personal communication with HEC Project Manager for MNBSP.

- Since 2010 when the focus areas came into effect, 66 percent of all scholarships have gone to students from these focus areas compared to 50 percent of scholarships awarded prior to 2010.

Figure 11 shows the percentage distribution by geographic region pre- and post-2010.

FIGURE 11: GEOGRAPHIC DISTRIBUTION OF SCHOLARSHIP RECIPIENTS



Source: MSI analysis of HEC data.

Conclusions

Based on self-reported income from the application process (and validated by the universities through the verification and selection process) a vast majority of scholarship recipients appear to satisfy the monthly income criterion for eligibility. Since the program did not specify the preference for geographic focus until 2010, and even then did not specify the focus areas precisely, it is difficult to determine the extent to which the project met this criterion. However, specifying a geographic focus in 2010 did appear to influence the distribution of scholarships towards the focus areas.

Question 7: Return on Investment (ROI)

Evaluation Question: What is the Return on Investment of the MNBSP?

ROI analysis is one of many approaches to comparing a program's costs with the benefits that it generates. ROI is the ratio of net benefits to total costs expressed as a percentage.⁴⁸ Two factors ultimately determine the validity of ROI estimates: recognition and measurement.

- *Recognition* refers to the conceptual definition of the components of cost and benefit that an ROI analysis attempts to capture. Benefits and costs in social programs can be difficult to completely identify because of spillovers and positive and/or negative externalities. Recognition issues generally lead to an incomplete accounting of costs or benefits and thus to biased estimates of ROI.

⁴⁸ $ROI = ((\text{Total Benefits} - \text{Total Costs}) / \text{Total Costs}) \times 100$

- *Measurement* refers to the general methodologies and specific calculations used to quantify each component of cost and benefit *recognized* for the analysis. The quality of measurements depends largely on the accuracy, sufficiency and/or availability of data to perform each of the underlying calculations. A measurement is only as good as the numbers that are put into it. Measurement issues lead to inaccurate estimates of costs and benefits and thus inaccurate estimates of ROI.

ROI analyses suffer from some important limitations when applied to social programs. The most severe is that it is often difficult to completely quantify benefits in monetary terms. The evaluation defines benefits as increases in projected life-time earnings, a measure which fails to capture important individual and social benefits of education. Since it is relatively easy to obtain a full accounting of costs, the partial nature of the benefit estimate implies that the ROI estimate understates the true ROI.

A limitation specific to this evaluation is the representativeness of the sample of alumni that provided the data for benefit estimates and the accuracy of the data obtained from alumni. The evaluation team attempted to contact all MNBSP alumni. However, those who responded may be quite different from those who a) were impossible to locate or b) refused to participate. For example, alumni who were impossible to locate may be more mobile or may not have telephones. Similarly, alumni who refused to participate in the survey may be more likely to be unemployed. Furthermore, individuals may have an incentive to overstate their incomes.

Table 15 summarizes the methodology used to analyze the ROI for MNBSP and summarizes specific limitations associated with the ROI estimates.

Findings

The evaluation team developed a ROI analysis using program data from the period July 2004 to Dec 2011. During this period USAID spent USD 7,331,320 (present value in 2011 of USD 10,959,707) on the MNBSP. The investment gave an estimated 1,171 students who would not otherwise have been able to attend college access to higher education. The analysis estimated the total present value of the higher incomes as a result of MNBSP, projected over a 25-year career, at USD 36,210,427 yielding an overall ROI of 230 percent. Table 16 summarizes ROI estimates by field, sex and degree type.

Additional findings include:

- Returns to degrees in business are higher than returns to degrees in agriculture. This result holds for both bachelor and master degrees and for both men and women.
- Returns to master degrees are greater than returns to bachelor degrees for both fields of study and for men and women.
- Returns to women appear higher than those for men overall and in business – due largely to the lower baseline (pre-degree) income earning potential of women. However, the small number of observations on post-degree incomes for women makes this result tentative at best.

It is important to note that the ROI values for women are not conclusive due to the small number of observations used to establish women's earnings after graduation. Another caveat is also in order. For management planning, the derived estimates are indicative only and are not rigorous estimates given the many limitations of ROI analysis of education investments. An ROI analysis of the program places heavy demands on the quality and quantity of the data required to derive precise estimates, which is not attempted here due to time and resource constraints.

Annex 7 contains a detailed description of the procedures used to estimate ROI.

Conclusions

Keeping in mind the caveats mentioned above, the evaluation concludes that USAID's investments in higher education through the MNBSP program have generated private economic returns to scholarship recipients well in excess of public investments in scholarships. Due to higher post-degree incomes,

returns to master degrees and degrees in business administration generate greater returns than bachelor degrees or degrees in agriculture, respectively.

TABLE 15: RECOGNITION AND MEASUREMENT OF MNBSP COSTS AND BENEFITS

Recognition	Measurement	Limitations
Program Costs		
USAID fully loaded program costs, including overhead, of attaining the degree	Total program costs outlined in program documentation received from USAID through 2011.	The cost data are disaggregated by field of study and degree type but not by sex. The analysis disaggregates cost by sex based on the percentage of men and women in each field/degree combination.
Other Costs	The analysis does not consider any other costs.	The analysis does not recognize: <ul style="list-style-type: none"> • the opportunity costs of foregone earnings (while attending school) • out-of-pocket expenses (i.e. any costs not covered by the scholarship/stipend).
Program Benefits		
Projected increases in lifetime earnings (assumed 25 years of working life) for each MBNSP alumnus.	<ul style="list-style-type: none"> • Baseline (without degree) earnings are based on HIES data for men and women without college degrees. • Post-degree earnings are based on MSI survey data and calculated separately for each combination of degree type, field and sex. • Projected lifetime earnings assume a 25 year career and include an annual “experience” premium based on HIES and PSLM (2010-11) estimates. • Costs and benefits are discounted to present values in 2011 using a real discount rate of 12 percent.⁴⁹ 	<ul style="list-style-type: none"> • Recognizes only a limited monetary measure of benefits. • Survey data produced only 140 observations of post-degree income for MNBSP alumni. This is insufficient data to produce valid estimates of income, especially for subgroups (e.g. women) with very small numbers of observations. The evaluation validated income estimates to the extent possible by comparing them to national averages for individuals with different levels of education and experience.
Unemployment	Benefits are adjusted to account for long-term unemployment.	
Attribution to MNBSP	To ensure that benefits are attributable to MNBSP, the analysis considers only students who could not have continued their education without the scholarship.	

a. Estimated by MSI from data on 10,864 respondents to the HIES and PSLM data from 2010/11.

⁴⁹ The Planning Commission uses a 12 percent discount rate for social sector projects.

TABLE 16 : SUMMARY OF RETURN ON INVESTMENT ESTIMATES

Field/degree	Present value of program costs (USD)			Present value of benefits (USD)			ROI (%)		
	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes
Program	8,549,729	2,409,979	10,959,707	24,083,484	8,589,047	32,672,531	182%	256%	198%
Agriculture	3,685,447	1,065,710	4,751,157	7,081,309	894,640	7,975,950	92%	-16%	68%
Bachelor	2,448,999	680,941	3,129,940	2,293,597	335,050	2,628,647	-6%	-51%	-16%
Master	1,236,448	384,769	1,621,217	4,787,713	559,590	5,347,303	287%	45%	230%
Business	4,864,282	1,344,269	6,208,550	17,002,174	7,694,407	24,696,581	250%	472%	298%
Bachelor	2,919,825	783,368	3,703,193	5,337,739	3,413,577	8,751,316	83%	336%	136%
Master	1,944,456	560,901	2,505,357	11,664,435	4,280,830	15,945,265	500%	663%	536%

Source: MSI survey of MNBSP alumni.

Question 8: Payment Mechanism

Evaluation Question: How well is the payment mechanism working?

Findings

The payment mechanism refers to the process by which the HEC transfers scholarship funds to the universities and the universities transfer funds to scholarship recipients. The payment system works as follows:

- USAID provides funds to HEC
- HEC transfers funds to participating universities to cover tuition and stipends
- Participating universities' financial aid offices retain the tuition portion of the scholarship and transfer the stipend portion to scholarship recipients.

Findings relative to the payment mechanism include universities' and scholarship recipients' satisfaction with the payment mechanism and qualitative evidence from the recipient surveys of the impacts on recipients of delayed payments.

The Payment Process

The payment process incorporates two separate sub-processes. The first involves evaluating scholarship recipients and verifying to HEC that the student has satisfied the requirements to continue receiving the scholarship. The second sub-process involves the flow of scholarship funds from HEC to the university and then to the student.

The evaluation team collected detailed information on the payment process from three universities and from HEC officials. Figure 12 illustrates the payment process and some of the timeframes and bottlenecks the evaluation team identified.

Satisfaction with the Payment Process

Most university officials the evaluation team interviewed were satisfied with the fund transfer process as well as the relationship between HEC and their universities. Of the 15 university officials who answered the question about satisfaction with the payment mechanism, 2 (13 percent) were “very satisfied”, 6 (40 percent) were “satisfied”, 4 (27 percent) thought that it “could be further improved”, and 3 (20 percent) were “not satisfied”.⁵⁰ Of the 16 university officials who provided answers to the question about cooperation between HEC and their universities, 9 (56 percent) described their relationship with the HEC to be “very cooperative” and 7 (44 percent) thought it to be “cooperative”.⁵¹

Despite these statistics, a significant proportion of the students were not satisfied with the payment mechanism. Almost half (45 percent) of respondents to the survey of current students and 20 percent of respondents to the alumni survey were dissatisfied with the payment process.⁵² Similarly, 80 percent of participants in group discussions with current students and alumni expressed dissatisfaction with the payment process.

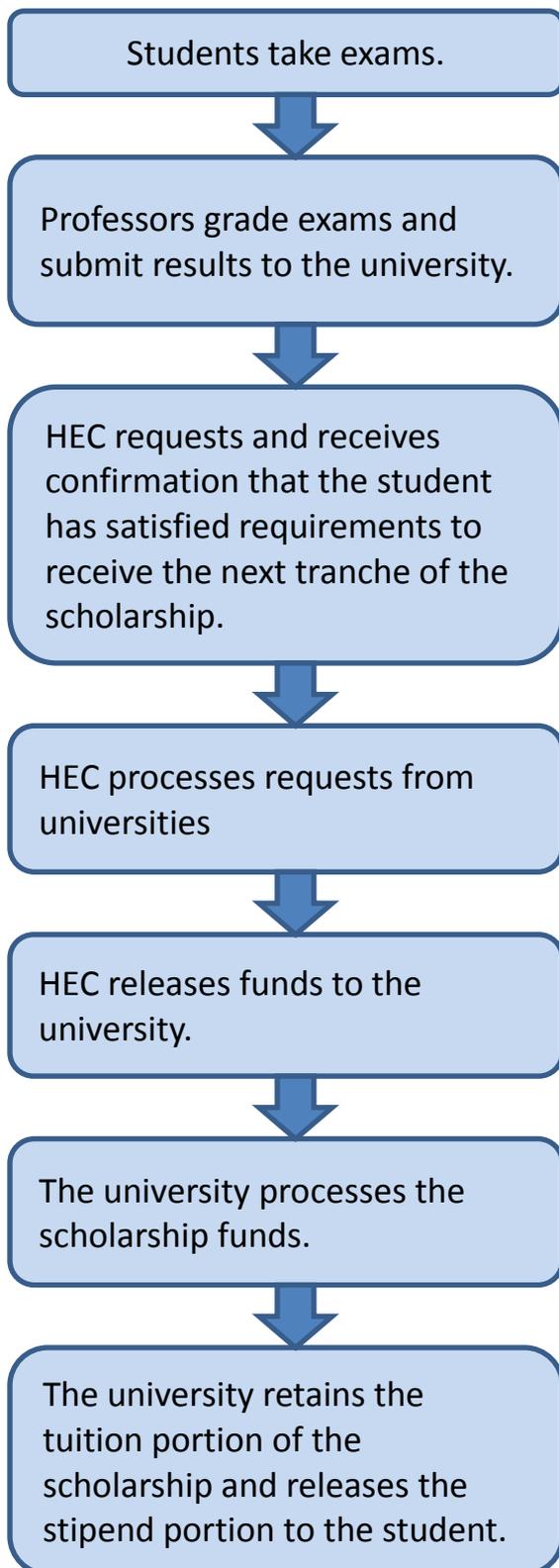
The only reasons for dissatisfaction reported by a large number of dissatisfied respondents were “delay in payment” (86 percent of dissatisfied students) and “too much paperwork” (25 percent of dissatisfied students). Other reasons for dissatisfaction included poor communication and relationship with financial aid offices.

⁵⁰ The question used a four-point scale with responses of “very satisfied”, “satisfied”, “can be further improved” and “not satisfied”.

⁵¹ The question used a four-point scale with responses of “very cooperative”, “cooperative”, “formal/ official” “not cooperative”.

⁵² Responded “somewhat dissatisfied” or “Extremely dissatisfied” on a four-point scale which also included “Very satisfied” and “Somewhat satisfied”.

FIGURE 12: ILLUSTRATION OF THE PAYMENT PROCESS



In QAU, some professors submitted grades one month after exams thus slowing the process of confirming that scholarship recipients had retained their eligibility and delaying disbursement of scholarship funds..

SZABIST prepared results for HEC and then waited for HEC to request the results. HEC finally requested the results after the next semester had started thus delaying processing and disbursement of the scholarship.

According to HEC officials, it takes an average of 45 days from the data universities submit requests to funds to release the scholarship funds.

In BUITEMS the internal processing of funds received from HEC takes about a month – substantially longer than other universities such as QAU.

Delay in Payments

Delayed stipend payments caused real hardships for scholarship recipients. The main objective of MNBSP was “to enable the academically qualified, yet financially needy, Pakistani students to continue university studies”. Delays in stipend payments therefore affected students who could least afford to cover their costs by other means. Students reported delays of six to eight months. However, the delays for a specific student varied across university, semester of the academic program and the year scholarship was awarded. Almost all students suffered the most in their first semester, sometimes not being paid for the entire semester. Students reported covering costs by taking loans from friends and relatives, working part-time and receiving support from family members.

Reasons for Delays in Payments to Students

From the universities’ perspectives, the causes of delayed stipend payments included:

- Universities’ internal procedures, i.e. too many channels and offices involved - especially in AUP and UAF;
- Delayed submission of examination results - especially in business schools (e.g. QAU) with many adjunct faculty members;
- Delayed final selection decisions by the SMC resulting in a delay in first installments and
- Slow verification processes (SAUT).

Other Findings

Other findings relevant to this question include:

- All alumni participants in the group discussions who received their scholarships before the universities established financial aid offices complained about lack of communication, i.e. they were not aware of when the payments were released. Alumni from after BUTTEMS and SZABIST established financial aid offices were satisfied with the communication with the offices.
- Participating universities had different policies for handling late receipt of scholarship funds from the HEC.
 - IBA-S, IBA-K, QAU, IMS, UAAR, LUMS and BUTTEMS did not require the MNBSP scholars to pay their tuition and university hostel fees (except for the first semester) when the university had not received the scholarship funds.
 - SAUT and UAF required the MNBSP scholars to pay their tuition fee even if they had not received their scholarships. UAF deferred the tuition payment date but if the scholarship funds were not received by the deferred date, the university would ask the students to pay.
 - SZABIST considered waiving tuition fees in the case of delayed payments but few students who participated in the group discussion knew of the option.
- In SZABIST funding was for a specific number of courses (i.e. 20) whereas the degree (3 year MBA 2006-09) required 28 courses. The beneficiaries had to make up the difference.
- In SAUT the MNBSP scholarship did not cover the substantial research-related expenditures of final year students.
- According to information obtained from financial aid office of IBA-S, students did not receive clear guidance on the status of their scholarships when they had to put a semester on hold for a valid reason like illness. According to the information obtained from group discussions at IBA-

K, the institution deducts hostel fees from the stipend of the students, which is a clear violation of the SOP.

Conclusions

A substantial number of MNBSP scholarship recipients (alumni as well as current students) were dissatisfied with the payment process – largely due to delayed payments. Delayed payments caused significant hardship to these students with limited financial resources to meet expenses (e.g. covering living expenses, paying tuition expenses at SAUT and UAF when scholarship payments arrived late). Establishing financial aid offices in some universities appears to have improved the performance of the payment mechanism.

Recommendations

- **Identify and resolve causes of delayed payments.** Improvements in the payment mechanism are required to minimize the significant hardships delayed payments currently cause scholarship recipients. USAID could influence the speed of payment by helping identify and resolve bottlenecks and by trying to influence policies at specific universities that require students to pay tuition even when the scholarship is delayed.
- **Ensure that the scholarship covers all education expenses.** The scholarship award should cover all education related expenses (e.g. research expenses) of the students and should be awarded for the entire duration of the degree program.

Question 9: Access to Higher Education

Evaluation Question: Would students have dropped out of the program if they had not received an MNBSP scholarship?

Findings

The analysis of evaluation question 1 concluded that the cost of a higher education was probably out of the reach of students whose households satisfied the MNBSP eligibility requirement of a maximum PKR 35,000 monthly income. Data from surveys of MNBSP scholarship recipients as well as interviews with university officials confirm this conclusion.

A majority (73 percent) of respondents to the surveys of MNBSP alumni and current students reported that they would not have been able to continue their studies without the scholarship. Participants in group discussions confirmed this finding. Table 17 summarizes results.

TABLE 17: CONTINUING EDUCATION WITHOUT MNBSP

Data source	Students who could not have continued education without MNBSP	
	Number	Percentage
Survey of alumni (N=278)	191	69%
Survey of current students (N=327)	252	77%
Both surveys (combined) (N=605)	443	73%

Source: MSI survey of MNBSP alumni and current students.

The difference in responses across alumni and current students is statistically significant at least $\alpha=0.05$.

Extrapolated to the 1,604⁵³ MNBSP scholarship recipients who are likely to complete their degree programs, this implies that the MNBSP will have supported a higher education for an estimated 1,171 students (908 men and 263 women) who would not have been able to attain the degrees without the MNBSP.

The fact that a significantly larger percentage of current students than alumni could not have continued their education without the MNBSP suggests that the PKR 35,000 maximum income criterion established in 2010 may be targeting the MNBSP more effectively to truly needy students.

The evaluation team also asked university officials if they thought scholarship recipients would have been able to continue without MNBSP funding. Of the 18 university officials interviewed, 8 (44 percent) believed that the students would have dropped out while 10 (56 percent) believed that students would not have dropped out if the MNBSP had not been offered.⁵⁴ All the officials agreed that without the MNBSP stipend, the academic performance of students would have been adversely affected by the need to earn income through part-time work.

Conclusions

The MNBSP scholarships gave an estimated 1,171 students (908 men and 263 women) who would not otherwise have been able to afford it, the chance to pursue a college education. Although more data are required for a definitive answer, the significant difference in the percentage of current students and alumni who could not have continued their education with the MNBSP scholarship suggests that the income criterion established in 2010 may be effectively targeting needy students.

Question 10: Employment Preferences and Prospects

Evaluation Question: How do students articulate their employment preferences and prospects?

Findings

The evaluation relied on responses to the surveys and group discussions with current MNBSP scholarship students to explore employment preferences and perceived prospects. Virtually all (96 percent) of 332 respondents to the survey of current students were “very optimistic” or “somewhat optimistic” about securing a job after they graduate. Master students (male and female) in business administration programs were more optimistic than students in agriculture programs about their job prospects. Eighty percent of business students (81 percent of men and 80 percent of women) were “very optimistic” about their job prospects compared to 64 percent (63 percent of men and 65 percent of women) in agriculture programs. Differences between other degrees, fields and sex were not significant.

Results from the group discussions mirrored the survey results with 92 percent of 286 participants stating that they were either “very optimistic” or “somewhat optimistic” about finding a job in their field after graduation. Business students were about three times more likely than agriculture students to be confident about their employment prospects. Other findings from the group discussions include:

- A majority of participants (87 percent) studying in agriculture programs were interested in public sector jobs while only 54 percent of participants in business programs were interested in public sector jobs. The rest in both groups were interested in private sector jobs.

⁵³ Of the 1,346 scholarship recipients who are not still enrolled, 151 (11.22 percent) dropped out. Applying this percentage to the 461 recipients still enrolled suggests that about 409 will eventually graduate. With the 1,195 recipients who have already graduated, an estimated 1,604 recipients will receive degrees with MNBSP support.

⁵⁴ This finding is not directly comparable to the surveys of students/alumni because university officials were not asked to specify the percentage of students/alumni that they felt would have dropped out. The officials’ answers to this question could have been influenced by a sense of institutional responsibility to ensure that meritorious students are retained at all costs.

- Seventy-one percent of agriculture students and 53 percent of business students wanted to pursue higher studies after completing their MNBSP-supported program. Other choices included academics (teaching) and research.
- In the agriculture program 72 percent of the current students would like to work in rural areas, while business administration students were evenly split between rural and urban locations with 14 percent indicating no specific preference.
- The job preferences of business students seemed to reflect the economy of the city in which they studied. For example, business students in Karachi preferred private sector jobs while business students in Quetta preferred public sector jobs.

