

Demand and Intake Capacity in Selected Departments of Postgraduate Studies in Addis Ababa University

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Abstract

The main purpose of this research paper is to examine problems existing in the current expansion of postgraduate programs in AAU. Moreover, to indicate possible intervention strategies for the university governing bodies and educational planners to alleviate the prevailing problems, regarding postgraduate programs. To this end, a descriptive survey method was employed. The study was conducted on purposely-selected twelve departments, which employs 16.6% of the total (72) departments. The data for the study were obtained from primary and secondary sources. Under primary sources: head of graduate studies and research office, two associate deans of postgraduate programs, and four department heads were selected through purposive sampling techniques. From these respondents data was gathered using structured interview. In addition, 40 % (75) of instructors involved in graduate programs and 40 % (272) of graduate students were treated using questionnaires. Stratified random sampling technique was employed to select instructors and graduate students. Under secondary data, documents that had information about applicants and accepted students for the last five years were assessed. To analyze the data, percentage, mean and chi-square statistical tools were used. Based on the analysis, postgraduate programs of AAU are increased their intake capacity of students than the past. Nevertheless, in various departments there is shortage of qualified instructors and inadequate classrooms, library and laboratory services. In light of these findings, the following recommendations were forwarded: Ministry of education should expand postgraduate programs in other universities in order to share the burden of AAU. The capacity of the program should be increased and strengthen in the areas' such as academic staffs, classrooms, libraries, laboratory service. Finally, financial constraints need to be resolved through the introduction of cost sharing in the program.

Keywords: Addis Ababa University; intake capacity; demand; postgraduate

Background of the Study

Education has a major role for economic, social, political and cultural improvement of a country. It enhances higher standard of living and creates economically, socially and politically stable society. Furthermore, it is believed that education is a key to unlock the gate towards modernization. Concerning this Smith and others (1966: 39) stated that, "the task of education has often been stated as the guidance of the total growth and development of young people so that they will be competent, adjusted, and social minded citizens of the community and nation."

Improvement in education (Access, Quality, Relevance and Equity) contributes to the building of the social and economic wellbeing of a nation. Concerning this idea, Beare and Boved (1993:161) state that education has always made a significant contribution to the economic development of a country.

Production, labor and entrepreneurial abilities are subjected to improvement by education in the widest sense; especially by higher education. It makes people more receptive to change and innovation (Kebede, 2002:2). Knowledge and technology become more important in economic development, only if it is backed by higher education and research. On the other hand, ignoring higher education will tend to result in suffering from relatively slow economic progress (Teshome, 2004: 2).

Aggarwal (1997:249) explains that especially postgraduate education and research a the key role in the activities of modernizing a country. Its objective is to take student to the threshold of new knowledge. Science-based technology, the explosion of knowledge, and rapid social and cultural change are the three main feature of modernization. These features of modernization could be well developed through postgraduate education and research. Therefore, every institution, which provides postgraduate instruction, should have capable staff, which actively participates in research, adequate research facilities in terms of laboratory equipment and research journals.

In Ethiopia, Modern Higher Education is a recent phenomenon. It began with the establishment of the University College of Addis Ababa in 1950 following the approval by the then government of Emperor Haile Selassie. Its main objective was to provide education in the fields of Art and science with certificate level. (Amare, 2005:9).

Although efforts have been made to access an over, all level of education, enrollment at tertiary level is very low. Hedija (2002:9) by referring World Bank (2000), Human Development Report of World Bank confirms that the enrolment rate of students at tertiary level in Ethiopia is very low (less than 1%) as compared to other countries such as India (7%), South Africa (15%) and England (52%). Now days the government is putting great

efforts to increase the enrolment ratio in postgraduate level. However, the number of graduate student in various universities is still insignificant.

According to data obtained from AAU Registrar Office (2006), there were 11,543 applicants for Graduate Programs in 2006/07. However, the University accepted only 2,106 of the applicants. This figure shows that only 18.2% of the applicants were accepted. This indicates that there is a significant gap between the number of applicants and the number of admitted students in the university.

