The Status of Research Undertaking in the Ethiopian Higher Institutions of Learning with Special Emphasis on AAU

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Abstract: One of the primary objectives of universities is the search for truth, advancement and refinement of knowledge by conducting both basic and applied research. Currently, research has been considered as one of the key tasks of institutions of higher learning not only as a matter of formality but for teaching effectively. Research should keep abreast with teaching and should help to raise the quality of teaching. Thus, research has been recognized as twin broad functions of higher education. Strengthening research and analytic capacity in higher education is an essential requirement for the improvement of development. Policies and practices, and the decisions taken regarding them, must be informed by the results of systematic, well-conceived research. Considerable progress has been so far achieved by the Addis Ababa University in this regard. However, much more needs to be done because of factors that are affecting the research environment. The challenges which tend to make conducting research in the Addis Ababa University difficult are factors within and outside the university. These can be a function of the material, human and financial organization of the University as well as the level of research culture among persons who are supposed to carry out and utilize research. The contribution of researches undertaken by the university is also hindered by its limited applicability to societal needs. Thus, attention must be paid to (a) improving the funding of both basic and applied research, (b) furthering work on advanced technologies of critical social and economic need of the country, (c) improving the preparation of researchers, (d) setting up adequate structures for the coordination, dissemination and publication of research results, (e) working to make research activities an integral part of university’s public service functions, and (f) reducing duplication through inter-institutional cooperation involving both researchers and facilities.

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Background

In today’s world, there are several promising trends, albeit against a background of much uncertainty. These trends include the transformation of relations between nations, progress towards democratization, the growing importance of human rights issues in international relations, and more global cooperation in favor of environmental protection and poverty reduction.

However, successful attempts to promote more equitable economic and social systems are rare, and have been acutely affected by high inflation rates and imbalance of trade. Currently, the maintenance, and at times the increase of inequality, poverty and injustice, accompanied by insufficient progress toward democracy, is constant threat to the security of peoples. Effective and sustainable approaches are needed to tackle such problems. In such a situation, informed policies and practices would be required to encourage a supportive economic and social development.

The economic and social changes, which Ethiopia has been witnessing since the last few years, have called for shifts from solving problems through commonsense to scientific approaches. The magnitude of poverty is now so great that its alleviation has become one of the most challenging tasks facing the Ethiopian government, in particular and the community at large. To deal with the problem of poverty, analysis must be done at both the micro- and macro- levels. In very poor rural Ethiopian societies, studies focusing on agriculture are needed, particularly in terms of the relationship between the modern and traditional agricultural methods, and how development in agriculture influences social and economic structures.

Another very serious and enduring problem that calls for scientific approach in Ethiopia is the creation of strong and circular relationship between poverty and environmental degradation. The range of these environmental problems is very diversified and extends from local to global. Global environmental problems such as treats to the ozone
layer, the exhaustion of petroleum resources and others call for worldwide action and management on the international scale.

In Ethiopia, environmental deterioration is intensified through inappropriate land-use, clearance of natural vegetation for agricultural use, settlement and urbanization, poor agricultural practices, which in turn leads to desertification. It becomes evident that unless poverty and its root causes can be tackled effectively, environmental stress in the country cannot effectively be eliminated. It is, therefore, essential that both economic growth and environmentally sound development be achieved, which will require again informed decision measures, which in turn depends on effective research undertaking.

Moreover, in Ethiopia where changes from one-party to multi-party system have already taken place and where greater respect for democratic values and human rights are highly required, the political and social system will face enormous challenges. The task of preparing the youth and the adult to contribute to such economic, social and political transformation requires scientific approaches. In addition, the diverse and extensive change in the status and content of knowledge and technology over the past decades has created a host of new needs and challenges that require attention.

Meeting these needs and overcoming these challenges require the development and efficient use of research. The contribution of higher institutions of learning to undertake research under such complex circumstances is evident. Therefore, strengthening research and analytic capacity of the Addis Ababa University in particular and other higher institutions in the country in general is an essential requirement for bringing sustainable economic, social and political development in the country. Development policies and practices, and the decision to be taken regarding them must be based on well-conceived research and evaluation results.

Much progress has been made by the Addis Ababa University in achieving this goal in the last few years. The number of researchers,
Some research institutions have grown to become the focal point of dynamic research environment, often in collaboration with national, regional and international networks.