Conclusions

MNBSP scholarship recipients who are currently enrolled are overwhelmingly optimistic about their job prospects after they graduate. They largely prefer public sector jobs in rural areas – a preference that is much stronger among those studying agriculture. MNBSP may, therefore, be an effective way to build skills in rural areas of Pakistan – particularly in agriculture.

Question 11: Employment of MNBSP Alumni

Evaluation Question: Are MNBSP alumni productively employed in fields related to their academic preparation?

Determining whether or not program alumni are productively employed in fields related to their academic preparation requires a series of questions. The process involves determining whether or not alumni are employed and, if they are employed, determining if they are employed in fields related to their academic preparation and if they are employed at an appropriate level to match their experience and academic preparation. The team developed survey questions and talking points for group discussions to cover each aspect of the question.

Findings

Employment Status

Of 284 respondents of the alumni survey, 151 (53 percent) were employed (51 percent by an organization and 2 percent self-employed) and 133 (47 percent) were unemployed (29 percent unemployed and 18 percent still studying). The following figures break down employment by field of study, sex, degree type, and university.

FIGURE 13 : EMPLOYMENT STATUS BY FIELD OF STUDY

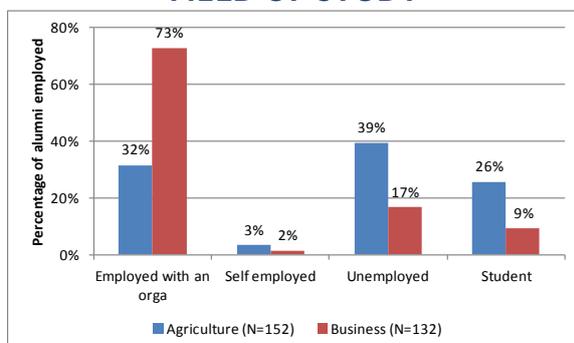


FIGURE 14 : EMPLOYMENT STATUS BY SEX

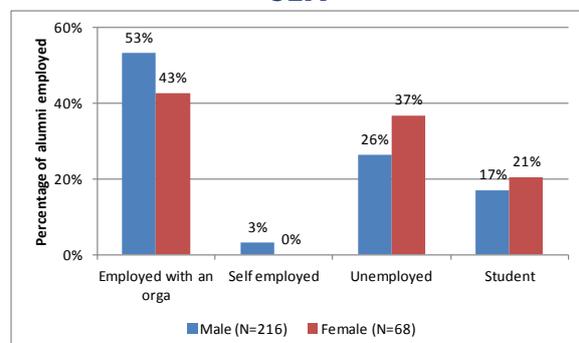


FIGURE 15 : EMPLOYMENT STATUS BY DEGREE TYPE

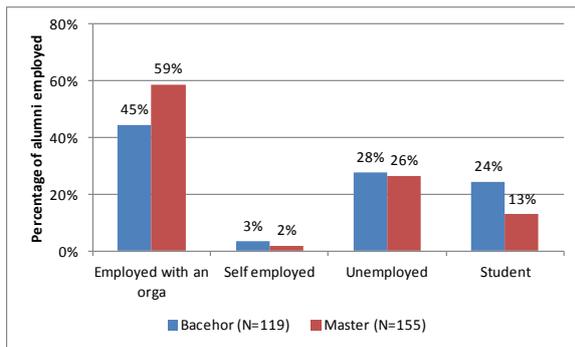
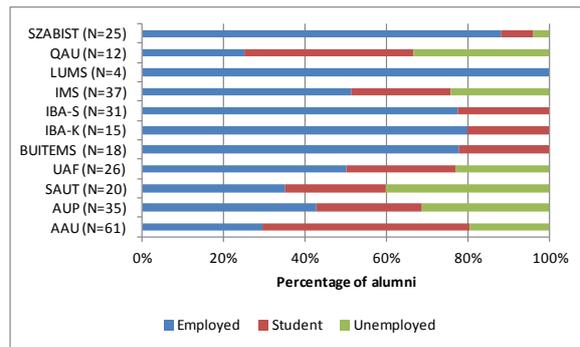


FIGURE 16: EMPLOYMENT STATUS BY UNIVERSITY



Key findings include:

- Agriculture graduates were more likely to be unemployed than were business graduates.
- Female graduates were more likely to be unemployed than male graduates.
- Employment rates varied substantially by university. However, this result probably reflects the lower employment rates among agriculture graduates than characteristics of the universities.

Reasons for Unemployment

Of the 82 alumni who reported not being employed, 55 (67 percent) had not been employed since graduation. These unemployed graduates cited poor economic conditions as the single most important reason for being unemployed (49 percent of the unemployed) while 4 (7 percent) cited a degree that did not equip them for employment.

Relevance of Employment

Of the alumni who were employed, 127 (88 percent) said that their current employment was relevant to their academic preparation. Figure 17 and Figure 18 show relevance of employment by field of study, sex, degree and university.

FIGURE 17: RELEVANCE OF EMPLOYMENT BY FIELD, SEX, AND DEGREE

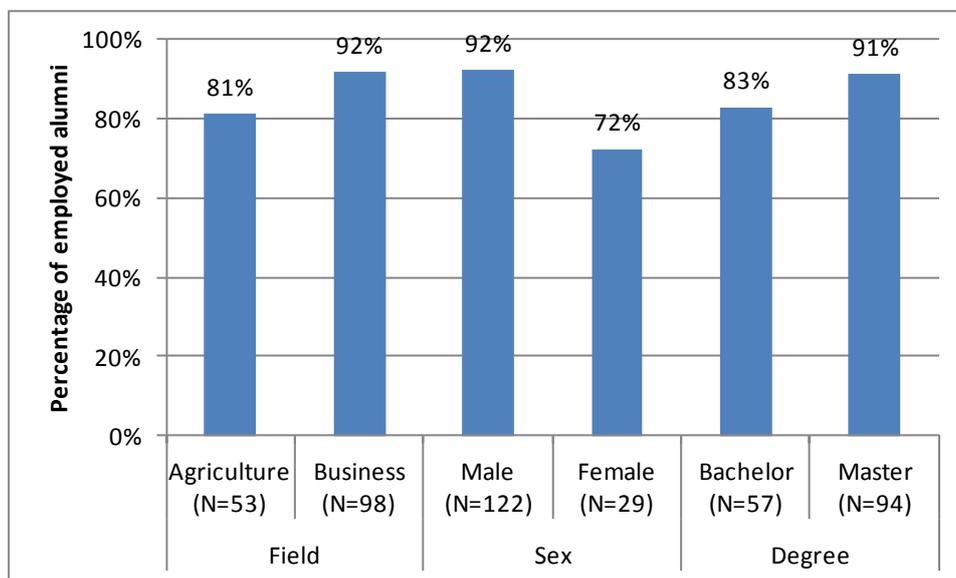
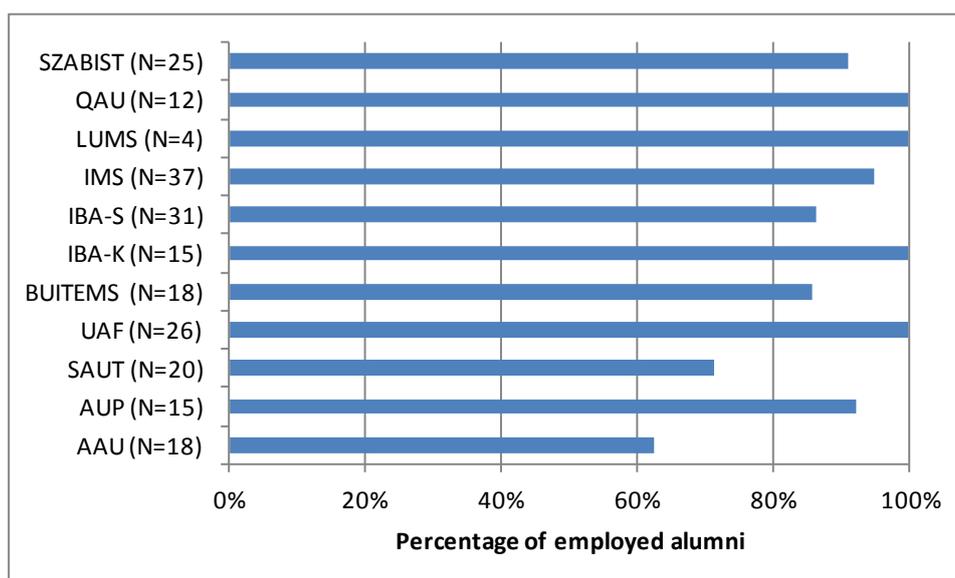


FIGURE 18: RELEVANCE OF EMPLOYMENT BY UNIVERSITY



Key findings include:

- Graduate in business were significantly more likely ($\alpha=.10$) than agriculture graduates to be employed in a field relevant to their academic preparation.
- Male graduates were significantly more likely ($\alpha=.01$) than female graduates to be employed in a field relevant to their academic preparation.
- Differences in relevance of employment by degree type are not statistically significant.
- Relevance of employment varied significantly across universities. However, the result is largely due to the fact that agriculture graduates were less likely than business graduates to find relevant employment. When agricultural universities are excluded from the analysis, there is no significant difference in relevance of employment by university.

Time Required to Find a Job

Of the 284 alumni, 192 had been employed at least once after graduating – although they may not have been employed at the time of the survey. The questionnaire asked this group about the time it took them to find their first job after graduating. Figure 19 and Figure 20 summarize results by field of study, sex, degree and university.

FIGURE 19: AVERAGE TIME TO FIRST JOB BY FIELD, SEX, AND DEGREE

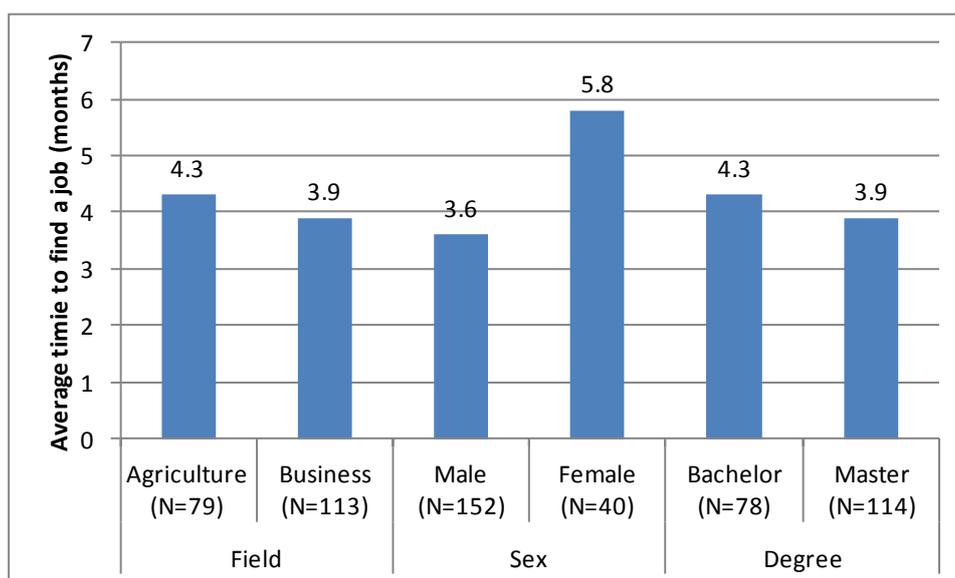
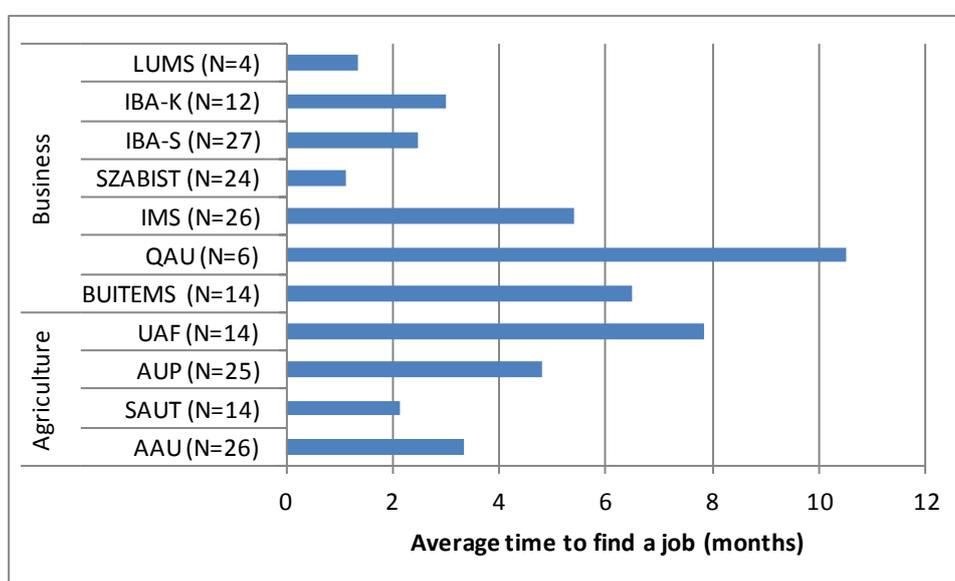


FIGURE 20: AVERAGE TIME TO FIRST JOB BY UNIVERSITY



Key findings include:

- Female graduates took significantly longer to find their first job than did male graduates – 5.8 months on average compared to 3.6 months.
- There is no statistically significant difference in the time required to find a job by field of study or degree type.
- There are significant differences in times required to get a job between graduates of the different universities. Figure 20 is ordered within each field of study by the ranking of the universities from highest to lowest.⁵⁵ Among business schools the average time required to find a job is roughly

⁵⁵ For a ranking of schools by category see <http://beta.hec.gov.pk/InsideHEC/Divisions/QALI/Others/RankingofUniversities/Pages/CategoryWise.aspx>.

related to the rank of the school, i.e. graduates from higher ranked schools find jobs more quickly. However, this relationship is reversed for agricultural schools.

Average Salary/Income

Of the 151 respondents who were employed, 141 were employed with an organization while 7 were self-employed. The average monthly salary/income for employed alumni was PKR 38,381. The income statistics are disaggregated on the basis of fields of study, sex, degree type, university, and province (Figure 21 through Figure 23).

FIGURE 21: AVERAGE MONTHLY INCOME BY FIELD, SEX, AND DEGREE TYPE

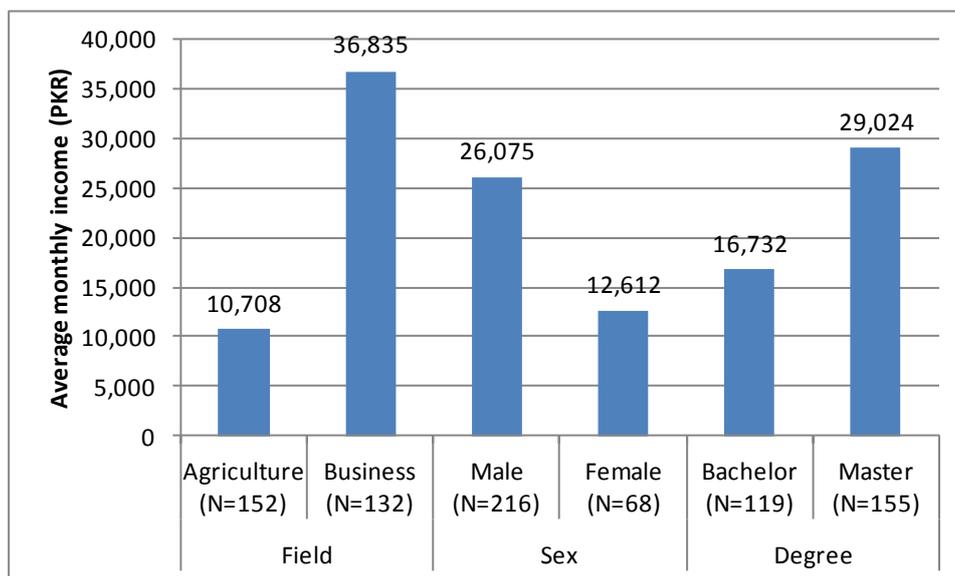


FIGURE 22: AVERAGE MONTHLY INCOME BY UNIVERSITY

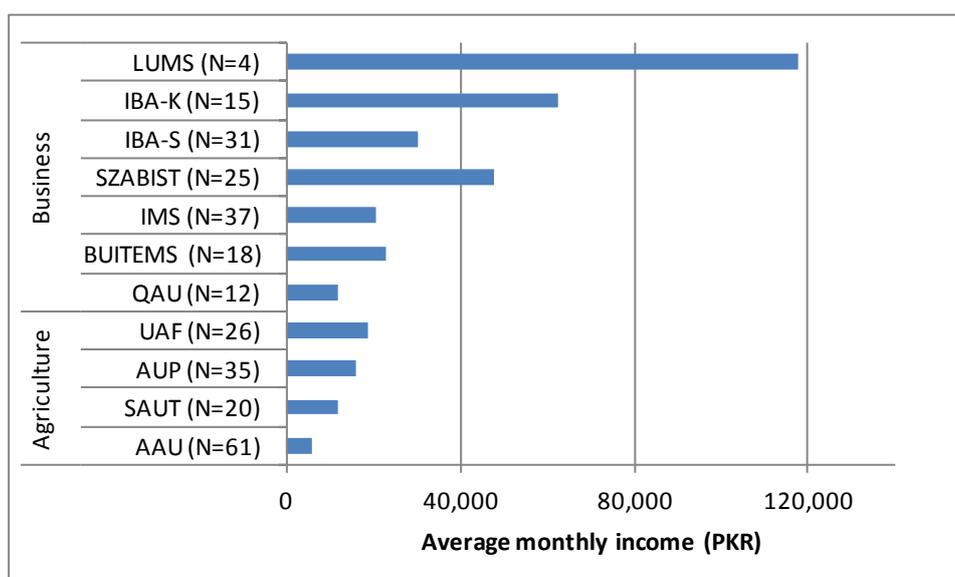
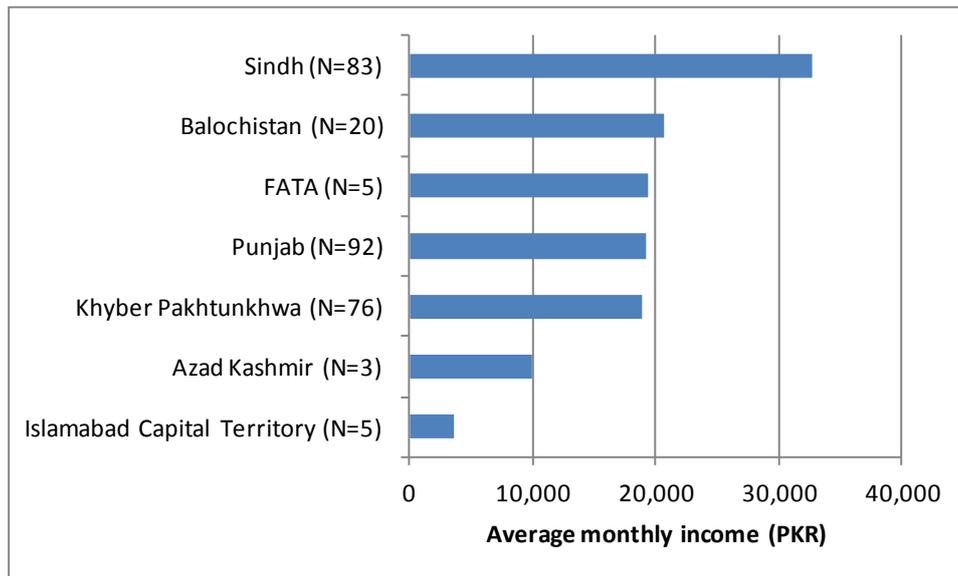


FIGURE 23: AVERAGE MONTHLY INCOME BY PROVINCE



Key findings include:

- Graduates with business degrees, male graduates, and master degrees earned significantly more ($\alpha=0.01$) than graduates with agriculture degrees, female graduates, and bachelor degrees, respectively.
- Figure 22 orders universities in each field (agriculture and business) by academic rank.⁵⁶ Average monthly incomes of graduates roughly follow the academic ranking, i.e. graduates from higher ranking universities earn more.

Relevance of Employment to Academic Preparation

Of the 151 currently employed alumni, 105 (70 percent) felt that their jobs were commensurate with their academic preparation.

⁵⁶ For a ranking of schools by category see <http://beta.hec.gov.pk/InsideHEC/Divisions/QALI/Others/RankingofUniversities/Pages/CategoryWise.aspx>.