In light of the above fact, the main objective of this study is to examine the major problems encountered in the postgraduate expansion program of AAU, which is designed in order to narrow the gap between demand for and intake capacity of postgraduate programs. Moreover, the specific objectives are:

Methodologies and Research Design

Study design

A descriptive institution based survey method was conducted..

Source of Data

The data for the study was obtained from primary and secondary sources. Under primary source, data were gathered from Addis Ababa University Officials (Directors of Graduate School and Research Office, Associate Deans of Postgraduate programs, and Heads of Departments) by using structured interview. Data from Instructors and students who were involved in graduate programs 2006/07 are gathered through questionnaires.

Addis Ababa University officials were selected depending on their direct involvement in the planning and implementation of the program. Associate Deans of Graduate Programs, Departments Heads, Instructors and Students were chosen based on their closeness to the issue related to graduate programs.

Under the secondary sources of data, relevant documents, which constitute regulations, guidelines, strategic planning, and statistical data of students in particular, were assessed.

Sample and Sampling Techniques

Currently about 72 departments are offering graduate programs through the School of Graduate Studies of Addis Ababa University (Registrar office of AAU, 2006). The study focuses only on twelve selected departments based on their demand and intake capacity. This constitutes 16.6% of the total departments. The following table shows sample distributions of respondents.

Table 1: Distributions of Sampled Respondents

No	Departments	Total No of Instructors.	Sample No of Instructors		Applicants for 2006/07	2006/07 Total Students No.	Sample of the Student	
		No	No	%			No	%
1	Archaeology	7	3	43	10	5	2	40
2	Public Health	11	4	37	480	53	21	40
3	Multilingual and Multicultural	13	5	38	18	14	6	42
4	Linguistics	9	4	44	36	29	11	38
5	TEFL	36	14	39	218	122	49	38
6	Educational Planning and Management	8	3	38	306	75	30	40
7	Regional and Local Development Study	10	4	40	602	43	17	40
8	Management and Business Administration	11	4	37	908	36	14	39
9	Civil Engineering	16	7	44	325	67	29	43
10	Environment Science	19	8	42	356	111	44	39
11	Biology	36	14	39	262	108	43	40
12	Sociology	12	5	42	568	16	6	38
	Total	188	75	40	4089	679	272	40

Source: AAU staff list of 2004 and AAU registrar office (2006)

Sample

The respondents of the study were from the selected graduate programs. These are the Head of Graduate Studies and Research Office two (2) Associate Deans of postgraduate programs out of seven deans, (this employed 29%)

and from 12 Department Heads, four (4) of them were chosen (these are 33 % of the total). 75 instructors were selected from the total 188 instructors of samples departments (this was about 40 %). Among 679 students of selected departments, 40 % of them were chosen (and this constitutes about 272 students).

Sampling Techniques

Respondents were selected based on purposive, and stratified random sampling technique. Purposive sampling was employed for Graduate Studies and Research Head, Associate Deans of postgraduate programs, and Head of Departments. Purposive sampling technique was also used to incorporate first year graduate students only. This was because; second year students were not available during data collection.

Stratified random sampling technique was used to secure relevant and reliable data from Instructors and Students from each selected departments with consideration of gender. In addition to this, using stratified random sampling technique is believed to have potential advantage to maintain the inclusion of sample fields.

Data Gathering Techniques/Tools

In the process of this study, data were collected through primary and secondary sources. The primary data were gathered by employing the research questionnaire and structured interviews.

Methods of Data Analysis

Information obtained through the open-ended question items, structured interviews and documents were considered during data interpretations in accordance with the items in the questionnaires. Then depending on the nature of the questions, different statistical tools such as percentage, mean, and chi-square test were employed for data analysis to explore and describe differences and similarities between respondents of different groups.

Percentage was used to analyze various characteristics of respondents such as their personal background. The chi-square (χ^2) of association was used to establish the difference between the respondents (instructors and students) opinion in their response to item given. The mean score was also used to identify which of the item is rated above average to be considered as the member of major factors, which highly affect the graduate programs of AAU. Moreover, to test whether there is significant difference between respondents given by two groups to major factors that influence intake of the graduate programs. To tolerate errors that came due to chance the 0.5 level of significant was used. To analyze data, SPSS software computer program was employed.