FIGURE 24: RELEVANCE OF EMPLOYMENT BY FIELD, SEX, AND DEGREE TYPE

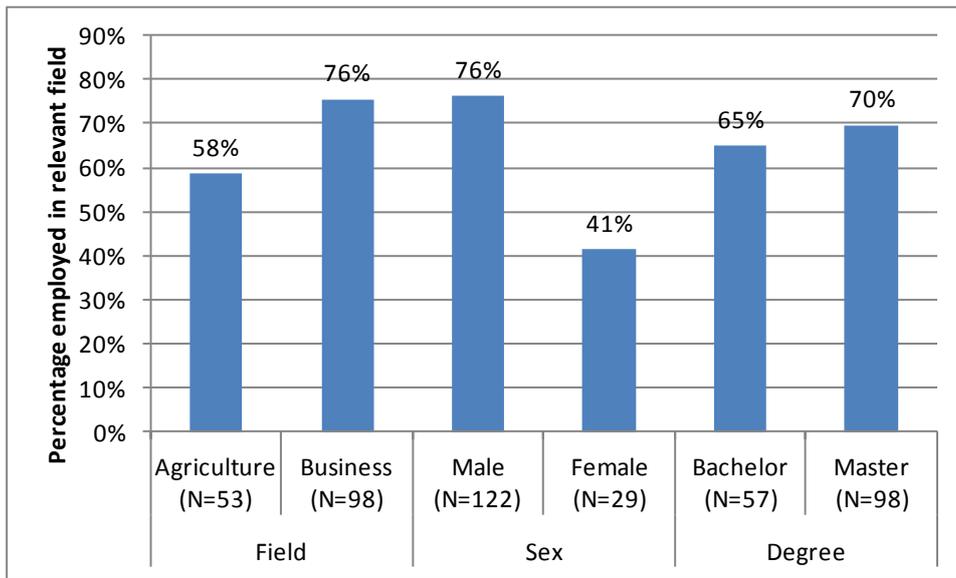
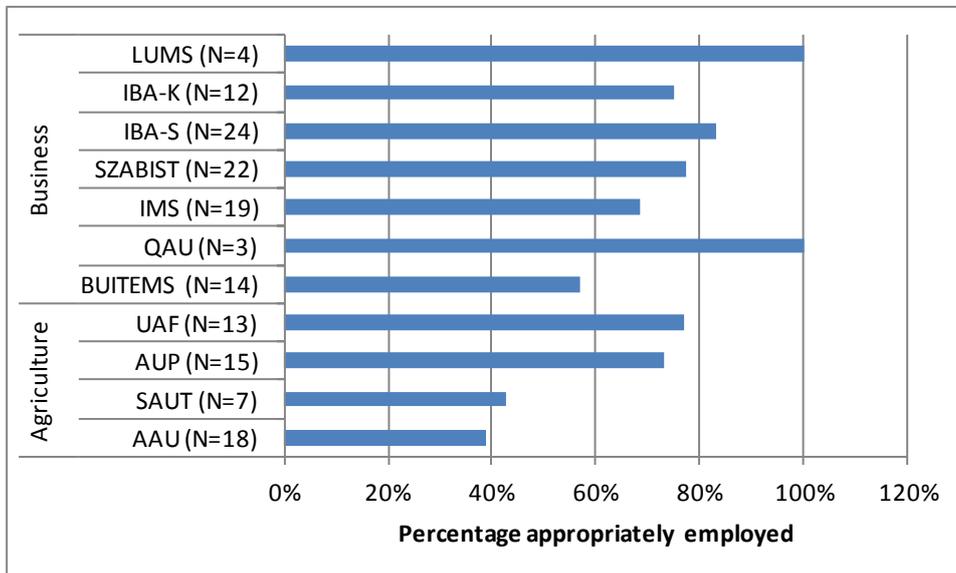


FIGURE 25 : RELEVANCE OF EMPLOYMENT BY UNIVERSITY



Employment by Sector

Of the 111 MNBSP alumni who reported a sector of current employment, 33 percent reported employment in the finance and real estate sector, 28 percent in the agriculture, fisheries and forestry sector and 23 percent in the community, social and personal services sector.⁵⁷ Figure 26 summarizes results by field, sex and degree type. Figure 27 summarizes average incomes by sector.

⁵⁷ There were too few observations in the mining and quarrying; electricity, gas and water; construction; wholesale and retail trade and transport and storage sectors to include in the analysis.

FIGURE 26: SECTOR OF EMPLOYMENT BY FIELD, SEX, AND DEGREE TYPE

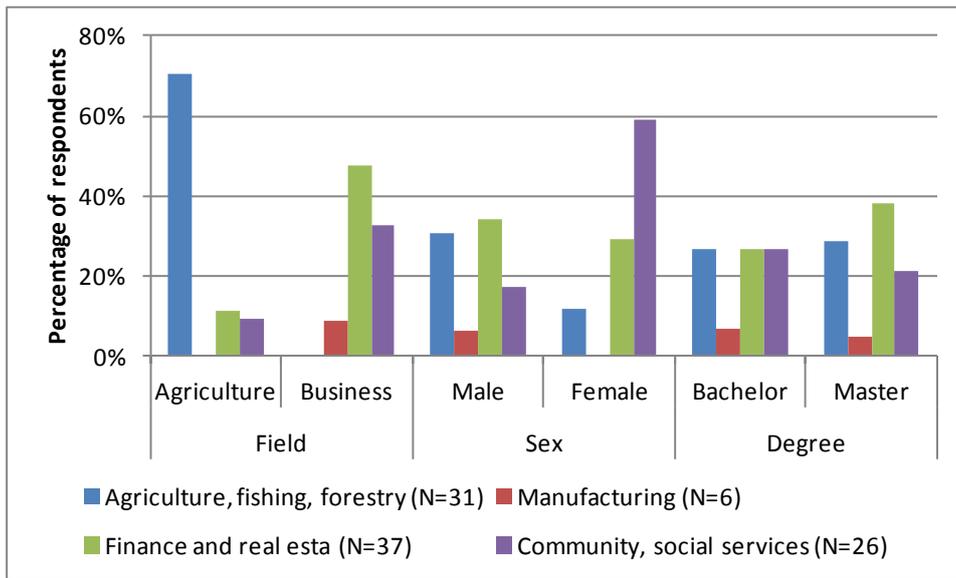
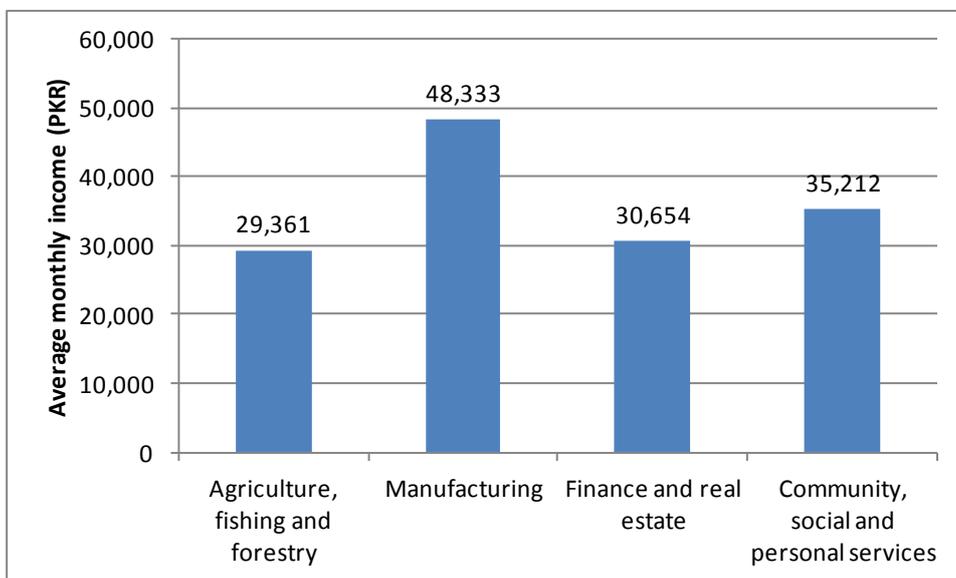


FIGURE 27: AVERAGE MONTHLY SALARY BY SECTOR OF EMPLOYMENT



Key findings include:

- A large majority (70 percent) of graduates in agriculture were employed in the agriculture sector. Business graduates were largely employed in the finance and real estate (48 percent) or community, social and personal services (33 percent) sectors.
- A majority of female graduates (59 percent) were employed in the community, social and personal services or the finance and real estate (29 percent) sectors.
- By degree type, graduates with a master degree were somewhat more likely than bachelor degree holders to work in the finance and real estate sector.
- Average salaries were higher in the manufacturing and community, social and personal services sectors.

Conclusions

Alumni of the MNBSP program are largely employed in fields related to their academic preparation. However, it took graduates several months to find their first job (and significantly longer for women than for men) and relatively high unemployment persists, especially among graduates with degrees in agriculture. MNBSP graduates are, on average, earning salaries commensurate with their peers with similar education and experience.

Question 12: Leadership Potential of MNBSP Graduates

Evaluation Question: To what extent are the alumni of the MNBSP positioned to assume positions of leadership in academia, government, industry and business?

Alumni of MNBSP are recent graduates, most have not been employed for long and it is premature to assess the positions they may one day assume. The evaluation therefore examines the academic and employment profiles of MNBSP alumni and assessments of university officials to answer this question. In particular, it presents data on students' academic performance, current employment profile, employment preferences and responses of key informants from universities.

Findings

Characteristics of MNBSP scholarship recipients that may be related to their potential to assume leadership positions include:

- Eighty-nine percent of MNBSP scholarship recipients eventually earned a degree. Of the 1,346 MNBSP scholarship recipients who are not still pursuing their education, 1,195 received a degree.
- MNBSP scholarship recipients who have graduated attained an average Grade Point Average of 3.23.⁵⁸
- In the span of about six years since the first MNBSP batch graduated, an estimated 11percent of the alumni have reached top management positions and 51percent are in the middle management range. Table 18 summarizes results.

TABLE 18: EMPLOYMENT POSITION OF MNBSP ALUMNI

Field	Top Management	Technical	Skilled Technical	Technical Assistant
Agriculture (N=38)	8%	45%	39%	8%
Business (N=79)	12%	53%	33%	2%
All fields	11%	51%	35%	4%

Source: MSI survey of MNBSP alumni.

- Out of a total of 144 employed alumni, a majority (88 percent) are employed in fields related to their academic discipline – 83 percent of graduates in agriculture and 91 percent of graduates in business.

A small majority (52 percent) of MNBSP graduates are employed in the private sector (Table 19).

⁵⁸ Represents the 436 alumni (out of 1,195) for whom the HEC database contained data on Grade Point Average.

TABLE 19: CURRENT SECTORS OF EMPLOYMENT

Degree	Academia	Government	Private Sector	NGO/International Dev. Organization
Bachelors (N=56)	13%	21%	57%	9%
Masters (N=88)	9%	30%	49%	12%
All degrees	11%	26%	52%	11%

Source: MSI survey of MNBSP alumni.

A majority (59 percent) of 17 key university officials (i.e. Vice Chancellors, Deans, Registrars and ISAC members) interviewed by the evaluation team held that the prospects of professional advancement of MNBSP scholars were on par with other students since the scholarship did not provide them any advantage over other students. The university also treated them like regular students and they were not differentiated in any manner. However, some senior university officials (24 percent) were highly optimistic about the future prospects of MNBSP graduates on the premise that the challenges these students had already faced in their lives had prepared them to be more resilient and committed than other students. One physically handicapped undergraduate agriculture student in SAUT was quite enthusiastic in expressing his resolve during a group discussion session to prove that he was worthy and deserving of the scholarship.

Conclusions

Since it is premature to assess whether MNBSP graduates have reached their employment potential, and in the absence of robust indicators of potential, the findings for this question are inconclusive. What the evaluation did conclude is:

- The MNBSP scholars have performed reasonably well academically, and this academic performance may be significant when viewed from the perspective of their relatively weak academic backgrounds as a result of attending public sector institutions located in remote areas.
- The university officials viewed the prospects of MNBSP scholars progressing in their professions at par with the rest of the students.

RECOMMENDATIONS

- **In consultation with HEC, reconsider the fields of study and the allocation of scholarships across supported fields of study in future scholarship programs.** Scholarships in business administration are not consistent with current HEC priorities as articulated in the MTDF. However, scholarships in business support other HEC initiatives such as small business innovation research grants; the office of research, innovation and commercialization; and business incubation centers. The MTDF also emphasizes study in scientific, technological and engineering fields that are not covered under the current MNBSP.
- **Increase outreach to women.** Achieving the target of 25 percent female participation may require special efforts to publicize the program among prospective female students and/or consideration to increase female participation from urban areas.
- **Consider modifying eligibility criteria for women.** If USAID desires to target female students from “remote/vulnerable” as opposed to “rural” areas, a more robust definition of “remote/vulnerable” may better serve this purpose. District-wise Human Development Index and/or Deprivation Indices can be the basis for defining “remote”/ “vulnerable”/”disadvantaged” areas.
- **Identify and resolve causes of delayed payments.** Improvements in the payment mechanism are required to minimize the significant hardships delayed payments currently cause scholarship recipients. USAID could influence the speed of payment by helping identify and resolve bottlenecks and by trying to influence policies at specific universities that require students to pay tuition even when the scholarship is delayed.
- **Ensure that the scholarship covers all education expenses.** The scholarship award should cover all education related expenses (e.g. research expenses) of the students and should be awarded for the entire duration of the degree program.

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ANNEXES

Annex I: Questionnaire for Current Students



Evaluation and Survey Unit

**Evaluation of USAID/HEC Merit and Needs Based Scholarship
Program (MNBSP)**

(Questionnaire for Current Students)

Version 1 (*English*)

February 2012

This survey is part of an evaluation of the Merit and Needs Based Scholarship Program (MNBSB). You have been chosen to participate in this survey because you received a MNBSB scholarship. Your responses to this survey will help the HEC and USAID improve the MNBSB. Your response is very important. We have sent the questionnaire to a small random sample of MNBSB recipients and it is important that we hear from everyone who received the questionnaire in order for our results to be meaningful. Answering the questions will take about 20 minutes. Please be assured that your answers will be kept strictly confidential. We will not share the survey data with anyone and will not identify individual responses in reports. Thank you in advance for your assistance with this important survey.

Q1. Who do you think provides the money for the MNBSB scholarships?

MNBSB funding source _____

[Write in an answer]

Section A: Information about Degree Program

Q2. Which degree are you receiving with financial assistance from the Merit and Needs Based Scholarship Program (MNBSB)?

Bachelors degree

1

[Circle one number]

Masters degree

2

Q3. Is your current degree in the field of Agriculture or Business Administration?

Agriculture

1

[Circle one number]

Business Administration

2

Q4. Which university are you attending to obtain this degree?

Arid Agriculture University, Rawalpindi

1

Khyber Pakhtunkhwa Agriculture University, Peshawar

2

Sindh Agriculture University, Tando Jam

3

University of Agriculture, Faisalabad

4

Baluchistan University of Information Technology, Engineering, and Management Sciences (BUIITEMS), Quetta

5

Institute of Business Administration (IBA), Karachi

6

Institute of Business Administration (IBA), Sukkur

7

Institute of Management Sciences (IMS), Peshawar

8

[Circle one number]

	Lahore University of Management Sciences (LUMS), Lahore	9
	Quaid-e-Azam University (QAU), Islamabad	10
	Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology (SZABIST), Karachi	11

Q5. In what year did you begin the degree program? <i>[Circle one number]</i>	2004	1
	2005	2
	2006	3
	2007	4
	2008	5
	2009	6
	2010	7
	2011	8

SECTION B : EXPERIENCE WITH MNBSP PROGRAM

Q6. How satisfied or dissatisfied were you with how you received your scholarship payments? <i>[Circle one number]</i>	Very satisfied	Somewhat satisfied	Somewhat dissatisfied	Very dissatisfied
	1 <i>[go to Q8]</i>	2 <i>[go to Q8]</i>	3 <i>[go to Q7]</i>	4 <i>[go to Q7]</i>
Q7. What are the reasons for your dissatisfaction with the payment mechanism? <i>[Circle all that apply]</i>	Delayed payments			1
	Poor communication with financial aid office			2
	Uncooperative financial aid office staff			3
	Too much paperwork			4
	Other <i>[Please Specify]</i> _____			5
Q8. In your opinion, in what areas could the payment mechanism be improved? <i>[Circle all that apply]</i>	More timely payments			1
	Better communication with the financial aid office			2
	Better financial aid office staff behavior			3
	Less paperwork			4
	Other (specify) _____			5
	None			6
Q9. Was the monthly stipend given under the	Yes <i>[go to Q. 11]</i>			1

MNBSP scholarship enough to cover your living expenses? <i>[Circle one response]</i>	No <i>[go to Q 10]</i>	2
Q10. Approximately how much did you spend over and above the monthly stipend to cover all of your expenses except tuition fees during the program? <i>[Circle one number]</i>	Monthly expense (Rs.) _____	
Q11. Would you have been able to enroll in this degree program if you had not received the scholarship? <i>[Circle one number]</i>	Yes <i>[go to Q. 12]</i>	1
	No <i>[go to Q 13]</i>	2

Q12. How would you have financed your education? <i>[Circle all that apply]</i>	Other Scholarship	1
	Personal savings	2
	Students loans	3
	Personal Loans	4
	Other <i>[please specify]</i> _____	5
Q13. How optimistic are you about finding a job relevant to the field of study of your degree once you graduate? <i>[Circle one number]</i>	Very optimistic	1
	Somewhat optimistic	2
	Not optimistic	3
Q14. In your opinion, how important is the MNBSP-supported degree to improving your chances of getting a job once you graduate? <i>[Circle one number]</i>	Very important	1
	Somewhat important	2
	Not important	3
Q15. In your opinion, how important is the MNBSP-supported degree to helping you advance more quickly in a job once you graduate?	Very important	1
	Somewhat important	2
	Not important	3

<i>[Circle one number]</i>				
Q16. If the MNBSP had offered scholarships in other fields, would you have chosen to study in a different field? <i>[Circle one number and then follow instructions to next question]</i>	Yes [go to Q 17]	1		
	No [go to Q. 19]	2		
Q17. Which field would you have chosen to study?	Name of Field _____			
Q18. Why would you have chosen this field? [Circle all that apply]	Better employment prospects	1		
	Better Salaries	2		
	More suited to personal interest	3		
	Other [specify] _____	4		
Q19. At this point in time, how satisfied are you with your choice of degree / field? <i>[Circle one number]</i>	Very Satisfied	Somewhat satisfied	Somewhat dissatisfied	Very dissatisfied
	1 [go to Q. 20]	2 [go to Q. 20]	3 [go to Q. 21]	4 [go to Q. 21]
Q20. What are the main reasons you are not satisfied with your choice of degree? <i>[Circle all that apply]</i>	More difficult to find a job than expected		1	
	Salary lower than expected		2	
	Did not learn relevant skills		3	
	Employers do not value degree		4	
	Not well suited to your personal interests		5	
	Other [Specify] _____		6	
Q21. Which field would you have chosen to study?	Name of field _____			
SECTION C : INTRODUCTORY INFORMATION				
Q22. Are you male or female?	Male	1		
	Female	2		
Q23. Which is your domicile province?	Punjab	1		
	Sindh	2		
	Khyber Pakhtunkhwa	3		
	Balochistan	4		
	Gilgit Baltistan	5		
	FATA	6		
	Azad Jamu – Kashmir	7		
Q24. In what year were you born?	Year of birth _____			

<i>[Enter year of birth]</i>					
Q25. Please tell me if you have a very favorable, somewhat favorable, somewhat unfavorable or very unfavorable opinion of the United States. <i>[Circle one number]</i>	Very favorable	Somewhat favorable	Somewhat unfavorable	Very unfavorable	Don't know/ refused
	1	2	3	4	5
Q 26. Please tell me if you have a very favorable, somewhat favorable, somewhat unfavorable or very unfavorable opinion of American people. <i>[Circle one number]</i>	Very favorable	Somewhat favorable	Somewhat unfavorable	Very unfavorable	Don't know/ refused
	1	2	3	4	5

Annex 2: Questionnaire for Alumni



Evaluation and Survey Unit

Evaluation of USAID/HEC Merit and Needs Based Scholarship Program (MNBSP)

(Questionnaire for Alumni)

Version 1 (*English*)

February 2012

An evaluation of the Merit and Needs Based Scholarship Program (MNBSB) is being conducted. You have been chosen to participate in this survey because you received a MNBSB scholarship. Your responses to this survey will help to improve the MNBSB. Your response is very important. We have sent the questionnaire to a small random sample of MNBSB recipients and it is important that we hear from everyone who received the questionnaire in order for our results to be meaningful. Answering the questions will take about 20 minutes. Please be assured that your answers will be kept strictly confidential. We will not share the survey data with anyone and will not identify individual responses in reports. Thank you in advance for your assistance with this important survey.

Q1. Who do you think provides the money for the MNBSB scholarships?

MNBSB funding source _____

[Write in an answer]

Section A: Information about Degree Program

Q2. Which degree have you received with financial assistance from the Merit and Needs Based Scholarship Program (MNBSB)?

[Circle one number]

Bachelors degree

1

Masters degree

2

Both Bachelors and Masters degrees

3

The following questions ask about the **last degree you received** with financial assistance from the Merit and Needs Based Scholarship Program (MNBSB)

Q3. Was the most recent degree you received with a scholarship from MNBSB in the field of Agriculture or Business Administration?

[Circle one number]

Agriculture

1

Business Administration

2

Q4. Which university did you attend to obtain this degree?

[Circle one number]

Arid Agriculture University, Rawalpindi

1

Khyber Pakhtunkhawa Agriculture University, Peshawar

2

Sindh Agriculture University, Tando Jam

3

University of Agriculture, Faisalabad

4

Baluchistan University of Information Technology, Engineering, and Management Sciences (BUIITEMS), Quetta

5

Institute of Business Administration (IBA), Karachi

6

Institute of Business Administration (IBA), Sukkur

7

Institute of Management Sciences (IMS), Peshawar

8

Lahore University of Management Sciences (LUMS), Lahore

9

Quaid-e-Azam University (QAU), Islamabad

10

Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology (SZABIST), Karachi

11

Q5. In what year did you begin the degree program?

[Circle one number]

2004

1

2005

2

2006

3

2007

4

		2008	5
		2009	6
		2010	7
		2011	8
Q6. In what year did you graduate? <i>[Circle one number]</i>		2005	1
		2006	2
		2007	3
		2008	4
		2009	5
		2010	6
		2011	7
		2012	8
Q7. Did you graduate in the semester that you expected to graduate when you started the degree? <i>[Circle one number]</i>	Yes <i>[go to Q9]</i>		1
	No		2
Q8. What were the primary reasons you did not graduate in the semester in which you expected to graduate? <i>[Circle all that apply]</i>	Unforeseen external circumstances (natural disasters, violence, etc.)		1
	Poor academic performance		2
	Disciplinary problems		3
	Personal situation		4
	Other (specify) _____		5
Section B: Employment Before Scholarship			
Q9. What was your employment/academic status before you were accepted into the degree program? <i>[Circle one number and then follow instructions to next question]</i>	Employed with an organization <i>[go to Q. 10]</i>		1
	Self employed <i>[go to Q. 16]</i>		2
	Unemployed <i>[go to Q. 20]</i>		3
	Student <i>[go to Q. 20]</i>		4
Section B.1: Employment With an Organization (Previous)			
Q10. Were you employed part-time or full-time? <i>[Circle one number]</i>	Part-time		1
	Full-time		2
Q11. Where did you work? <i>[Indicate province/region and district]</i>	Province/Region <i>[Circle one number]</i>	Punjab	1
		Sindh	2
		Khyber Pakhtunkhwa	3

		Balochistan	4
		Gilgit Baltistan	5
		FATA	6
		Azad Jammu & Kashmir	7
	District	_____	
	[Write in response]		

Q12. What was the type of your employment? <i>[Circle one number]</i>	Academic	1
	Government	2
	Private sector	3
	NGO/International development organization	4
Q13. In which sector were you employed? <i>[Circle one number]</i>	Agriculture, Fishing & Forestry	1
	Mining and Quarrying	2
	Manufacturing	3
	Electricity, Gas, Water	4
	Construction	5
	Wholesale and Retail Trade	6
	Transport and Storage	7
	Finance , Real state	8
	Community, Social, Personal Service	9
	Other (Please Specify) : _____	10
Q14. What position did you hold when you left the job? <i>[Circle one number]</i>	Top or senior management/bureaucrat	1
	Professionals, experienced specialists and mid-management, government officer, university professor	2
	Skilled technical, junior management, supervisors, foremen, superintendents, clerk, schoolteacher	3
	Semi-skilled (discretionary decision making)	4

	Unskilled (defined decision making)	5	
Q15. What was your approximate monthly salary when you left the job? <i>[Fill in amount]</i>	Monthly salary (Rs.) _____ <i>[go to Q 20]</i>		
Section B.2: SELF EMPLOYMENT SECTION			
Q16. Where did you work?	Province/Region <i>[Circle one number]</i>	Punjab	1
		Sindh	2
		Khyber Pakhtunkhwa	3
		Balochistan	4
		Gilgit Baltistan	5
		FATA	6
		Azad Jammu & Kashmir	7
	District <i>[Write in response]</i>	_____	
Q17. What was your approximate monthly income from your enterprise? <i>[Fill in response]</i>	Monthly income (Rs.) _____		
Q18. What was the type of your employment? <i>[Circle one number]</i>	Academic	1	
	Government	2	
	Private sector	3	
	NGO/International development organization	4	
Q19. In which sector were you self-employed? <i>[Circle one number]</i>	Agriculture, Fishing & Forestry	1	
	Mining and Quarrying	2	
	Manufacturing	3	
	Electricity, Gas, Water	4	
	Construction	5	
	Wholesale and Retail Trade	6	

	Transport and Storage	7
	Finance , Real state	8
	Community, Social, Personal Service	9
	Other (Please Specify) : _____	10
SECTION C: EMPLOYMENT AFTER SCHOLARSHIP		
Q20. What is your current employment/academic status? <i>[Circle one number and then follow instructions to next question]</i>	Employed with an organization <i>[go to Q21]</i>	1
	Self-employed <i>[go to Q30]</i>	2
	Unemployed <i>[go to Q39]</i>	3
	Student <i>[go to Q39]</i>	4
Section C.1: EMPLOYMENT with an Organization (Current)		
Q21. Are you employed in a field that is related to your degree financed by the MNBSP?	Yes <i>[go to Q23]</i>	1
	No <i>[go to Q22]</i>	2
Q22. What are the most important reasons for not working in a field related to your training? <i>[Circle all that apply]</i>	Difficult to find a job in the field	1
	Did not learn relevant skills	2
	Employers did not view the degree as high quality	3
	Changed careers	4
	Earning potential in field was too low	5
	Other (specify) _____	6
Q23. Are you employed part-time or full-time? <i>[Circle one number]</i>	Part-time	1
	Full-time	2
Q24. What is your type of employment? <i>[Circle one number]</i>	Academic	1
	Government	2
	Private sector	3
	NGO/International development organization	4
Q25. In which sector are you employed? <i>[Circle one number]</i>	Agriculture, Fishing & Forestry	1
	Mining and Quarrying	2
	Manufacturing	3
	Electricity, Gas, Water	4
	Construction	5
	Wholesale and Retail Trade	6
	Transport and Storage	7

	Finance , Real state	8
	Community, Social, Personal Service	9
	Other (Please Specify) : _____	10

Q26. Where do you work?	Province/Region [Circle one number]	Punjab	1
		Sindh	2
		Khyber Pakhtunkhwa	3
		Balochistan	4
		Gilgit Baltistan	5
		FATA	6
		Azad Jammu & Kashmir	7
	District [Write in response]	_____	
Q27. What position do you hold? [Circle one number]	Top or senior management/bureaucrat		1
	Professionals, experienced specialists and mid-management, government officer, university professor		2
	Skilled technical, junior management, supervisors, foremen, superintendents, clerk, schoolteacher		3
	Semi-skilled (discretionary decision making)		4
	Unskilled (defined decision making)		5
Q28. What is your approximate monthly salary? [Fill in amount]	Monthly salary (Rs.) _____		
Q29. In your opinion, is your job at the level of your qualifications or do you consider yourself underemployed? [Circle one number]	Job at level of qualifications [Go to Q57]		1
	Underemployed [Go to Q57]		2
Section C.2: SELF EMPLOYMENT SECTION (Current)			
Q30. Are you employed in a field that is related to your degree financed by the MNBSP?	Yes [Go to Q32]		1
	No [Go to Q31]		2

Q31. What are the most important reasons for not working in a field related to your training? <i>[Circle all that apply]</i>	Difficult to find a job in the field		1
	Did not learn relevant skills		2
	Employers did not view the degree as high quality		3
	Changed careers		4
	Earning potential in field was too low		5
	Other (specify) _____		6
Q32. For how long have you been self employed since graduating? <i>[Fill in years and months]</i>	Years	_____	
	Months	_____	
Q33. Where do you work? <i>[Circle one number]</i>	Province/Region	Punjab	1
		Sindh	2
		Khyber Pakhtunkhwa	3
		Balochistan	4
		Gilgit Baltistan	5
		FATA	6
		Azad Jammu & Kashmir	7
	District	_____	
<i>[Write in response]</i>			
Q34. What is your type of employment? <i>[Circle one number]</i>	Academic		1
	Government		2
	Private sector		3
	NGO/International development organization		4
Q35. In which sector are you self-employed?	Agriculture, Fishing & Forestry		1
	Mining and Quarrying		2

[Circle one number]	Manufacturing	3
	Electricity, Gas, Water	4
	Construction	5
	Wholesale and Retail Trade	6
	Transport and Storage	7
	Finance , Real state etc	8
	Community, Social, Personal Service	9
	Other (Please Specify) : _____	10

Q36. What position do you hold? [Circle one number]	Top or senior management/bureaucrat	1
	Professionals, experienced specialists and mid-management, government officer, university professor	2
	Skilled technical, junior management, supervisors, foremen, superintendents, clerk, schoolteacher	3
	Semi-skilled (discretionary decision making)	4
	Unskilled (defined decision making)	5

Q37. What is your approximate monthly salary? [Fill in amount]	Monthly salary (Rs.) _____
--	----------------------------

Q38. In your opinion, is your job at the level of your qualifications or do you consider yourself underemployed? [Circle one number]	Job at level of qualifications [go to Q58]	1
	Underemployed [go to Q58]	2

Section C.3: UNEMPLOYED SECTION (Current)

Q39. Have you been employed since you graduated? [Circle one number and then follow instruction to next question]	Yes [go to Q42]	1
	No [go to Q40]	2

Q40. What are the main reasons you think you have not found work since you graduated? [Circle all that apply]	Poor economic situation	1
	Degree did not equip you with appropriate skills	2
	Continuing education	3
	Other [please Specify] _____	

Q41. How optimistic are you about finding a job relevant to the field of study of your degree? <i>[Circle one number]</i>	Very optimistic <i>[go to Q58]</i>	1	
	Somewhat optimistic <i>[go to Q58]</i>	2	
	Not optimistic <i>[go to Q58]</i>	3	
Q42. How were you employed? <i>[Circle one number and then follow instructions to next question]</i>	Employed with an organization <i>[go to Q. 43]</i>	1	
	Self employed <i>[go to Q. 52]</i>	2	
Section C.3.1. PREVIOUS EMPLOYMENT with an Organization after Graduation			
Q43. Was your most recent job part-time or full-time? <i>[Circle one number]</i>	Part-time	1	
	Full-time	2	
Q44. What was the type of your employment? <i>[Circle one number]</i>	Academic	1	
	Government	2	
	Private sector	3	
	NGO/International development organization	4	
Q45. In which sector were you employed? <i>[Circle one number]</i>	Agriculture, Fishing & Forestry	1	
	Mining and Quarrying	2	
	Manufacturing	3	
	Electricity, Gas, Water	4	
	Construction	5	
	Wholesale and Retail Trade	6	
	Transport and Storage	7	
	Finance , Real state	8	
	Community, Social, Personal Service	9	
	Other (Please Specify) : _____	10	
Q46. Where did you work?	Province/Region	Punjab	1
		Sindh	2

	[Circle one number]	Khyber Pakhtunkhwa	3
		Balochistan	4
		Gilgit Baltistan	5
		FATA	6
		Azad Jammu & Kashmir	7
	District	_____	
	[Write in response]	_____	
Q47. What position did you hold? [Circle one number]	Top or senior management/bureaucrat		1
	Professionals, experienced specialists and mid-management, government officer, university professor		2
	Skilled technical, junior management, supervisors, foremen, superintendents, clerk, schoolteacher		3
	Semi-skilled (discretionary decision making)		4
	Unskilled (defined decision making)		5
Q48. What was your approximate monthly salary? [Fill in amount]	Monthly salary (Rs.) _____		
Q49. In what sector was the job? [Circle one number]	Academic		1
	Government		2
	Private sector		3
	NGO/International development organization		4
Q50. In which sector are you employed? [Circle one number]	Agriculture, Fishing & Forestry		1
	Mining and Quarrying		2
	Manufacturing		3
	Electricity, Gas, Water		4
	Construction		5
	Wholesale and Retail Trade		6
	Transport and Storage		7
	Finance , Real state etc		8
	Community, Social, Personal Service		9

	Other (Please Specify) : _____	10
Q51. How long did you work for this organization?	Years	_____
[Fill in years and months and then go to Q57]	Months	_____

C.3.2. Previous Self Employment			
Q52. Where did you work?	Province/Region [Circle one number]	Punjab	1
		Sindh	2
		Khyber Pakhtunkhwa	3
		Balochistan	4
		Gilgit Baltistan	5
		FATA	6
		Azad Jammu & Kashmir	7
	District [Write in response]	_____	
Q53. What was your approximate monthly salary? [Fill in amount]	Monthly salary (Rs.) _____		
Q54. In what sector was the job? [Circle one number]	Academic	1	
	Government	2	
	Private sector	3	
	NGO/International development organization	4	
Q55. In which sector are you employed?	Agriculture, Fishing & Forestry	1	
	Mining and Quarrying	2	

<i>[Circle one number]</i>	Manufacturing	3
	Electricity, Gas, Water	4
	Construction	5
	Wholesale and Retail Trade	6
	Transport and Storage	7
	Finance , Real state etc	8
	Community, Social, Personal Service	9
	Other (Please Specify) : _____	10
Q56. How long did you work for this organization? [Fill in years and months and go to Q.58]	Years	_____
	Months	_____

Section C.4: TIME TO FIND JOB

Q57. How long did it take after graduating to find your first job [months]?	Months	_____
[Fill in number of months]		

SECTION D : EXPERIENCE WITH MNBSP PROGRAM

Q58. How satisfied or dissatisfied were you with how you received your scholarship payments?	Very satisfied	Somewhat satisfied	Somewhat dissatisfied	Very dissatisfied
	1	2	3	4
<i>[Circle one number]</i>	[go to Q60]	[go to Q60]	[go to Q59]	[go to Q59]

Q59. What are the reasons for your dissatisfaction with the payment mechanism? <i>[Circle all that apply]</i>	Delayed payments	1
	Poor communication with financial aid office	2
	Uncooperative financial aid office staff	3
	Too much paperwork	4
		5

	Other <i>[Please Specify]</i> _____	
<p>Q60. In your opinion, in what areas could the payment mechanism still be improved?</p> <p><i>[Circle all that apply]</i></p>	More timely payments	1
	Better communication with the financial aid office	2
	Better financial aid office staff behavior	3
	Less paperwork	4
	Other (specify) _____	5
	None	6
<p>Q61. Was the monthly stipend given under the MNBSP scholarship enough to cover your living expenses?</p> <p><i>[Circle one response]</i></p>	Yes <i>[go to Q. 63]</i>	1
	No <i>[go to Q 62]</i>	2
<p>Q62. Approximately how much did you spend over and above the monthly stipend to cover all of your expenses except tuition fees during the program?</p> <p><i>[Circle one number]</i></p>	Monthly expense (Rs.) _____	
<p>Q63. Would you have been able to enroll in this degree program if you had not received the scholarship?</p> <p><i>[Circle one number]</i></p>	Yes <i>[go to Q. 64]</i>	1
	No <i>[go to Q 65]</i>	2
<p>Q64. How would you have financed your education?</p> <p><i>[Circle all that apply]</i></p>	Other Scholarship	1
	Personal savings	2
	Students loans	3
	Personal Loans	4
	Other <i>[please specify]</i> _____	5
<p>Q65. In your opinion, how important is the MNBSP-supported degree to improving your chances of getting a job?</p> <p><i>[Circle one number]</i></p>	Very important	1
	Somewhat important	2
	Not important	3

Q66. In your opinion, how important is the MNBSP-supported degree to helping you get a good position in a job? <i>[Circle one number]</i>	Very important		1	
	Somewhat important		2	
	Not important		3	
Q67. In your opinion, how important is the MNBSP-supported degree to helping you advance more quickly in a job? <i>[Circle one number]</i>	Very important		1	
	Somewhat important		2	
	Not important		3	
Q68. If the MNBSP had offered scholarships in other fields, would you have chosen to study in a different field? <i>[Circle one number and then follow instructions to next question]</i>	Yes [go to Q 69]		1	
	No [go to Q. 71]		2	
Q69. Which field would you have chosen to study?	Name of Field _____			
Q70. Why would you have chosen this field? <i>[Circle all that apply]</i>	Better employment prospects		1	
	Better Salaries		2	
	More suited to personal interest		3	
	Other [specify] _____		4	
Q71. At this point in time, how satisfied are you with your choice of degree / field? <i>[Circle one number]</i>	Very Satisfied	Somewhat satisfied	Somewhat dissatisfied	Very dissatisfied
	1	2	3 [go to Q. 72]	4 [go to Q. 72]
Q72. What are the main reasons you are not satisfied with your choice of degree? <i>[Circle all that apply]</i>	More difficult to find a job than expected		1	
	Salary lower than expected		2	
	Did not learn relevant skills		3	
	Employers do not value degree		4	
	Not well suited to your personal interests		5	
	Other [Specify]_____		6	
Q73. Which field would you have chosen to study?	Name of Field _____			
SECTION E : INTRODUCTORY INFORMATION				
Q74. Are you male or female?	Male		1	
	Female		2	

Q75. Which is your domicile province?	Punjab	1
	Sindh	2
	Khyber Pakhtunkhwa	3
	Balochistan	4
	Gilgit Baltistan	5
	FATA	6
	Azad Jamu – Kashmir	7

Q76. In what year were you born? <i>[Enter year of birth]</i>	Year of birth _____
--	---------------------

SECTION F : Perceptions about the US

Q77. Please tell me if you have a very favorable, somewhat favorable, somewhat unfavorable or very unfavorable opinion of <u>the United States.</u> <i>[Circle one number]</i>	Very favorable	Somewhat favorable	Somewhat unfavorable	Very unfavorable	Don't know/ refused
	1	2	3	4	5
Q 78. Please tell me if you have a very favorable, somewhat favorable, somewhat unfavorable or very unfavorable opinion <u>of the American people.</u> <i>[Circle one number]</i>	Very favorable	Somewhat favorable	Somewhat unfavorable	Very unfavorable	Don't know/ refused
	1	2	3	4	5

Annex 3: Survey Responses by Contact Mode

Universities	On-Campus Current Students			Alumni								
	HEC Old Status			Telephonic				Online		On-Campus Achieved	Courier	
	Target	Achieved	Difference	Target	Phase 1 Achieved	Target	Phase 2 Achieved	Target	Achieved		Target	Achieved
AAUR	41	30	11	371	33	368	146	443	32	4	291	2
AUP	62	15	47		19					12		1
SAUT	125	76	49		6					3		6
UAR	63	45	18		3					0		9
BUIITEMS	39	26	13		7					0		0
IBA-K	9	9	0		1					0		0
IBA-S	42	49	-7		0					4		0
IMS	39	44	-5		15					2		4
LUMS	17	16	1		3					0		0
QAU	22	17	5		3					6		0
SZABIST	9	9	0		4					1		0
Total	468	336	132	371	94	368	188	443	32	22	291	22

Telephone enumerators had 739 telephone numbers, called 354, received 72 rejections and completed 282 interviews to reach the target number of completed surveys.

Annex 4: Evaluation Statement of Work



USAID
FROM THE AMERICAN PEOPLE

PAKISTAN MERIT AND NEEDS BASED SCHOLARSHIP PROGRAM EVALUATION STATEMENT OF WORK

DECEMBER 26, 2011

This publication was produced for review by the United States Agency for International Development. It was prepared by Management Systems International (MSI) under the Independent Monitoring and Evaluation Contract (IMEC).

PAKISTAN MERIT AND NEEDS BASED SCHOLARSHIP PROGRAM

EVALUATION STATEMENT OF WORK



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DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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ACRONYMS

DFID	Department for International Development
FATA	Federally Administered Tribal Areas
GoP	Government of Pakistan
HEC	Higher Education Commission of Pakistan
ILO	International Labor Organization
IMEC	Independent Monitoring and Evaluation Contract
MSI	Management Systems International
MNBSP	Merit and Needs-Based Scholarship Program
MTDF	Medium Term Development Framework
USAID	United States Agency for International Development
USDOS	United States Department of State
WB	World Bank

Federally Administered Tribal Areas (FATA). Students receiving scholarships are able to pursue degrees in agriculture or business administration at the Bachelor or Masters level. The program reserves 25 percent of the scholarships for female students. Scholarships are comprehensive and include financial support for tuition, transportation, books, lodging and related educational expenses. The scholarships are awarded for study at 11 Pakistani universities, 9 of which are public while the remaining 2 are private. Participating universities include:

Agriculture

- University of Agriculture, Faisalabad;
- Khyber Pakhtunkhwa Agriculture University, Peshawar;
- Arid Agriculture University, Rawalpindi;
- Sindh Agriculture University, Tando Jam;

Business Administration

- Institute of Business Administration (IBA), Karachi;
- Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology, Karachi;
- Institute of Business Administration, Sukkur;
- Lahore University of Management Sciences, Lahore;
- Baluchistan University of Information Technology, Engineering, and Management Sciences, Quetta;
- Institute of Management Sciences, Peshawar; and
- Quaid-e-Azam University, Islamabad.