Result

The questionnaire was distributed to 75 instructors, who are involved in graduate programs of the university and 272 graduate students. Among the distributed questionnaires, 81.3 percent (61) of instructors and 94 percent (256) of students filled and returned the questionnaire. In addition, the Head of Graduate School and Research, two Associate Deans of Postgraduate Programs, and four Heads of Departments were interviewed.

Characteristics of Respondents

Description of the characteristic of the samples of the study is presented below in table 2.

Table 2: Characteristics of Instructors Respondents

Characteristics	Items	Instructors	
		No	%
Age in years	20-40	19	31.1
	41-60	29	47.5
	Above 60	13	21.3
Sex	Male	56	91.8
	Female	5	8.2
Level of education	PhD	43	70.5
	MA/MSc	18	29.5
	Assistant professor	27	44.3
	Associate Professor	32	52.5
	Professor	2	3.3
Term of employment	Full Time	61	100
Years taught in graduate program of AAU	5 and above year	61	100

Table 3 presents the characteristics of student respondents. According to the table 84 percent, (215) are male and the rest 16 percent (41) are female. When it comes to respondents' age, 85.9 percent (220) of students were between 20 to 40 years.

Table 3, Characteristics of graduate student respondents

Variables	Response options	No	%
Age	20-40	220	85.9
	41-60	36	14.1
Sex	Male	215	84.0
	Female	41	16.0
Sponsorship	Government	127	49.6
	Self	129	50.4
	NGO's	-	-

Trend of Graduate Programs in AAU for the Past five Years (2003/04-2006/7)

Even though most graduate programs have large number of applicants, there are few departments with have relatively few numbers of applicants. As it is shown in, the table above departments such as Archaeology and Linguistics can be cited as an example. They had few numbers of applicants for the past five academic years. The reasons are related to low job opportunity. These departments are assumed to have low market demand in comparison to others. Thus, students were not interested to join such departments.

Table 4: Applicants and Accepted Students of Graduate Programs for the Last five- Years

Department	2002/3		2003/4		2004/5		2005/6		2006/7	
	App.	Acce.	App.	Acce.	Appt.	Acce.	Appt	Acce.	App.	Acce.
Archaeology	7	7	16	5	6	4	-	-	10	5
Sociology	-	-	-	-	-	-	-	-	568	16
Linguistics	11	11	12	16**	16	15	8	7	36	29
EdPM	33	20	78	44	87	47	102	57	306	75
TEFL	47	30	108	63	85	95	52	50	218	122
Environment Science	13	13	9	17	65	29	92	52	356	111
Biology	96	79	12	12	16	4	56	74**	267	108
Multilingual and Multicultural	-	-	-	-	-	-	-	-	18	14
MBA	228	25	286	52	374	61	336	64	908	38
Civil Engineer	68	44	2	-	27	43	73	39	325	67
Public Health	93	40	138	49	190	65	126	51	480	53
RLDs	-	-	-	-	147	57	*	49	602	43
Total	596	269	661	258	1013	420	1007	443	4094	618

Note: App-applicants Acce. -accepted

* Not available. **additional students transfer from anther departments.

What is actually observed from Table five is that instructors and students had different opinion on selection criteria. One of the points raised was applicants for postgraduate programs should have 2.50 minimum cumulative GPA or they should have only 2.00 (having first degree is enough). These χ^2 values confirm that there was opinion difference; χ^2 values are 76.603 and 56.963 to the first and the second item respectively. These χ^2 values were greater than the table values (9.49). Thus, there was significant difference of opinion between the two groups. Majority of instructors 78.6 percent (48) expressed their agreement.