Partner universities accept enrollment applications based on merit. A Scholarship Management Committee (SMC) with representatives from the 11 universities, HEC and USAID use equitable, objective and transparent written criteria established by the HEC to identify financially needy students accepted for enrollment based on merit and awards scholarships to selected students. The selection criteria include 42 variables in 5 categories including (i) personnel information; (ii) family status; (iii) monthly income; (iv) monthly expenditures; and (v) fixed and current assets. The university committee files a written evaluation of each valid student application.

In addition to providing scholarships, the program also aims to develop the institutional capacity of HEC and partner universities as they implement, monitor, and evaluate the scholarship program. As the implementing partner, HEC disburses funds and monitors the program's progress. Participating universities establish student enrollment systems, collect candidate data in a standardized format, perform data analysis and evaluation, and conduct needs assessments to support the selection of candidates with the assistance of HEC. The program also builds the capacity of HEC and participating universities to conduct outreach and communications in remote areas, so that students are aware of their educational options and receive appropriate guidance.

A 2008 evaluation of USAID's higher education portfolio found that interviewed students were very satisfied with the program and most reported they could not have attended a higher education institution without the scholarship support. Most of those receiving scholarships successfully complete their program¹. The MNBSP has exceeded its scholarship targets. The initial scope of the project included 1,000 scholarships. However, due to a decline in the exchange rate of Pakistani rupees against U.S. dollars, HEC and USAID approved 407 additional slots. In the 2010/2011 school year, the MNBSP

¹ Pakistan Higher Education Commission (2011). Medium Term Development Framework. <http://www.hec.gov.pk/MediaPublication/HECPublication/PublishingImages/MTDFII201015/mtdf2.html>

awarded 400 new scholarships, bringing the cumulative total since 2004 to 1,807 scholarships. Accounting for those who have not yet completed their degrees, more than 850 students have completed undergraduate and graduate degrees to date. The program has stimulated other donors to develop scholarship programs, leading to a more than doubling of financially needy student enrollment at participating institutions since 2004. The program has encouraged universities to take a standardized approach to financial-needs assessment by adopting a uniform financial aid application form and setting common criteria for data evaluation. Female participation in the program has nearly doubled from 14 percent in 2004/2005 to a current level of 25 percent. As a result of meeting the 25 percent target, the program will raise the target to encourage more women to pursue higher education. As the first financial aid program of its kind in Pakistan, the program offers a proven model to other international and local donors. In 2004, needs-based scholarships were available at only two institutions of higher education in Pakistan. Today, more than 50 institutions offer financial aid. Table 1 documents scholarships awarded by institution, fiscal year, and degree type (undergraduate and graduate).

EVALUATION OBJECTIVES

Since the program began in 2004, the United States Government has invested \$7.7 million in the MNBSP. The intent of this evaluation is to investigate multiple research questions that are essential to determining the degree to which the MNBSP is an effective and cost-efficient mechanism for achieving the U.S. Government's development objectives. The results will provide information critical to making decisions about the program's efficacy and relative importance in the higher education portfolio. The evaluation team will probe the outcomes and results as deeply as feasible within time and resource constraints.

A second purpose is to determine the importance of the MNBSP to the GoP, the HEC, and the participating universities. The MNBSP has created a strategic plan, known as the Medium Term Development Framework (MTDF), 2011-2015. An important strategic issue is to ensure that the MNBSP supports the objectives of the HEC. Thus, one of the important purposes of this evaluation is to determine if and how the MNBSP supports the HEC's objectives and how it fits within the HEC's portfolio of scholarships.

The results of this evaluation will serve an important function by determining how well the program is achieving outcomes that are synergistic with other tertiary education programs. In particular, USAID is working with the HEC to develop three university Centers of Excellence in Water, Energy, and Agriculture. Potentially, the MNBSP students and graduates will be able to study, engage in research projects and contribute to these centers.

Another critically important purpose is to determine the contribution of the MNBSP to the USAID development strategy in Pakistan. It is critical that the valuable resources devoted to supporting tertiary education achieves the maximum impact on the success of USAID's strategic objectives in the areas of Energy, Economic Growth, Stabilization, Health, and Education. Critical to the success in each of these areas is the development of human capital. This evaluation will help determine how effective the MNBSP is in advancing U.S. interests in Pakistan through civilian assistance and how cost-effective it is relative to other investments in human capital development.

TABLE I: MERIT AND NEEDS-BASED SCHOLARSHIPS, 2004-2011

Name of institution	Province	2004-05		2005-06		2006-07		2007-08		2008-09		2009-10		2010-11		Total
		UG	G	UG	G	UG	G	UG	G	UG	G	UG	G	UG	G	
University of Agriculture, Faisalabad	Punjab	30	25	60	22	0	33	0	3	0	72	0	0	37	20	302
Khyber Pakhtunkhwa University of Agriculture, Peshawar	Khyber Pakhtunkhwa	30	20	73	15	0	20	0	0	0	83	0	0	38	18	277
Sindh Agriculture University-Tandojam	Sindh	20	15	50	13	0	0	0	25	0	0	0	66	35	23	247
Arid Agriculture University, Rawalpindi	Punjab	0	0	38	16	0	0	0	24	0	40	0	0	30	23	171
Quaid-e-Azam University, Islamabad	Federal	0	18	0	16	0	0	0	16	0	16	0	0	0	22	88
Institute of Business Administration, Sukkur	Sindh	20	0	30	0	0	0	0	5	0	28	0	0	25	17	125
Institute of Business Administration, Karachi	Sindh	19	6	32	17	0	26	0	0	0	39	0	0	16	5	160
Institute of Management Sciences, Peshawar	Khyber Pakhtunkhwa	20	25	33	6	0	9	0	2	0	38	0	0	20	10	163
Baluchistan University of Information Technology, Engineering, and Management Sciences, Quetta	Balochistan	0	14	0	13	0	0	0	13	0	18	0	0	17	15	90
Lahore University of Management Sciences (LUMS)	Punjab	5	8	35	12	0	18	0	0	0	22	0	0	16	5	121
Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology, Karachi	Sindh	0	17	0	11	0	16	0	0	0	11	0	0	0	8	63
Total		144	148	351	141	0	122	0	88	0	347	0	66	234	166	1,807

Evaluation Questions

This section presents the fundamental questions that the evaluation will answer. It is likely that some of these questions will lead to related questions. The evaluation will produce a comprehensive analysis of the outcomes and the causal contributors to those outcomes. Evaluation questions fall into four basic evaluation criteria – relevance, effectiveness, efficiency and impact. Annex 1 describes these criteria. The specific evaluation questions are:

Relevance

1. *To what extent do the alumni of the MNBSP contribute to the achievement of the goals and objectives the U.S. government's development strategy in Pakistan?*

Explanation: The U.S. Government is providing assistance to the people of Pakistan in order to achieve specific strategic objectives. The activities supported by USAID resources are intended to support these objectives. The MNBSP currently awards scholarships only in the fields of business administration and agriculture. Also, the program targets students going to schools in rural or remote areas of the country, especially Northern Sindh, Balochistan, Southern Punjab, Khyber Pakhtunkhwa, and FATA. Investigation of this question will determine if the fields in which awards are made are sufficiently aligned and balanced to achieve multiple objectives, particularly those sectors critical to USAID's development strategy.

2. *How relevant is the current MNBSP (e.g., mix of degree types, U.S. versus in-country study, field of study) to the priority needs of the HEC and public universities?*

Explanation: The U.S. Government strategy in Pakistan seeks close cooperation with the Government of Pakistan to address the country's development needs. In the higher education sector, that cooperation is manifested by working with and through the HEC to achieve mutually agreed diplomacy and development objectives. USAID's development strategy is to support the HEC's strategic plan, the Medium-Term Development Framework.

This question will determine extent to which the MNBSP supports the priority needs of the HEC and public universities and will help determine the desired balance of scholarship types (i.e. U.S., regional, or in-country) to be supported by the U.S. Government. It will also provide information to determine the ideal balance of awards among other possible disciplines.

Effectiveness

3. *To what extent has the MNBSP achieved the planned outputs and outcomes as defined in the implementing agreement with the HEC?*

Explanation: USAID's agreement with the HEC includes specific targets for number of scholarships awarded, disaggregated by sex, age, etc. Graduation rate is another important measure, although the agreement between USAID and the HEC does not contain a specific target for graduation rates.

The response to this evaluation question will determine if the MNBSP has achieved (a) the target number of scholarship awards, (b) the sex balance target of 25 percent of awards to women, (c) an equitable, transparent, and merit-based selection process, and (d) an acceptable graduation rate.

4. *Do scholarship recipients graduate on time?*

Explanation: Since scholarship recipients are selected based on merit, graduation rates and graduation timeliness should be significantly higher than for other groups.

Investigation of this question will yield information about completion rates and how well the selection process works to identify highly-motivated and capable students.

Efficiency:

5. *What is the Return on Investment of the MNBSP?*

Explanation: Calculating the ROI of the MNBSP will be extremely challenging. The "Investment" per student is simply USAID's fully-loaded costs, including overhead, of attaining the degree. However, it is much more difficult to reliably and credibly monetize the return to education programs. If the evaluation team determines that a formal ROI calculation is not feasible, it will determine the cost-effectiveness of the program relative to alternative approaches to funding advanced degrees (e.g., the Fulbright Student Program).

For whatever efficiency measure the evaluation team deems feasible, it will calculate the measure separately for students having completed the bachelor's vis-à-vis master's degrees to enable USAID to make informed decisions about its future strategy.

Impact:

6. *Are MNBSP alumni productively employed in fields related to their academic preparation?*

Explanation: For various reasons, alumni may be unemployed, under-employed, or work in fields unrelated to their degree. The data collected in response to this question will document employment rates and will characterize the nature of the employment. The information gained in response to this question will also help USAID ensure that students are selected who are committed to work in fields aligned with their academic preparation. It will also help to align fields of study with workforce requirements.

Reported data, subject to feasible methods of collection, will include, but may not be limited to, the following:

- Employment status (i.e. is the graduate employed?)
- Sector of employment, cross-tabbed with degree discipline (i.e. is the sector of employment related to the discipline in which the degree was attained)
- Indicators of productivity (e.g. salary, promotions, publications, academic rank, civil service level)
- All data should be disaggregated by degree type, discipline, gender, and other available and relevant demographic variables

7. *To what extent are the alumni of the MNBSP positioned to assume positions of leadership in academia, government, industry, business?*

Explanation: To maximize the return on U.S. investment, alumni must receive an education that is of high quality and recognized as such within Pakistani society. The alumni must also return to an environment in which decision-makers and stakeholders are poised to take advantage of their talent.

Analysis of this question will help determine if employers in Pakistan's government, business, and industry consider graduates of domestic universities to be equivalent in quality to the education of other workers who studied in the U.S. or elsewhere.

EVALUATION METHODS AND INFORMATION SOURCES

The MNBSP evaluation is envisioned as a mid-term formative evaluation that also provides summative information. It will collect and evaluate the data and evidence necessary to address the fundamental evaluation questions. As the evaluation will rely heavily on extant data that have been collected by program management, the evaluation will assess secondary data and verify its reliability. USAID recognizes that data limitations and feasible methods of collecting data may significantly impact the analysis. An essential element of the evaluation is to collect data from alumni and their employers to determine how MNBSP recipients are benefitting from their educational experience and how they are using their education to contribute to economic growth and social stability.

IMEC proposes a mixed method approach to the evaluation that complies to the greatest extent possible with the USAID evaluation policy – and specifically that for performance evaluations. The evaluation will rely largely on qualitative evidence to answer the evaluation questions but will include quantitative data to the extent possible. Proposed data collection methods include document review, semi-structured interviews, group discussions, online surveys, and secondary data.

To facilitate analysis, the data will, to the extent feasible, be collected and reported in a way that enables disaggregation across multiple dimensions. These dimensions include, but are not limited to, sex, academic discipline, degree type, institution, and sector of employment.

USAID recognizes that a limitation of the study is the relatively short period of time it has operated. It takes several years after graduation and entry into the workforce to achieve the ultimate objective of producing citizens who contribute to Pakistan's economic and social development. Therefore, the evaluation will collect the best available data and make evidence-based inferences while recognizing the limits of the analysis.

MSI anticipates using the following data collection methods.

Document review – The evaluation team will collect and review all relevant project documents from USAID, HEC, and other sources identified during the evaluation. Relevant reports include the HEC's Medium Term Development Framework (2011-2015), the Evaluation of USAID's Higher Education Portfolio (2008), SMC documents related to selection criteria and annual program reports, program agreement documents, financial audit reports, program management manuals, Performance Management Plans, and evaluation and assessment reports. Annex 1 lists the documents available to MSI to date.

Semi-structured interviews – The evaluation team will conduct semi-structured interviews with the officials of HEC, USAID and recipient universities' faculty and administration to collect information about how and why the MNBSP works, the extent to which it contributes to institutional and development objectives, and its relevance to institutional and government priorities. Semi-structured interviews will also be conducted with employers of alumni recipients to assess alumni's contribution to firms and economic growth.

Online surveys – MSI expects to base the quantitative portion of the evaluation on a large-scale online survey of the universe of MNBSP alumni and current recipients. MSI understands that the HEC maintains a database of MNBSP alumni and current students. If the evaluation team can access these lists, it will draw samples for interviews (individual and group) from the list and also contact all MNBSP alumni (and current scholars) from the list. If these institutions cannot share the list, the evaluation team will explore implementing the survey under the auspices of the HEC/recipient university. MSI expects to use its local IT unit to implement the online survey using standard online survey applications (e.g., Survey Monkey, Zoomerang). The online survey of alumni will provide a list of employers, in absence of tracker studies or such information from other sources.

Group discussions – The evaluation team will conduct group discussions with samples of MNBSP alumni in Islamabad/Rawalpindi, Lahore/Faisalabad, Karachi/Tando Jam and Peshawar. If possible, the team will recruit participants randomly from lists of alumni. The qualitative interviews will provide evidence of “how” and “why” the MNBSP program works and will support the quantitative data collected through the proposed online survey.

Secondary data – The evaluation will rely heavily on secondary data collected by program management – USAID, HEC and partner universities. The evaluation team will review and assess the quality of these data, address quality issues to the extent possible, and note any remaining deficiencies in the evaluation report. The evaluation team expects to use USAID/HEC/recipient university data on scholarships awarded, contact information for alumni, program expenditures and any data collected from alumni. The team will collect participation data for as far back as possible to understand trends in participation. The evaluation team will also identify and validate other sources of secondary data such as labor market surveys that may contribute to the evaluation.

The final evaluation report will present evidence to determine what the program has achieved; how its achievements relate to expected results; how the MNBSP is implemented; perceptions of the program among alumni, employers, and the GoP. The report will explicitly state any methodological or data limitations encountered. The report will include at least the following data – disaggregated by degree type, discipline, sex, and other available demographic variables as relevant.

- Number of MNBSP applicants.
- Number of MNBSP awards.
- Number of degrees attained.
- For alumni who are no longer in Pakistan, country of destination.
- Employment status (i.e. is the graduate employed?).
- Sector of employment, cross-tabbed with degree discipline (i.e. is the sector of employment related to the discipline in which the degree was attained).

The initial Getting to Answers Table in Annex 2 shows how the evaluation team expects to address the evaluation questions. The table represents a first draft of the approach that the evaluation team will refine during the initial team planning meeting.

Potential Limitations of the Data and Analysis

The methods proposed for collecting and analyzing evaluation information are potentially subject to selection bias. Selection bias occurs when the subjects of surveys or interviews are not representative of the population of interest. In this case, selection bias will likely result from online survey respondents self-selecting themselves. Similar self-selection bias may affect employment numbers as those who are employed are more likely to respond than those who are not. Lack of current postal addresses or e-mail address will also favor urban relative to rural recipients.

TEAM COMPOSITION

MSI expects to conduct the evaluation largely with MSI/IMEC staff. The evaluation team will include the following areas of expertise:

- (a) evaluation in accordance with USAID accepted principles and methods and,
- (b) higher education, economic development and employment generation.

The evaluation team leader will be responsible for designing and implementing the evaluation and for writing the evaluation report. The team leader will have extensive experience evaluating higher education programs, particularly student support programs (i.e. scholarship and fellowship programs) and be knowledgeable about the higher education sector and development needs in Pakistan. The team leader for the MNBSP evaluation will also be responsible for synthesizing the findings of the evaluations of the Fulbright Student Program and the MNBSP.

The Field team will be comprised of two full-time IMEC staff, a half time online survey coordinator and a half-time group discussion coordinator. These four individuals will be responsible for group interviews with MNBSP alumni and current students and interviews with relevant officials of HEC and recipient universities. They will also design the online questionnaire and all interview guides and analyzing survey data. Team members will also write specific sections of the report.

As part of the internal peer review process, MSI's Technical Director for IMEC will advise on all aspects of the evaluation process from design, implementation and review the all reports prior to submission to USAID.

Team Leader: *Sejjad Akhtar*, Education: PhD (Economics), Southern Methodist University, USA; MA(Economics) Boston University, USA, with specialization in quantitative techniques and education economics. He brings 25 years of evidence based policy research experience with him to the team. During the last 3 years as a consultant for WB, DFID, British Council and GIZ, conducted a number of evaluations in the education sector in Pakistan, ranging from WB's Punjab Education Sector Project" to DFID's "Business Case for Education Fund for Sindh". Also studies for ILO. Research and Policy Areas: Macroeconomic modeling, International and Monetary Economics, Poverty and Income Distribution, Education Economics, Agriculture, Employment and Labor markets, Public Finance, Regional Economics, and Household Survey based studies. Managed Research and Policy analysis in all stages from research conceptualization, data collection and analysis to final report writing.

Evaluation Specialist (Field Team): *Ghazanfar Ali Khan Hoti* is a full-time staff member of IMEC Evaluation Unit with expertise in bank examining and project evaluations. He has worked as a consultant with the Independent Evaluation Group of the World Bank in Washington DC. Mr. Hoti was previously employed by the State Bank of Pakistan in Karachi. He has participated in evaluations of USAID projects and has conducted onsite inspection of several commercial bank and development financial institutions. He holds a Master's in Public Administration (Economic Policy Management) and Master of Science (Operations Research) from Columbia University, USA.

Economist: *Imran Khan* is a full-time staff member of the IMEC Survey Unit with expertise in econometric analysis and impact evaluations. He has worked as an economist with the USAID-funded Competitiveness Support Fund. Mr. Khan was previously employed by the State Bank of Pakistan in Karachi. His areas of research and analysis include monetary economics, financial markets, competitiveness, trade, investment and fiscal economics. His thematic and sector experience includes provincial budgetary processes, provincial competitiveness analysis, and innovation. He holds a Master's in Public Administration/International Development from the Harvard Kennedy School, USA.

Survey Coordinator: *Muhammad Danish* is a full-time coordinator of the IMEC survey unit. His expertise includes survey design, questionnaire development, sampling, survey implementation, data processing and initial data analysis. He has conducted various thematic and sector surveys include surveys on prospects of UK based school level qualifications in Pakistan for the British Council, British Council Partnership mapping study (Education and Technical Skills Programs), World Bank, GIZ (education and employment survey in 10 districts of Punjab), global brand survey (TNS), media surveys (individual viewing habits), current affairs (public opinion), Balochistan and Swat public opinion surveys by UNDP, IT Security system (Vista International), Land Record Survey of Punjab Board of Revenue, Agriculture study on corn pesticide, Hundi System of money transferring survey, and Sandoz Health Care surveys, Samsung brand market share and competitors survey, beverage and food industry (taste test survey), Nestle and Tetra pack awareness survey, wetland survey. He has worked for Gallup Marketing Research and IUCN-the World Conservation Union. Danish has a Master's in Business Administration, University of Baluchistan; Post Graduate Diploma-Applied Economics, University of the Punjab; and an Associate Diploma in Information Technology, Innovative Information Technologies Institute, Quetta.

WORK PLAN AND DELIVERABLES

The evaluation will proceed in four main phases – planning, online survey, field work and reporting. This section describes the general tasks in each of these phases. Table 2 provides a detailed list of tasks with specific dates for deliverable and other key milestones.

Evaluation planning – During the planning phase, IMEC will develop a detailed SOW based on a draft SOW provided by USAID. The detailed SOW will serve as the work plan for the evaluation. Once USAID approves the detailed SOW, MSI will request background documents and data from USAID and the implementing partners. For this evaluation, it will be critical that MSI receive contact information for MNBSP alumni and current recipients from USAID, the HEC or the recipient universities as soon as possible to begin the online survey.

Deliverables: The detailed SOW, which serves as an initial work plan for the evaluation is the key deliverable of the first phase.

Online survey – As soon as USAID approves the detailed SOW, MSI will begin to develop and deploy the online survey of MNBSP alumni and current recipients. The survey will remain open for at least five weeks unless additional time is required to boost response rates. USAID has indicated a willingness to entertain an extension if necessary to complete the survey.

Deliverables: There are no deliverables associated with the online survey phase. The output of this phase is cleaned and prepared survey data.

Field work – The evaluation field work will begin as the online survey is almost complete so that the survey data will be cleaned and analyzed before the evaluation team drafts the evaluation report. Field work consists of the document review, site visits, semi-structured interviews, group discussion and secondary data collection described in the methodology section of this SOW. At the beginning of the field work the evaluation team will conduct a team planning meeting to plan the evaluation field work, refine field data collection methods and develop interview guides and other field protocols. Before starting data collection, the evaluation team will meet with USAID to clarify evaluation objectives, review evaluation questions, discuss details of the field work, and obtain approval for the field work plan. The evaluation team will also meet with the implementing partners (e.g., USAID, the HEC and recipient universities) early in the field work phase to gain a deeper understanding of the program prior to beginning data collection. Field work will require approximately four weeks.

Deliverables: No deliverables are associated with the field work phase.

Reporting – At the conclusion of the field work, the evaluation team will prepare and deliver a debriefing presentation to USAID and to implementing partners or other parties with USAID approval. The evaluation team will incorporate comments from the presentation(s) into a draft report. After a thorough technical review, MSI will deliver the draft report to USAID – and to implementing partners if appropriate - for review and comment. Once MSI receives comments on the draft report, it will ask the evaluation team to incorporate comments, send the report to the MSI home office for a final technical review, editing and branding and then deliver the final report to USAID.

USAID has asked for recommendations that cut across the two USAID-funded scholarship programs, the MNBSP and the Fulbright Student Program. MSI will discuss with USAID how to present these joint recommendations – in a separate report or as part of the separate evaluation reports of the two programs.

Deliverables: The key deliverables of the reporting phase are 1) a debriefing presentation to USAID, 2) a draft evaluation report, 3) a final evaluation report and perhaps 4) a synthesis report containing joint recommendations from the evaluations of the MNBSP and the Fulbright Student Program.

TABLE 2: PROPOSED EVALUATION SCHEDULE

Locations, Activities and Deliverables	Dates
Statement of Work	
MSI submits draft SOW to USAID for review and discussion	Dec 23
MSI meets with USAID to discuss draft SOW	Dec 26 - Jan 6
MSI delivers final SOW to USAID	Jan 6
On-line Survey	
MSI develops draft questionnaire	Jan 9-12
MSI shares draft questionnaire with USAID for comments	Jan 13
USAID delivers comments on questionnaire to MSI	Jan 20
MSI prepares questionnaire online (Survey Monkey, Zoomerang)	Jan 23-25
MSI pretests questionnaire with a few targeted alumni	Jan 26-31
MSI finalizes questionnaire based on pretest	Feb 1-2
MSI launches online survey ²	Feb 7
MSI manages online survey	Feb 7–Mar 16
MSI analyzes survey data	Mar 19-30
Field Work	
MSI facilitates Team Planning Meeting	Jan 23 - 25
MSI schedules interviews and group discussions ³	Jan 19 - 23
Evaluation team conducts interviews in Islamabad	Jan 30 – Feb 3
Evaluation team conducts interviews in Peshawar	Feb 6 – 9
Break for MSI evaluation training	Feb 13 – 17
Evaluation team conducts interviews in Lahore and Faisalabad	Feb 20 – 24
Evaluation team conducts interviews in Quetta	Feb 27 – March 1
Evaluation team conducts interviews in Karachi and Tando Jam	Feb 27 – March 1
Reporting	
MSI prepares draft evaluation report	April 2– 13
MSI delivers debriefing presentation to USAID, HEC	April 16 – 17
MSI incorporates comments from debriefing into draft report	April 18 - 20
MSI technical review of draft report	April 23 - 27
MSI submits draft report to USAID	April 30
USAID reviews draft report	April 30 – May 7
USAID provides comments on draft report to MSI	May 7
MSI prepares final report	May 8 – 21
MSI delivers final report to USAID	May 21

² MSI will strategically launch the survey on a Tuesday to maximize response rates. Potential respondents are likely have to deal with a backlog of email traffic from the weekend on Monday and are likely to put off responding to email they receive late in the work week.

³ Scheduling interview occurs about one week before the interviews take place with reminder calls to those scheduled more than a week out.

TABLE 3 : DRAFT EVALUATION LEVEL OF EFFORT (DAYS)

Evaluation task	STTA
Evaluation planning	0
MSI develops draft detailed SOW	0
MSI finalizes detailed SOW based on USAID comments	0
MSI collects documents and data from partners and others	0
Online survey	2
MSI develops draft survey instrument	1
MSI pretests draft instrument	0
MSI finalizes draft instrument	0
MSI deploys survey	0
MSI analyzes survey data	1
Field work	50
Evaluation team members review documents	0
Evaluation team convenes	0
MSI facilitates team planning meeting	0
Evaluation team delivers work plan to USAID for approval	0
Field schedule to be determined	48
Evaluation team delivers tapes of group discussions to IMEC	0
MSI translates and transcribes tapes	0
MSI prepares report on group discussions	2
Reporting	6
Evaluation team drafts debriefing presentation	2
MSI reviews debriefing presentation	0
Evaluation team finalizes debriefing presentation	0
Evaluation team delivers debriefing presentation to USAID	0
Evaluation team prepares draft evaluation report	2
MSI reviews draft report	0
MSI technical director reviews draft report	0
Evaluation team finalizes draft report	1
Evaluation team prepares final report	0
MSI reviews final report	1
MSI technical director reviews final report	0
MSI home office edits and formats report	0
Total LOE	58

ANNEXES

Annex I: Evaluation Framework

The evaluation as a whole has to address not only quantifiable impact but also other evaluation criteria and questions, as well as impact that is not quantifiable or not reliably quantifiable at this stage of the project. The questions raised in the draft SOW can be clustered under the five standard evaluation criteria. The standard criteria are defined as follows⁴:

- **Relevance:** Evaluations examine the continued relevance of the intervention's objectives and approach in light of changing development problems, policies, or priorities. The political, economic and institutional environments in which the project was designed and implemented tend to change over time. Some of the changes can have major consequences for a project.
- **Effectiveness:** refers to the extent to which an intervention's objectives are achieved or are likely to be achieved. Evaluations seek to determine whether interventions' services and products are reaching the targeted populations; whether the intended beneficiaries are using them; whether the coverage of the target population is as planned in the project design; and whether the intervention is likely to achieve its targets.
- **Efficiency:** measures the output of an intervention in relation to its costs. The most widely used method is to undertake cost-benefit analysis to determine the net benefits of an intervention. Such analyses are most appropriate when (a) reliable data are available and (b) realistic assumptions about benefit streams can be made. Cost-benefit analyses are often problematic in evaluating social or democracy programs, because they require economic quantification of the benefits.
- **Impact:** In evaluation parlance, impacts refer to results or effects that are caused by, or are attributable to a project. Impact evaluations usually focus on higher level effects of a project that occur in the medium or long term. For example, have farmers' incomes increased as a result of an agricultural development project? Such effects can be intended or unintended, positive or negative.
- **Sustainability:** refers to the continuation of an intervention's services and benefits after foreign assistance ends. Three dimensions of sustainability – financial, institutional and environmental – will be examined in evaluations. Financial sustainability indicates the capacity of an agency or organization assisted by a project or program to be financially self-sufficient, either through revenue-generating activities or through substitution of other public, private, or donor sources of funding. Institutional sustainability refers to the supported organization's capacity to manage its operations independently. Finally, environmental sustainability refers to the capacity of an intervention's services and benefits to survive in the changed or changing environment.

A clustering of evaluation questions under these and other headings is presented in the section below. The questions will be reviewed and refined during the evaluation Team Planning Meeting (TPM) by means of a Getting to Answers method based on a guide and a template developed by MSI. This would relate the questions to methods and information sources that can be used for answering specific questions.

⁴ The definitions for relevance, effectiveness, efficiency, impact and sustainability have been taken from EFGA 2009.

Annex 2: List of Documents Reviewed

- USAID-Funded Higher Education Commission - Financial Aid Development (HEC-FAD), Proposed Annual Work Plan, October 2009 to September 2010, 2009
- USAID-Funded Higher Education Commission - Financial Aid Development (HEC-FAD), Annual Report, October 2008 to September 2009
- USAID-Funded Higher Education Commission Financial Aid Development (HEC-FAD) Program: Progress and Future Plans (presentation), 2011
- USAID/Pakistan Fact Sheet: Higher Education Commission-Financial Aid Development (HEC-FAD) Program, 2010
- USAID/Pakistan Fact Sheet: Merit and Needs-Based Scholarship Program, 2010
- Higher Education Operational Plan Indicators, Definitions and associated HEC-FAD PMP Indicators Progress Update as of September 30, 2009 and Target for FY 2009-10
- Merit and Needs-Based Scholarship Project, Quarterly Report (From 1st July 2011 to 30th September 2011), 2011
- Merit and Needs-Based Scholarship Project, Annual Report (From 1st July 2010 to 30th June 2011), 2011
- Performance and Monitoring and Evaluation Plan Year Wise with Timelines
- Various spreadsheets of information about scholarship awards
- Medium-Term Development Framework II 2011-15, Higher Education Commission of Pakistan
- Evaluation of USAID Higher Education Portfolio, Academy for Educational Development, 2008

Annex 3: Initial Getting to Answers Table

Evaluation question	Type of answer/evidence	Data Collection		Sampling/selection	Data analysis methods
		Methods	Source		
1. To what extent has the MNBSP achieved the planned outputs and outcomes as defined in the implementing agreement with the HEC?	Descriptive - Quantitative (Comparing planned vs actual outputs/outcomes)	Document review; literature review;	Project records	Purposive sample of USAID and HEC personnel	Document the scholarship awards, sex-disaggregated figures; merit-based selection process and graduation rate.
2. Do scholarship recipients graduate on time?	Statistical – number or percentage of MNBSP recipient graduating on time	Survey; document review.	Project records	Clustered random sample (in case of survey)	Document recipients graduation timelines
3. Are MNBSP alumni productively employed in fields related to their academic preparation?	Statistical – number or percentage of MNBSP alumni currently employed by position, field, and preparation (e.g. degree and field).	Survey; document review; group interviews	Online survey of MNBSP awardees; project records if available; group interviews with MNBSP alumni	Online survey of universe of MNBSP alumni	Document employment status, field of work, and position, reasons for not working in relevant field
4. To what extent do the alumni of the MNBSP contribute to the achievement of the goals and objectives the U.S. government's development strategy in Pakistan?	Descriptive	Semi-structured interviews; survey; group interviews	Interviews with USAID personnel, HEC officials, and MNBSP alumni; online survey of MNBSP alumni; group interviews with MNBSP alumni	Purposive sample of USAID and HEC personnel; online survey of universe of MNBSP alumni	Use content analysis of interviews to determine how MNBSP contributes to goals and objectives. Support with quantitative data from survey where applicable.
5. To what extent are the alumni of the MNBSP positioned to assume positions of leadership in academia, government, industry, business?	Statistical	Semi-structured interviews; surveys; group interviews	Interviews with employers of MNBSP alumni; online survey of MNBSP alumni; group interviews with MNBSP alumni	Random sample of employers (sample size!); online survey of universe of MNBSP alumni	Develop indicators of leadership and/or performance. % of alumni by index value and discipline/sector

Evaluation question	Type of answer/evidence	Data Collection		Sampling/selection	Data analysis methods
		Methods	Source		
6. What is the Return on Investment of the MNBSP?	Financial analysis – Return on Investment, Cost Benefit/Effectiveness Analysis	Document review, literature review, survey	Cost data from program records; framework for return to education from literature; estimates of monetary benefits from survey of alumni	Online survey of universe of MNBSP alumni	If it is possible to determine the monetary return to investments in education, then calculate ROI. Otherwise, calculate cost per output (e.g. graduate, employed graduate, etc.)
7. Is the leadership of HEC and public universities committed to the MNBSP and does the HEC consider it a high priority relative to other student support programs?	Descriptive	Semi-structured interviews; survey; group interviews	Interviews with HEC, associated University senior officials, and MNBSP alumni; online survey of MNBSP alumni; group interviews with MNBSP alumni	Purposive sample of HEC, associated University personnel; online survey of universe of MNBSP alumni	Use content analysis of interviews to determine HEC commitment to MNBSP vis-à-vis other student support programs; Support with quantitative data from survey where applicable.

Annex 5: Key Informant Interview Guides

Financial Aid Office

Some of the Qs from Vice Chancellor, registrar and Dean interviews will overlap in this survey also for triangulation purposes.

Q.1

Is the scholarship stipend enough to cover the living expenses of the student?

Q.2

Do you have any advice/suggestions for further improving the selection process of MNBSP candidates?

Q.3

Would you suggest any other actions by (a) HEC (b) USAID that could increase the effectiveness of MNBSP?

Q.4

Are you running any other scholarship programs in the same discipline as in the MNBSP? Elaborate and identify the programs by name?

Q. 5 (For universities with a significant higher drop-out rate than other universities)

What are the reasons for drop-out in the MNBSP program. Is it significantly higher than other programs in your university?

Q.6 (For universities with a significant higher drop-out rate than other universities)

What steps have been taken to reduce the drop-out rate from the program?

Q.7

What steps have been taken to improve the timeliness of scholarship payments to MNBSP scholars?

Q.8

What is the share of MNBSP funding in the total scholarship/financial aid funds of the university?

Q.9

What is the process for deciding on the discontinuation of scholarships? Is it documented anywhere?

Q.10

Do you coordinate with placement office of the university for MNBSP alumni?

Q.11

Please tell us the process that is in place for receiving funds from HEC. What steps are needed to improve this process from i) HEC side ii) your side?

KEY INFORMANT INTERVIEWS QUESTIONS
Vice Chancellor

Q.1

What are the significant challenges currently facing the university?

[In terms of finances, enrolment, faculty, disciplines, sex-mix or level-mix?]

Q.2

How does the MNBSP contribute towards achieving the objectives/priorities of the university?

Q.3

In the context of HEC-MTDF, and its stated priorities, to what extent is it relevant or consistent with the priorities/objectives of your university? *[Flag the differences in priorities]*

Q.4

How does MNBSP complement/compare with other scholarship funds?

Q.5

What are your views on maintaining the current status quo or expanding the number of disciplines in the MNBSP program? What additional disciplines you would want included or substituted by existing disciplines and why?

Q.6

In relation to job opportunities or future employment prospects in your area what other disciplines would you recommend for inclusion in MNBSP program?

Q.7

In your opinion, how effective is the selection process in identifying the needy students?

1. Very Effective
2. Effective
3. Satisfactory
4. Not Effective

Q.8

As you chair the university's selection committee, what factors do you consider for subjective selection criteria in the committee?

Q.9

What controls/procedures you have in place for the 50% subjective criteria to prevent its abuse.

Q.10

If a student is denied the MNBSP scholarship program, then how likely is that he/she will be dropped from the academic program?

Q.11

Do you have any advice/suggestions for further improving the selection process of MNBSP candidates?

Q.12

What is your general impression about the prospects of professional advancement of MNBSP scholars relative to others?

1. Highly Optimistic
2. Optimistic
3. In line with Non-MNBSP scholars
4. Not Optimistic

Q.13 How do you assess your relationship with HEC in the context of MNBSP program?

1. Very Cooperative
2. Cooperative
3. Formal/Official
4. Not Cooperative

Q.14

How satisfied you are with the scholarship fund transfer process from HEC?

1. Very Satisfied 2. Satisfied 3. Can be further Improved 4. Not Satisfied

Q.15

Do you entertain self-financed students for the MNBSP program?

Q.15

Suppose your institution is selected by USAID to participate in a similar MNBSP scheme for Afghan students in similar disciplines and levels? What would be your reaction? Do you have capacity to accommodate additional students?

KEY INFORMANT INTERVIEWS QUESTIONS
Dean of the Faculty

Some of the Qs from Vice Chancellor and registrar interviews will overlap in this survey also for triangulation purposes.

Q.1

What are your views on maintaining the current status quo or expanding the number of disciplines in the MNBSP program? What additional disciplines you would want included or substituted by existing disciplines and why?

Q.2

In your opinion, how effective is the selection process in identifying the needy students?

1. Very Effective 2. Effective 3. Satisfactory 4. Not Effective

Q.3

As you are a member of the university's selection committee, what factors do you consider for subjective selection criteria in the committee?

Q.4

What controls/procedures you have in place for the 50% subjective criteria to prevent its abuse.

Q.5

If a student is denied the MNBSP scholarship program, then how likely is that he/she will be dropped from the academic program?

Q.6

What is your general impression about the prospects of professional advancement of MNBSP scholars relative to others?

1. Highly Optimistic 2. Optimistic 3. In line with Non-MNBSP scholars 4. Not Optimistic

Q.7

Do you entertain self-financed students for the MNBSP program?

Q.8

Did you experience any difficulties in fulfilling the quota? If yes what are those difficulties? What steps have been taken or planned to meet the quota?

Q.9 (For universities with a significant higher drop-out rate than other universities)

What are the reasons for drop-out in the MNBSP program? Is it significantly higher than other scholarship programs in your university?

Q.10 (For universities with a significant higher drop-out rate than other universities)

What steps have been taken to reduce the drop-out rate from the program?

Q.11

How do you view the performance of MNSBP scholars relative to Non-MNBSP scholars in the program?

1. Far better 2. Better 3. About the same 4. Below than others

KEY INFORMANT INTERVIEWS QUESTIONS

Registrar

Q1-Q15 asked to Vice Chancellor will also be repeated to Registrar for triangulation purposes. In case we are unable to see Vice Chancellor on the appointed day, the answers to these questions from Registrar will serve as a substitute.

Q.1

What are the significant challenges currently facing the university?

[In terms of finances, enrolment, faculty, disciplines, sex-mix or level-mix?]

Q.2

How does the MNBSP contribute towards achieving the objectives/priorities of the university?

Q.3

In the context of HEC-MTDF, and its stated priorities, to what extent is it relevant or consistent with the priorities/objectives of your university? *[Flag the differences in priorities]*

Q.4

How does MNBSP complement/compare with other scholarship funds?

Q.5

What are your views on maintaining the current status quo or expanding the number of disciplines in the MNBSP program? What additional disciplines you would want included or substituted by existing disciplines and why?

Q.6

In relation to job opportunities or future employment prospects in your area what other disciplines would you recommend for inclusion in MNBSP program?

Q.7

In your opinion, how effective is the selection process in identifying the needy students?

1. Very Effective
2. Effective
3. Satisfactory
4. Not Effective

Q.8

As you are a member of the university's selection committee, what factors do you consider for subjective selection criteria in the committee?

Q.9

What controls/procedures you have in place for the 50% subjective criteria to prevent its abuse.

Q.10

If a student is denied the MNBSP scholarship program, then how likely is that he/she will be dropped from the academic program?

Q.11

Do you have any advice/suggestions for further improving the selection process of MNBSP candidates?

Q.12

What is your general impression about the prospects of professional advancement of MNBSP scholars relative to others?

1. Highly Optimistic
2. Optimistic
3. In line with Non-MNBSP scholars
4. Not Optimistic

Q.13 How do you assess your relationship with HEC in the context of MNBSP program?

1. Very Cooperative 2. Cooperative 3. Formal/Official 4. Not Cooperative

Q.14

How satisfied you are with the scholarship fund transfer process from HEC?

1. Very Satisfied 2. Satisfied 3. Can be further Improved 4. Not Satisfied

Q.15

Do you entertain self-financed students for the MNBSP program?

Q.16

Did you experience any difficulties in fulfilling the quota? If yes what are those difficulties? What steps have been taken or planned to meet the quota?

Q.17 (For universities with a significant higher drop-out rate than other universities)

What steps have been taken to reduce the drop-out rate from the program?

Q.18

What steps have been taken to improve the timeliness of scholarship payments to MNBSP scholars?

Q.19

What is the share of MNBSP funding in the total scholarship/financial aid funds of the university?

Annex 6: MNBSP Application Form



USAID Funded Merit & Needs Based Scholarship Program SCHOLARSHIP APPLICATION FORM

Scholarship is based on assessment of need and merit as well as availability of funds. Selection will be decided on the basis of information provided in this form and investigations for the authentication of provided information. Candidate may be required to appear for interview (s).

PROVIDING FALSE INFORMATION

Providing false information may result in one or all of the following:

- Cancellation of admission.
- Rustication from the university.
- Initiation of criminal proceedings.
- Disqualification for award of any future loan/scholarship.
- Refund of all the payment received and or a penalty equal to total scholarship amount.

INSTRUCTIONS FOR FILLING OUT THE SCHOLARSHIP APPLICATION FORM:

- ✓ Fill in the form using black ball point pen and write in capital letters and leave space between words
- ✓ Read the application form carefully.
- ✓ Make a photocopy of the application form
- ✓ Complete the photocopy form and make sure everything is correct and final
- ✓ Copy all information from photocopied form to the original form
- ✓ Submit duly completed application form to the admission office or focal person
- ✓ Furnish factual, comprehensive and authentic information in the form
- ✓ For family financial reporting parents/guardian may be consulted for guidance
- ✓ Whenever in doubt or lost, seek help from the Focal Person
- ✓ Check your application for spellings, grammatical errors and factual oversight
- ✓ Keep a photocopy of the filled-in original application form for your record
- ✓ Ensure that you have attached all the required documents by putting a tick mark in checklist

- ✓ Answer all questions. Those not applicable should be marked “N/A”
- ✓ Affidavit Needs to be submitted after final selection of the candidate

Definitions:

Family: Father, mother(s), brother(s), sisters(s), Maternal / Paternal Uncles (s) & Aunts, Grandparents etc.