Table 5: Opinion of respondents about selection criteria of graduate students

Selection Criteria Items	R.	1		2		3		4		5		χ^2
		No	%	No	%	No	%	No	%	No	%	
Academic performance (CGPA)	S	31	12.1	33	12.9	7	2.7	122	47.7	63	24.6	3.161
	I	5	8.2	6	9.8	3	4.9	27	44.3	20	32.8	
	T	36	11.4	39	12.3	10	3.2	149	47.0	83	26.2	
Minimum CGPA 2.00	S	17	6.6	19	7.4	26	10.2	45	17.6	149	58.2	56.963
	I	14	23.0	20	32.8	8	13.1	9	14.8	10	16.4	
	T	31	9.8	39	12.1	34	10.7	54	17.0	159	50.2	
Minimum CGPA 2.50	S	52	20.3	132	51.6	19	7.4	23	9.0	30	11.7	76.603
	I	4	6.6	8	13.1	1	1.6	19	31.1	29	47.5	
	T	56	17.7	140	44.2	20	6.3	42	13.2	59	18.6	
Entrance Exam	S	10	3.9	5	2.0	22	8.6	55	21.5	164	64.1	0.549
	I	3	4.9	2	3.3	25	8.2	13	21.3	38	62.3	
	T	13	4.1	7	2.2	27	8.5	68	21.5	102	63.7	
Work experience	S	148	57.8	55	21.5	24	9.4	17	6.6	12	4.7	0.373
	I	36	59.0	14	23.0	5	8.2	3	4.9	3	4.9	
	T	184	58.0	69	21.8	29	9.1	20	6.3	15	4.7	
Personal interest	S	11	4.3	20	7.8	13	5.1	173	67.6	39	15.2	2.813
	I	3	4.9	7	11.5	2	3.3	36	59.0	13	21.3	
	T	14	4.4	27	8.5	15	4.7	209	65.9	52	16.4	
Publication	S	127	49.6	69	27.0	21	8.2	19	7.4	20	7.8	5.239
	I	23	37.7	20	32.8	9	14.8	6	9.8	3	4.9	
	T	150	47.3	89	28.1	30	9.5	25	7.9	23	7.3	

Note: Significant at alpha = 0.05 (df (4) = 9.49); 1- very unimportant. 2- Unimportant 3-undecided 4- important 5- very important; R- respondents S-Student I- Instructor T-total

The interview with the Director of Graduate Studies and Research revealed that graduate programs need ample educational inputs, and facilities. Therefore, the current capacity of the University was not adequate to implement expansion postgraduate programs. There were inadequacy of academic staff, shortage of buildings and education facilities.

According to the Director of, Graduate Studies and Research Office, alleviate shortages of academic staff, the University trying to increase salary of the staff, and recruit additional academic staff for various departments. Regarding the shortage of classrooms, there are buildings under construction in different part of the University campuses. For instance, constructions in FBE campus, Technology campus, Science campus and Veterinary campus are almost ready to begin functioning. These buildings might minimize the shortage of classrooms, reading space and laboratory (display rooms) services.

Conclusions

The outcome of the study revealed that in the past five academic years i.e. the trend about the number of applicants for and number of accepted to graduate programs of Addis Ababa University were growing very fast. In 2003/04, the total number of applicants in the departments selected for this study was about 596. However, presently the numbers increased by 3490 (more than seven fold) in 2006/07 and reached 4094. Regarding accepted students to the selected departments, the number has grown from 269 in 2003/04 to 618 in 2006 /07.

According to the findings, majority 245 (95.7%) of the respondents asserted that the major reasons that made them continue the postgraduate program were securing better employment and high income. These reasons were the influential factors for some departments to have very large number of applicants. In reverses, the students assumed that of some departments do not pave the way for better job opportunities and possibilities of high income.

Regarding students intake capacity in different departments of the program, there was a remarkable gap between departments. For instance, Biology and Environmental Science departments relatively took large number of applicants. Figuratively putting, the average percentile shows that about 30% of applicants had a chance to join the departments. However, departments like Sociology had very large number of applicants in comparison to other departments. However, the chance to join these departments was less than 8%.

The University takes action to improve its intake capacity. As a result, applicant number for the program was highly increased. However, still the University's intake capacity is very limited; it could not satisfy most applicants and the need for high-level qualified personnel of the country.

Finally, the uncovered and related issues to the study need to be further studied. Therefore, the researcher recommends other interested researchers extensively assess issues related to the demand and intake capacity of

postgraduate programs of AAU as well as other Universities in the country.

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