Pucca House: A pucca house is one, which has walls and roof made of the following material.

Wall material: Burnt bricks, stones (packed with lime or cement), cement concrete, timber, ekra, etc.

Roof Material: Tiles, GCI (Galvanised Corrugated Iron) sheets, asbestos cement sheet, RBC, (Reinforced Brick Concrete), RCC (Reinforced Cement Concrete) and timber etc.

Kutch House: The walls and/or roof of which are made of material other than those mentioned above, such as un-burnt bricks, bamboos, mud, grass, reeds, thatch, loosely packed stones, etc. are treated as kutch house.

Semi -Pucca house: A house that has fixed walls made up of pucca material but roof is made up of the material other than those used for pucca house.

Others: The houses, which are not covered by the types mentioned above, are to be treated as of ‘others’ type.

Application Form Check List

SN	Description	Tick the relevant
1	Copies of computerized NIC of	
	Father	<input type="checkbox"/>
	Mother	<input type="checkbox"/>
2	Income Tax Certificate	
	Father	<input type="checkbox"/>
	Mother	<input type="checkbox"/>
3	Copy of last Income Tax Return of	
	Father	<input type="checkbox"/>
	Mother	<input type="checkbox"/>
4	Salary Certificate of	
	Father	<input type="checkbox"/>
	Mother	<input type="checkbox"/>
5	Copies of last six (06) month utility bills	
	Electricity	<input type="checkbox"/>
	Gas	<input type="checkbox"/>

Telephone	<input type="checkbox"/>
Water	<input type="checkbox"/>
6 Attested copy of rent agreement (if applicable)	<input type="checkbox"/>
7 Copies of last & latest fee receipts of self and siblings *	<input type="checkbox"/>
8 Copies of Medical bills/ expenditure related documents (if applicable)	<input type="checkbox"/>
9 Copies of previous scholarship(s) attained (if applicable)	<input type="checkbox"/>
10 Statement of Purpose & two passport size Photographs	<input checked="" type="checkbox"/>

* Siblings are brother & sisters

Tick the Section When Completed

I Section A: Personal and family information	<input type="checkbox"/>
II Section B: Cumulative information of Self, Parents & Guardian Assets	<input type="checkbox"/>
III Section C: Financial arrangements for current year	<input type="checkbox"/>
IV Section D: Educational Record	<input checked="" type="checkbox"/>

DO's:

- Send your application by post or submit by hand to the admission office or focal person.
- Place documents in right order as per above sections (1 to 10)
- Put all amounts in Pak Rs.
- Do consult with parent(s)/guardian(s) for financial data accuracy & reliability
- For the information not present/relevant write in capital letters **N/A**

DO NOT:

- Provide False/vague/ incomplete information.
- Overwrite/ scratch on the form.
- Send scholarship application form directly to HEC

17. Total Number of Brothers/Sisters married Total: _____ Brothers _____ Sisters _____

S #	Name of Family Member (s)	Relationship	Marital Status	Remarks**
1				
2				
3				
4				
5				
6				
7	**Remarks: List down the number of dependents supported by married brother(s)/ sister(s)			

18. Brothers/Sisters/Children/Family Members studying _____

Details of Siblings Studying including the applicant own detail

S #	Name	Relation with applicant	Name & Address of Institute	Fee per month	Tuition per month (If applicable)
1					
2					
3					
4					
5					
6					
22	Total Fees & Tuition Charges				

19. **Father's Name:** _____ Computerized N.I.C. No _____

20. Father Status: Alive Deceased (Deceased please mentioned the date of demise (dd-mm-yy) _____)

21. Professional status: Employed Unemployed

If answer is Employed complete the sections (22-30) else from (27-30)

22. Name of Company/Employer:

23. Address: _____
 24. Tel (Off): _____ Mobile: _____
 25. Occupation : _____
 26. Designation & Grade (BPS/ SPS/PTC etc): _____
 27. Total Gross Monthly Income (Salary/ Pension/ Others): _____
 28. Total Net Monthly Take Home Income (Salary/ Pension/ Others): = _____

29. Previous Occupation (if applicable): _____
 30. Total Annual Income: _____
 NTN _____

31. **Mother's Status:** Alive Deceased (if deceased please mentioned the date of demise (dd-mm-yy) _____)

32. Marriage Relationship: Combined Separated/Divorced

33. Professionals Status: Working Working

Any Other Supporting Person (Mother/ Guardian/ Brother/ Sister/Family Relative/Guardian) [Add Page if required]

34. Name: _____ Relationship: _____

35. Address: _____

36. Tel (Off/Res) _____ Mobile No. _____ NIC no. _____

37. Occupation _____

38. Designation _____ Name of Company/Employer _____

39. Total Monthly Gross Income (Salary/ Pension/ Others) _____

40. Total Net Monthly Take Home Income (Salary/ Pension/ Others): = _____

41. Total Net Annual Income _____ 44. Monthly Financial Support Available from supporting person to Applicant in Pak Rs. _____

45. Asset Income (on monthly basis)

S #	Income Source	Father	Mother	Spouse	Self	Other	Total
1	Property Rent						
2	Land Lease						
3	Bank Deposits*						
4	Shares / Securities*						

5	Other (Specify)						
45	Total						

* For sources with annual income returns, kindly report the monthly income earned

42. Total Earning Members in Family: _____

43. Total No of family members not earning _____

44. Details of Family Members Earning:

S #	Family Member Name	Relationship	Family Member occupation ***	Organization Name	Designation	Monthly Gross Pay/Earning	**Remarks
1							
2							
3							
4							
44	Total Monthly Family Income (add self-income, if applicable) Pak Rupees						

** Please mentioned if the Family member supporting to Family in Remarks Column (Yes/No)

*** Family Member Occupation classification

1. Government Service (Specify the employment grade BPS/SPS/PTC etc.)
2. Private Job
3. Agriculture/Farming
4. Own Business (Self Employed). Details/nature of self-business need to filled in at remarks column
5. Others. Details/nature of self-business need to filled in at remarks column

46. Total Family Monthly Income

S #	Family Member Name	Relationship	Monthly Income from Assets	Monthly Gross Pay/Earning	Monthly Net (Take home)
-----	--------------------	--------------	----------------------------	---------------------------	-------------------------

			(Sec. 45)		Pay/Earning
1					
2					
3					
4					
5	Applicant Monthly Gross Pay/Earning				
6	Applicant Monthly Net (Take home) Pay/Earning (Sec. 12)				
46-A	Total Monthly Income in Pak Rupees				
46-B	Total Annual Income in Pak Rupees				

FAMILY EXPENDITURES

47. Accommodation Expenditures (Please Check the relevant boxes)

Type: Bungalow Apartment /Flat Town House Village House

Structure: Pucca House Kutcha House Semi Pucca House Others

(Detail available at Page 1 &2)

Status: Rented Self or Family owned Employer / Govt Owned

Rent Payment: Self Employer/Govt Others

Total Size of the House in Sq. ft. _____ Covered Area in Sq. ft. _____

S #	Accommodation Location /Address	Number Of Bed Rooms		Number Of Air conditioners		Accommodation Monthly Rent	Accommodation Annual Rent
		1-2	<input type="checkbox"/>	Nil	<input type="checkbox"/>		
		2-4	<input type="checkbox"/>	1-2	<input type="checkbox"/>		
		4-6	<input type="checkbox"/>	3-6	<input type="checkbox"/>		
		6-8	<input type="checkbox"/>	6-8	<input type="checkbox"/>		

		Above 8	<input type="checkbox"/>	Above 8	<input type="checkbox"/>		
48	Total Accommodation Rental Expenditure						

Any other house/flat owned by the Parents/Guardian (if yes please specify with location and size) _____

49. Utilities Expenditures

Last Month Utilities Paid			
Telephone	Electricity	Gas	Water

Average of Last Six Months (Per Month Utilities Charges)					
S #	Telephone	Electricity	Gas	Water	Total
49					

50. Monthly Food /Kitchen Expenditures

51. _____

52. **Medical Expenditures:** Average of last six months (Per Month Expenditure)_____

53. **Travelling/ Miscellaneous Expenditures**

Average of last six months (Per Month Expenditure)_____

Total Family Expenditures

S #	Education Expenditure (Sec. 22)	Accommodation Expenditure (Sec. 48)	Utilities Expenditure (Sec. 49)	Food Expenditure (Sec. 50)	Medical Expenditure (Sec. 51)	Misc. Expenditure (Sec. 52)	Total Monthly Expenditure (52.A)	Total Annual Expenditure (52.B)
52								

S #	Description	Amounts in Pak Rupees
(Sec.46-A)	Total Monthly Income	
(Sec. 52-A)	Total Monthly Expenditure	
53-A (46.A – 52.A)	Net Monthly Disposable Income*	

S #	Description	Amounts in Pak Rupees
(Sec.46-B)	Total Annual Income	
(Sec. 52-B)	Total Annual Expenditure	
52-B (46.B – 52.B)	Net Annual Disposable Income*	

* If the monthly / Annual Disposable Income is negative, kindly explain the reasons for the gap, and the arrangements through which the differential gap is met by the family

Section B:

Cumulative information of Self, Parents and Guardian Assets

Assets (with current market value)

53. Does the family own any Transport? Yes No

If yes kindly fill the relevant details

S #	Transport Type (Car/ Motor cycle/ Others*)	Make /Model	Engine Capacity (CC)	Registration No.	Ownership Period
1					
2					
3					
4					

* Others: include tractor, rickshaw, bi-cycle, motorcycle rickshaw, carriage pick, truck etc.

54. Number of Cattle(s) (with kind) _____

55. Area and location of Land(s)/Plot(s) owned _____

Assets Title	Qty	Size	Location (Address)	Cultivable Area	Agricultural Yield per Acre
Residential					
Commercial					
Agricultural					
Employer/ Govt Scheme					

56. Assets worth (Current Market Value in Pak. Rs.)

S #	Assets Title	Father	Mother	Spouse	Self	Guardian	Total
1	House						
2	Business						

3	Land & Building						
4	Bank Balance						
5	Stocks/Prize bond						
6	Others/ Cattle(s)						
56	Total						

57. Taxes paid (per annum in Pak.

Rs)_____

Section C:
Financial arrangements for current year

58. Funds Availability for Applicant Education (per annum in Pak Rupees)

S #	Income Source	Father	Mother	Spouse	Self	Other	Total
1	Salary / Earnings						
2	Family / Friend Advances & Loan *						
3	Bank Loan						
4	Other (Specify)						
58	Total						

* Family/ Friend Loan

(Specify relationship with the relative / friend)

59. Any source of financing other than this scholarship (Please specify)

60. How were the admission /first semester charges paid?

Section D:
Applicant Educational Record

Level of Study	Name of the Institute	*Address of the Institute	Period(Start & End Date)	Per Month Fee	Division/ GPA/ Grade
Bachelors					
Intermediate					
Higher Secondary					
Secondary					
Primary					

* At least the name of the City is required in the field.

61. Have you ever awarded any other scholarship before: Yes No

(If yes fill the details of scholarships & attach documentary proof of the scholarships)

S #	Name of Institute	Scholarship Name	Total Scholarship Amount	Total Scholarship Period	Class / Level at which Scholarship was granted
1					
2					

3					
---	--	--	--	--	--

Statement of Purpose (Explain your suitability for this scholarship) - attach separate sheet if required

UNDERTAKING

1. The information given in this application is true to the best of my knowledge and I understand that any incorrect information will result in the cancellation of this application. If any information given in this application is found incorrect or false after grant of financial assistance, the institute will stop further assistance and the student will have to refund all payment received and or penalty equal to total scholarship amount.
2. HEC reserves the right to use information given in this form for verification and other purposes.

Date:

Date:

Date: Parents / Guardian Signature

Applicant Signature:



SPECIMEN (1 pages)

Each Page must be executed on stamp paper, Other papers not acceptable, type one side of paper only.

This Affidavit needs to be submitted after final selection

Deed of agreement

For Undertaking a Course of Studies

Under the Scheme HEC-US Need based Merit Scholarships for Pakistani University Students enrolled in Agriculture & Business Administration study Program formally called as “USAID funded Merit and Needs based Scholarship Program”

Mr./ Ms. _____ son/ daughter of _____

Computerized NIC No. _____ University Reg. No. _____

Dept. of _____ studying in the University _____

hereby called the Approved Student has been selected by Higher Education Commission for the award of scholarship under USAID funded Merit and Needs based Scholarship Project in the field of study (Agriculture / Business) _____ for completion of (B.Sc/ M.Sc , BBA/MBA) _____ academic program. The approved student has agreed to accept the award of the scholarship on the terms and conditions governing the scholarship award.

Now this deed witnesses as under:

- i) The payment of allowances admissible under the scholarship program shall be made subject to the complete adherence to all rules and regulations governing the scholarship program as well as satisfactory performance in the authorized studies.
- ii) The student shall not change the specified course of studies nor register himself/herself for any other course or program/University/Institute without prior approval of the HEC.
- iii) The student shall not extend the specified period of studies without prior approval of the HEC. **In case of selection at any other scholarship scheme the student will immediately report the same at the university.**
- iv) In case the scholar fails to qualify the course/degree for which he/she was awarded scholarship, the HEC reserves the right to recover all the payment received and or a penalty equal to total scholarship amount from the Scholars/Guarantor/University.
- v) The Parents/ Guardian of the student are unable to financially support his/her education.
- vi) The Scholarship will be terminable in the following cases:
 - a) If the student fails to maintain class attendance of 75%.
 - b) If the student is involved in malicious/undesirable activities.
 - c) If the student fails to obey or act in accordance with HEC’s order directing him/her, he/she will be liable to action under the acts/rules in force in the country.
 - d) If the student is punished because of his involvement in violation of the university rules, damage to institute property, misbehaviour with staff or colleagues or any other disciplinary action.
 - e) **If the information provided by the student is found incorrect at any time during his study period.**
 - g) If the student fails to maintain academic standards of the university

AND THE STUDENT FURTHER COVENANTS, that in case of breach of any of the above terms and conditions as well as the rules / terms and conditions those governing scholarship award and / or his / her failure as directed by the HEC for the specified period, the student shall be bound to obey the orders as prescribed and assessed by the HEC shall be final and conclusive.

IN WITNESS WHEREOF, the parties aforementioned have signed this deed in token of acceptance thereof.

Date:

Date:

Signature of Student_____

Signature of Parent
/Guarantor_____

Name:

Name:

NIC No.

NIC No.

Signature of Witness No. 1_____

Signature of Witness No.
2_____

Name:

Name:

NIC No.

NIC No.

Annex 7: Estimating Return on Investment

Background and Scope

The ROI analysis compares the costs with the benefits of the MNBSP program. The time period of the analysis is July, 2004 (the start of the program) through December, 2011 (the date of the evaluation). Costs and benefits during this period are defined as follows.

- **Costs:** Costs include USAID’s fully-loaded costs, including overhead. The analysis does not include private costs such as out-of-pocket expenses (in excess of stipends) incurred by scholarship recipients or the opportunity costs to recipients of foregone earnings while they attended school. USAID and HEC records disaggregate costs by degree type and field of study. They do not, however, disaggregate costs by sex. The analysis allocated costs between male and female students within each field/degree category on the basis of the share of male and female students in the category.
- **Benefits:** The analysis defines benefits as the difference in projected career (25 years) earnings with and without the MNBSP-supported degree. Baseline (pre-degree) earnings are based on national income data for individuals without a college degree obtained from the HIES and PSLM surveys. Post-degree incomes are determined from incomes reported by MNBSP alumni in the MSI survey of alumni. These values determine starting incomes which are then adjusted each year by an “experience premium” based on Mincer earnings function estimates calculated for Pakistan.

Estimating Benefits

The aggregate benefit for each field/sex/degree category is the number of beneficiaries in that category multiplied by the average income premium for the category. Beneficiaries are MNBSP graduates who a) could not have continued their education without the scholarship and b) are employed. This section describes the calculation of each of these key values – i.e. income increment and number of beneficiaries.

Incremental Income Associated with MNBSP-Supported Degree

The analysis defined the monetary benefit of an MNBSP-supported degree as the difference in projected career earnings with and without the degree. The HIES and PSLM estimates of average pre-degree earnings for men and women with higher secondary school certificates (i.e. 12 years of education) represented pre-degree incomes for MNBSP alumni. The analysis estimated post-degree earnings from earnings reported by respondents to the MSI survey of MNBSP alumni. The survey collected current income data from 177 respondents who reported being employed (either by an organization or self-employed) and who provided income data. Table 20 summarizes average monthly income estimates used in the ROI analysis and the number of observations on which each estimate is based. Note that the number of observations is small – particularly for women.

TABLE 20: AVERAGE INCOME ESTIMATES USED IN ROI ANALYSIS

Sex	Estimated average monthly income (PKR)				
	Pre-degree	Agriculture		Business	
		Bachelor	Master	Bachelor	Master
Male	13,607	22,040	28,086	37,063	59,852
N		29	29	32	50
Female	10,479	13,500	14,700	23,167	28,663
N		2	10	6	19

Source: HIES and PSLM, MSI survey of MNBSP alumni.

The analysis increases both pre- and post-degree incomes each year to account for experience. The “experience premium” of 5.839 percent annually is based on an estimated Mincer earnings function using the national level data base of HIES/PSLM 2010-11.⁵⁹ Table 21 shows estimation results.

TABLE 21 : CALCULATION OF "EXPERIENCE PREMIUM"

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	8.290	.030		277.689	.000
	MALE	.373	.017	.178	22.365	.000
	EDUBSC	.422	.024	.279	17.623	.000
	EDUMSC	.880	.027	.504	32.307	.000
	PUNJB	2.574E-02	.018	.017	1.407	.159
	SINDH	-4.55E-02	.018	-.030	-2.567	.010
	KPK	-.105	.021	-.052	-5.023	.000
	EXPERIEN	5.839E-02	.002	.796	26.816	.000
	EXPER2	-7.32E-04	.000	-.367	-13.856	.000
	EXPBSC	-1.99E-03	.001	-.025	-1.529	.126
	EXPMSC	-6.16E-03	.002	-.062	-4.018	.000

a. Dependent Variable: LINCM

The income increment attributable to MNBSP in a given year (t) is thus:

$$Benefit_t = \sum_{n=0t} (I_{dn} - I_{bn}) * (1 + ep)^n$$

where ep is the experience premium, I denotes annual income, b denotes baseline and d denotes pre-degree annual income. Finally, the analysis discounts benefits to 2011 using a 12 percent discount rate.

⁵⁹ MSI estimated the Mincer earnings function from data from 10,864 respondents to the HIES/PSLM surveys of 2010/11.

Number of Graduates

The number of beneficiaries in each year is the number of graduates in that year adjusted downward by the percentage who would have been able to pursue their degrees without the scholarship and by the percentage who are unemployed. Table 22 reports the percentage of scholarship recipients who reported that they could not have continued their studies without the scholarship. The MSI alumni survey also found that 11 percent of alumni had not found a job since graduating. The analysis takes this as the chronic unemployment rate and reduces the number of beneficiaries accordingly. The cumulative number of beneficiaries in a given year is thus:

$$\text{Beneficiaries}_t = \text{Beneficiaries}_{t-1} + \text{Graduates}_t (b - u)$$

Where t denotes year, u is the chronic unemployment rate (11.22 percent) and b is the percentage of alumni who said they could not have continued their education without the scholarship.

TABLE 22 : PERCENTAGE OF SCHOLARSHIP RECIPIENTS WHO COULD NOT HAVE COMPLETED STUDIES WITHOUT THE SCHOLARSHIP

Degree	Agriculture		Business	
	Male	Female	Male	Female
Bachelor	62.5%	73.3%	72.5%	85.7%
Master	48.0%	70.0%	80.4%	75.0%

Source: MSI survey of MNBSP alumni.

Table 23 through Table 30 summarize the derivation of the present value of benefits for each combination of field, sex and degree.

- **Number of graduates (actual)** represents the actual number of scholarship recipients who graduated in a given year based on HEC records.
- **Number of graduates (adjusted)** represents the number of graduates who could not have continued their studies without the scholarship (Table 22) and those who are unemployed (11.22 percent of all graduates).
- **Number of graduates (cumulative adjusted)** is the total cumulative adjusted number of graduates in each year. This column facilitates calculation of cumulative benefits in the next column.
- **Benefits (aggregate baseline)** is the estimated total amount of money the cumulative graduates in a given year would have earned had they not received the scholarship. For men this is PKR 163,284 and for women it is PKR 125,748.
- **Benefits (aggregate post degree)** is the estimated total annual earnings of the cumulative graduates after earning their degrees. This is based on survey results summarized in Table 20.
- **Benefits (difference, discounted)** is the difference between aggregate post degree income and aggregate baseline income discounted to 2011 by 12 percent. This is the cumulative, discounted, impact of the scholarship program in each year.
- **PV** is the present value of benefits in PKR and in USD. It is the sum of discounted benefits over the 25-year horizon over which the evaluation counted benefits.

TABLE 23: BENEFITS – MALE, AGRICULTURE, BACHELOR

Year	Number of graduates			Benefits (PKR)		
	Actual	Adjusted	Cumulative adjusted	Aggregate baseline	Aggregate post-degree	Difference (discounted)
2004	0	0	0	0	0	0
2005	0	0	0	0	0	0
2006	0	0	0	0	0	0
2007	16	8	8	1,358,523	2,200,443	1,324,777
2008	50	26	34	5,683,231	9,205,310	4,948,267
2009	139	72	107	17,817,242	28,859,153	13,850,973
2010	0	0	107	18,857,591	30,544,239	13,089,046
2011	0	0	107	19,958,686	32,327,717	12,369,031
2012	0	0	107	21,124,074	34,215,333	11,688,624
2013	0	0	107	22,357,508	36,213,166	11,045,646
2014	0	0	107	23,662,963	38,327,653	10,438,036
2015	0	0	107	25,044,644	40,565,605	9,863,851
2016	0	0	107	26,507,000	42,934,230	9,321,251
2017	0	0	107	28,054,744	45,441,160	8,808,499
2018	0	0	107	29,692,861	48,094,469	8,323,953
2019	0	0	107	31,426,627	50,902,705	7,866,061
2020	0	0	107	33,261,627	53,874,914	7,433,358
2021	0	0	107	35,203,774	57,020,670	7,024,457
2022	0	0	107	37,259,322	60,350,107	6,638,049
2023	0	0	107	39,434,894	63,873,950	6,272,897
2024	0	0	107	41,737,498	67,603,550	5,927,832
2025	0	0	107	44,174,550	71,550,921	5,601,748
2026	0	0	107	46,753,902	75,728,780	5,293,602
2027	0	0	107	49,483,862	80,150,583	5,002,406
2028	0	0	107	52,373,225	84,830,576	4,727,229
2029	0	0	107	55,431,298	89,783,833	4,467,190
2030	0	0	107	58,667,931	95,026,311	4,221,454
2031	0	0	107	62,093,552	100,574,897	3,989,237
2032	0	0	107	65,719,194	106,447,466	3,769,793
2033	0	0	107	69,556,538	112,662,933	3,562,421
2034	0	0	107	73,617,944	119,241,322	3,366,456
2035	0	0	107	77,916,496	126,203,823	3,181,271
2036	0	0	107	82,466,040	133,572,864	3,006,272
PV (PKR)						206,423,689
PV (USD)						2,293,597

TABLE 24: BENEFITS – FEMALE, AGRICULTURE, BACHELOR

Year	Number of graduates			Benefits (PKR)		
	Actual	Adjusted	Cumulative adjusted	Aggregate baseline	Aggregate post-degree	Difference (discounted)
2004		0	0	0	0	0
2005		0	0	0	0	0
2006	0	0	0	0	0	0
2007	16	12	12	1,475,443	1,900,800	669,307
2008	7	5	17	2,207,101	2,843,388	893,937
2009	34	25	42	5,471,290	7,048,613	1,978,594
2010	0	0	42	5,790,759	7,460,182	1,869,754
2011	0	0	42	6,128,881	7,895,782	1,766,900
2012	0	0	42	6,486,747	8,356,816	1,669,705
2013	0	0	42	6,865,508	8,844,771	1,577,856
2014	0	0	42	7,266,385	9,361,217	1,491,060
2015	0	0	42	7,690,669	9,907,818	1,409,039
2016	0	0	42	8,139,727	10,486,336	1,331,529
2017	0	0	42	8,615,006	11,098,633	1,258,283
2018	0	0	42	9,118,036	11,746,682	1,189,066
2019	0	0	42	9,650,438	12,432,571	1,123,657
2020	0	0	42	10,213,927	13,158,509	1,061,846
2021	0	0	42	10,810,318	13,926,834	1,003,435
2022	0	0	42	11,441,533	14,740,022	948,237
2023	0	0	42	12,109,604	15,600,692	896,075
2024	0	0	42	12,816,684	16,511,616	846,783
2025	0	0	42	13,565,050	17,475,730	800,203
2026	0	0	42	14,357,113	18,496,138	756,184
2027	0	0	42	15,195,425	19,576,127	714,587
2028	0	0	42	16,082,686	20,719,177	675,279
2029	0	0	42	17,021,754	21,928,970	638,132
2030	0	0	42	18,015,654	23,209,402	603,029
2031	0	0	42	19,067,588	24,564,599	569,857
2032	0	0	42	20,180,944	25,998,926	538,510
2033	0	0	42	21,359,310	27,517,004	508,887
2034	0	0	42	22,606,480	29,123,721	480,894
2035	0	0	42	23,926,472	30,824,256	454,440
2036	0	0	42	25,323,539	32,624,084	429,442
PV (PKR)						30,154,510
PV (USD)						335,050

TABLE 25 : BENEFITS – MALE, AGRICULTURE, MASTER

Year	Number of graduates			Benefits (PKR)		
	Actual	Adjusted	Cumulative adjusted	Aggregate baseline	Aggregate post-degree	Difference (discounted)
2004		0	0	0	0	0
2005		0	0	0	0	0
2006	34	16	16	2,664,795	5,500,403	4,997,311
2007	53	25	42	6,974,337	14,395,730	11,677,705
2008	15	7	49	8,557,214	17,662,945	12,792,898
2009	43	21	70	12,427,051	25,650,677	16,587,717
2010	19	9	79	14,641,817	30,222,175	17,450,001
2011	80	38	117	21,766,858	44,928,973	23,162,116
2012	42	20	137	26,329,630	54,346,992	25,015,502
2013	0	0	137	27,867,017	57,520,313	23,639,426
2014	0	0	137	29,494,172	60,878,924	22,339,046
2015	0	0	137	31,216,337	64,433,644	21,110,199
2016	0	0	137	33,039,059	68,195,925	19,948,950
2017	0	0	137	34,968,210	72,177,885	18,851,580
2018	0	0	137	37,010,003	76,392,352	17,814,574
2019	0	0	137	39,171,018	80,852,901	16,834,614
2020	0	0	137	41,458,213	85,573,902	15,908,560
2021	0	0	137	43,878,958	90,570,562	15,033,447
2022	0	0	137	46,441,051	95,858,977	14,206,473
2023	0	0	137	49,152,744	101,456,183	13,424,990
2024	0	0	137	52,022,772	107,380,209	12,686,496
2025	0	0	137	55,060,382	113,650,140	11,988,625
2026	0	0	137	58,275,358	120,286,172	11,329,144
2027	0	0	137	61,678,056	127,309,681	10,705,940
2028	0	0	137	65,279,438	134,743,293	10,117,017
2029	0	0	137	69,091,104	142,610,954	9,560,491
2030	0	0	137	73,125,334	150,938,008	9,034,579
2031	0	0	137	77,395,122	159,751,278	8,537,596
2032	0	0	137	81,914,223	169,079,155	8,067,952
2033	0	0	137	86,697,194	178,951,687	7,624,143
2034	0	0	137	91,759,444	189,400,676	7,204,747
2035	0	0	137	97,117,277	200,459,782	6,808,422
2036	0	0	137	102,787,955	212,164,628	6,433,898
PV (PKR)						430,894,158
PV (USD)						4,787,713

TABLE 26: BENEFITS – FEMALE, AGRICULTURE, MASTER

Year	Number of graduates			Benefits (PKR)		
	Actual	Adjusted	Cumulative adjusted	Aggregate baseline	Aggregate post-degree	Difference (discounted)
2004		0	0	0	0	0
2005		0	0	0	0	0
2006	4	3	3	352,094	493,920	249,945
2007	8	6	8	1,076,842	1,510,600	682,527
2008	6	4	13	1,667,860	2,339,684	943,864
2009	5	4	16	2,205,365	3,093,698	1,114,325
2010	13	9	25	3,478,443	4,879,579	1,569,273
2011	32	22	48	6,498,304	9,115,858	2,617,553
2012	21	15	62	8,726,236	12,241,213	3,138,372
2013	0	0	62	9,235,761	12,955,977	2,965,734
2014	0	0	62	9,775,037	13,712,477	2,802,592
2015	0	0	62	10,345,801	14,513,148	2,648,424
2016	0	0	62	10,949,893	15,360,571	2,502,737
2017	0	0	62	11,589,257	16,257,475	2,365,064
2018	0	0	62	12,265,954	17,206,748	2,234,965
2019	0	0	62	12,982,163	18,211,450	2,112,022
2020	0	0	62	13,740,191	19,274,817	1,995,842
2021	0	0	62	14,542,481	20,400,274	1,886,053
2022	0	0	62	15,391,616	21,591,446	1,782,303
2023	0	0	62	16,290,333	22,852,170	1,684,260
2024	0	0	62	17,241,525	24,186,508	1,591,611
2025	0	0	62	18,248,258	25,598,759	1,504,058
2026	0	0	62	19,313,774	27,093,470	1,421,321
2027	0	0	62	20,441,505	28,675,458	1,343,136
2028	0	0	62	21,635,084	30,349,818	1,269,252
2029	0	0	62	22,898,357	32,121,944	1,199,431
2030	0	0	62	24,235,392	33,997,544	1,133,452
2031	0	0	62	25,650,497	35,982,661	1,071,102
2032	0	0	62	27,148,229	38,083,688	1,012,182
2033	0	0	62	28,733,414	40,307,395	956,503
2034	0	0	62	30,411,158	42,660,943	903,887
2035	0	0	62	32,186,866	45,151,916	854,165
2036	0	0	62	34,066,257	47,788,336	807,178
PV (PKR)						50,363,131
PV (USD)						559,590

TABLE 27: BENEFITS – MALE, BUSINESS, BACHELOR

Year	Number of graduates			Benefits (PKR)		
	Actual	Adjusted	Cumulative adjusted	Aggregate baseline	Aggregate post-degree	Difference (discounted)
2004		0	0	0	0	0
2005		0	0	0	0	0
2006	4	3	3	473,524	1,289,775	1,438,514
2007	0	0	3	501,173	1,365,085	1,359,383
2008	37	27	30	4,910,529	13,375,211	11,892,268
2009	82	59	89	14,904,489	40,596,577	32,228,155
2010	0	0	89	15,774,762	42,967,011	30,455,319
2011	0	0	89	16,695,851	45,475,855	28,780,005
2012	0	0	89	17,670,721	48,131,190	27,196,847
2013	0	0	89	18,702,515	50,941,570	25,700,778
2014	0	0	89	19,794,554	53,916,049	24,287,006
2015	0	0	89	20,950,358	57,064,207	22,951,003
2016	0	0	89	22,173,650	60,396,186	21,688,493
2017	0	0	89	23,468,369	63,922,719	20,495,433
2018	0	0	89	24,838,687	67,655,167	19,368,001
2019	0	0	89	26,289,018	71,605,552	18,302,588
2020	0	0	89	27,824,034	75,786,600	17,295,782
2021	0	0	89	29,448,680	80,211,780	16,344,360
2022	0	0	89	31,168,188	84,895,345	15,445,274
2023	0	0	89	32,988,098	89,852,385	14,595,646
2024	0	0	89	34,914,273	95,098,865	13,792,755
2025	0	0	89	36,952,918	100,651,688	13,034,030
2026	0	0	89	39,110,599	106,528,740	12,317,042
2027	0	0	89	41,394,267	112,748,953	11,639,495
2028	0	0	89	43,811,278	119,332,365	10,999,219
2029	0	0	89	46,369,418	126,300,181	10,394,164
2030	0	0	89	49,076,929	133,674,849	9,822,392
2031	0	0	89	51,942,531	141,480,123	9,282,073
2032	0	0	89	54,975,455	149,741,148	8,771,476
2033	0	0	89	58,185,472	158,484,534	8,288,966
2034	0	0	89	61,582,921	167,738,445	7,832,999
2035	0	0	89	65,178,748	177,532,693	7,402,114
2036	0	0	89	68,984,535	187,898,827	6,994,932
PV (PKR)						480,396,511
PV (USD)						5,337,739

TABLE 28: BENEFITS – FEMALE, BUSINESS, BACHELOR

Year	Number of graduates			Benefits (PKR)		
	Actual	Adjusted	Cumulative adjusted	Aggregate baseline	Aggregate post-degree	Difference (discounted)
2004		0	0	0	0	0
2005		0	0	0	0	0
2006	4	3	3	431,136	953,143	919,955
2007	0	0	3	456,310	1,008,797	869,349
2008	37	32	35	4,470,962	9,884,273	7,605,313
2009	82	70	105	13,570,309	30,000,848	20,610,467
2010	0	0	105	14,362,680	31,752,597	19,476,707
2011	0	0	105	15,201,317	33,606,631	18,405,314
2012	0	0	105	16,088,922	35,568,922	17,392,858
2013	0	0	105	17,028,354	37,645,792	16,436,095
2014	0	0	105	18,022,639	39,843,930	15,531,963
2015	0	0	105	19,074,981	42,170,417	14,677,567
2016	0	0	105	20,188,769	44,632,747	13,870,169
2017	0	0	105	21,367,592	47,238,853	13,107,186
2018	0	0	105	22,615,245	49,997,130	12,386,174
2019	0	0	105	23,935,749	52,916,462	11,704,824
2020	0	0	105	25,333,358	56,006,255	11,060,954
2021	0	0	105	26,812,573	59,276,460	10,452,503
2022	0	0	105	28,378,159	62,737,612	9,877,522
2023	0	0	105	30,035,159	66,400,862	9,334,170
2024	0	0	105	31,788,912	70,278,008	8,820,707
2025	0	0	105	33,645,067	74,381,541	8,335,490
2026	0	0	105	35,609,603	78,724,679	7,876,963
2027	0	0	105	37,688,847	83,321,413	7,443,660
2028	0	0	105	39,889,499	88,186,550	7,034,192
2029	0	0	105	42,218,647	93,335,763	6,647,249
2030	0	0	105	44,683,794	98,785,638	6,281,591
2031	0	0	105	47,292,880	104,553,731	5,936,047
2032	0	0	105	50,054,312	110,658,624	5,609,512
2033	0	0	105	52,976,983	117,119,981	5,300,938
2034	0	0	105	56,070,309	123,958,617	5,009,339
2035	0	0	105	59,344,254	131,196,560	4,733,781
2036	0	0	105	62,809,365	138,857,127	4,473,381
PV (PKR)						307,221,941
PV (USD)						3,413,577

TABLE 29: BENEFITS – MALE, BUSINESS, MASTER

Year	Number of graduates			Benefits (PKR)		
	Actual	Adjusted	Cumulative adjusted	Aggregate baseline	Aggregate post-degree	Difference (discounted)
2004		0	0	0	0	0
2005		0	0	0	0	0
2006	4	3	3	524,841	2,308,576	3,143,550
2007	0	0	3	555,487	2,443,374	2,970,627
2008	37	30	33	5,442,705	23,940,374	25,987,893
2009	82	66	99	16,519,754	72,664,068	70,427,428
2010	0	0	99	17,484,342	76,906,923	66,553,291
2011	0	0	99	18,505,253	81,397,519	62,892,266
2012	0	0	99	19,585,775	86,150,320	59,432,629
2013	0	0	99	20,729,388	91,180,637	56,163,304
2014	0	0	99	21,939,777	96,504,674	53,073,821
2015	0	0	99	23,220,841	102,139,582	50,154,287
2016	0	0	99	24,576,706	108,103,512	47,395,353
2017	0	0	99	26,011,739	114,415,676	44,788,186
2018	0	0	99	27,530,565	121,096,408	42,324,436
2019	0	0	99	29,138,075	128,167,227	39,996,214
2020	0	0	99	30,839,447	135,650,911	37,796,065
2021	0	0	99	32,640,162	143,571,568	35,716,944
2022	0	0	99	34,546,021	151,954,712	33,752,193
2023	0	0	99	36,563,163	160,827,348	31,895,521
2024	0	0	99	38,698,086	170,218,057	30,140,983
2025	0	0	99	40,957,668	180,157,089	28,482,959
2026	0	0	99	43,349,186	190,676,461	26,916,142
2027	0	0	99	45,880,345	201,810,060	25,435,514
2028	0	0	99	48,559,298	213,593,749	24,036,334
2029	0	0	99	51,394,676	226,065,488	22,714,121
2030	0	0	99	54,395,611	239,265,452	21,464,641
2031	0	0	99	57,571,770	253,236,162	20,283,894
2032	0	0	99	60,933,386	268,022,621	19,168,099
2033	0	0	99	64,491,287	283,672,462	18,113,683
2034	0	0	99	68,256,933	300,236,097	17,117,268
2035	0	0	99	72,242,455	317,766,883	16,175,666
2036	0	0	99	76,460,692	336,321,291	15,285,860
PV (PKR)						1,049,799,173
PV (USD)						11,664,435

TABLE 30 : BENEFITS – FEMALE, BUSINESS, MASTER

Year	Number of graduates			Benefits (PKR)		
	Actual	Adjusted	Cumulative adjusted	Aggregate baseline	Aggregate post-degree	Difference (discounted)
2004		0	0	0	0	0
2005		0	0	0	0	0
2006	4	3	3	377,244	1,031,872	1,153,678
2007	0	0	3	399,271	1,092,123	1,090,216
2008	37	28	31	3,912,092	10,700,708	9,537,517
2009	82	62	92	11,874,021	32,478,897	25,846,757
2010	0	0	92	12,567,345	34,375,340	24,424,955
2011	0	0	92	13,301,152	36,382,516	23,081,364
2012	0	0	92	14,077,806	38,506,891	21,811,683
2013	0	0	92	14,899,809	40,755,309	20,611,846
2014	0	0	92	15,769,809	43,135,011	19,478,010
2015	0	0	92	16,690,609	45,653,664	18,406,546
2016	0	0	92	17,665,173	48,319,382	17,394,021
2017	0	0	92	18,696,643	51,140,750	16,437,195
2018	0	0	92	19,788,340	54,126,859	15,533,002
2019	0	0	92	20,943,781	57,287,326	14,678,548
2020	0	0	92	22,166,688	60,632,333	13,871,097
2021	0	0	92	23,461,001	64,172,655	13,108,063
2022	0	0	92	24,830,889	67,919,696	12,387,003
2023	0	0	92	26,280,764	71,885,527	11,705,607
2024	0	0	92	27,815,298	76,082,923	11,061,694
2025	0	0	92	29,439,434	80,525,405	10,453,202
2026	0	0	92	31,158,402	85,227,284	9,878,183
2027	0	0	92	32,977,741	90,203,705	9,334,794
2028	0	0	92	34,903,311	95,470,699	8,821,297
2029	0	0	92	36,941,316	101,045,233	8,336,047
2030	0	0	92	39,098,319	106,945,264	7,877,490
2031	0	0	92	41,381,270	113,189,798	7,444,158
2032	0	0	92	43,797,523	119,798,951	7,034,663
2033	0	0	92	46,354,860	126,794,012	6,647,693
2034	0	0	92	49,061,520	134,197,514	6,282,011
2035	0	0	92	51,926,222	142,033,307	5,936,444
2036	0	0	92	54,958,194	150,326,631	5,609,887
PV (PKR)						385,274,669
PV (USD)						4,280,830

Costs

The Program Implementation Letter No. 12 summarizes USAID fully loaded costs. These consist of a) scholarship (including stipend), b) equipment/commodities and c) scholarship management unit costs. Scholarship funds, by far the largest component of costs, are disbursed by university. For comparison with benefit estimates, the analysis disaggregated costs by field, sex and degree type. USAID provided cost data by field and degree type. The evaluation team disaggregated costs within each category by sex using the proportion of male and female graduates in each field and degree type category. Table 31 documents the distribution of scholarships by degree, sex and field of study.

TABLE 31: DISTRIBUTION OF SCHOLARSHIPS BY DEGREE, SEX AND FIELD

Degree	Agriculture		Business	
	Male	Female	Male	Female
Bachelor	78%	22%	79%	21%
Master	76%	24%	78%	22%

Source: Aalysis of data on scholarship recipients provided by HEC.

Table 32 summarizes program costs by year, field, degree type and sex.

TABLE 32: MNBSP PROGRAM COSTS

Year	Agriculture				Business			
	Bachelor		Master		Bachelor		Master	
	Male	Female	Male	Female	Male	Female	Male	Female
2004	0	0	0	0	0	0	0	0
2005	86,037	23,923	62,897	19,573	115,933	31,104	166,593	48,056
2006	54,910	15,268	42,704	13,289	106,298	28,519	104,656	30,189
2007	628,401	174,726	208,940	65,020	721,991	193,705	307,332	88,653
2008	638,729	177,598	448,537	139,580	587,374	157,588	629,256	181,516
2009	224,292	62,364	62,268	19,377	262,421	70,406	50,654	14,612
2010	10,023	2,787	0	0	143,550	38,514	0	0
2011	3,660	1,018	0	0	52,419	14,064	0	0

Source: Program Implementation Letter No. 12: USAID funded Merit and Needs-Based Scholarship Program.