However, much more needs to be done because of factors that are affecting the research environment. The ability of research and analysis to assist in meeting this challenge is limited because some of the faculties and institutions of the university suffer from an absolute lack of skilled researchers and viable research centers, or particular skills at various levels or units of the system.

Insufficient and/or un-sustained funding, excessive teaching load, lack of support from the government, and the general deterioration of academic infrastructure are considered by many as hindering research undertaking in the university. In this paper, therefore, an attempt has been made to analyze to what extent these critical factors have influenced the development, survival and utilization of research in the Addis Ababa University. The writer of this paper considers the following leading research questions for guiding his undertaking:

- Is Research often given priority in the University agenda?
- Is there definite overall research strategy at the University?
- What are the efforts so far made to develop and maintain capacity of research undertaking?
- Are the frameworks for dissemination of research results well developed?

Importance of Conducting Research for Instructors of Higher Institutions

Educators and trainers in higher institutions are, by necessity, decision-makers. Daily, in the course of carrying out the training process, they are faced with the task of making decisions about how to plan learning experiences, how to teach, how to guide students, how to organize a training system, and other matters. Unlike
unskilled workers who are told what to do, instructors must plan for themselves. They need to have the knowledge and skills necessary to make valid decisions about what to do and how to do. But how are instructors to know what is the right answer in a particular situation?

Although there are other sources of knowledge such as commonsense, experience, authority, and tradition, it is the scientific knowledge about the training process that makes the most valuable contribution to decision making and practice in higher institution. Instructors can turn to this source for reliable information and suggestions to be used in a decision-making situation. This fund of knowledge has been made available to educators because of research.

Mwapachu (1995) argues that research is the fulcrum of academia. It is research that makes academics earn their professional mark and are judged of career advancement. The writer maintains that research is the major ingredient that distinguishes universities from other institutions in terms of nourishing, advancing, and refining knowledge and skills imparted and sought for by students in the teaching and learning process. It also serves as a springboard for innovation and subsequent development. Research is instrumental in the pursuit of truth and providing clear basis for action.

There is also an increasing argument that teachers in higher education, in spite of the higher level of competence they may have in their subject area, aspire to becoming distinguished teachers as well. The most productive way of making this a reality is encouraging them to be competent researchers and prepare situations so that their research will be valued and recognized. This may require both the personal and institutional efforts and personal input.

According to Derebssa (2000) Research is important to the staff of higher education institutions in at least three major ways. First, it enhances the quality of instruction. Newness is brought about as a consequence of research. Research results generated by teachers or
others in the field form the basis for updating content of lectures and practical work. An academic staff who does little or no research falls back on his or her old lecture notes year after year.

Secondly, engagement in research ensures that the teachers are able to supervise research by their students more effectively. Teachers are called upon every year to supervise research of their students for undergraduate and/or postgraduate studies in partial fulfillment of their degrees. Changes in research methods, materials, procedures of analysis, and current literature can only be known by those teachers who are up-to-date in research. Thus, their work and the works of students they are supervising will benefit tremendously by their active engagement in research.

The third point of note regarding the importance of research to the higher education teacher has to do with promotion. Teachers are expected to “publish or perish”. Promotion is largely based on contribution to knowledge through research and publications. “No research no paper, no paper no promotion”. To move up the academic ladder, teachers must be engaged in productive research.

However, those who are entitled to carry out research need to possess high quality of expertise and experiences. Initially higher institution teachers used to take no training either to teach or to conduct research, rather they are professionals in other fields of study having a wide range of skill and competence in their professions. Naturally, their interest in research was limited to its instrumentality for promotion.

**The Status of University Research in Ethiopia**

It has been widely accepted that institutions of higher learning should be concerned with production and reproduction of knowledge, generating and disseminating new ideas. Instructors of higher institutions need to integrate teaching and research. In technologically advanced world, universities are the mainsprings of science; they not
only produce high level manpower but also constitute the main centers of research.

In Ethiopia, though all the universities are vested with full powers under their charters to undertake research, very little research is actually carried out in our universities compared to their potentials. This is partly because the resources allocated for research have been extremely meager. The teaching load is usually excessive in most cases, which leave university staff very little time for research (ESTC, 1987).

Most of the Ethiopian higher institutions are still in a phase of transition in terms of infrastructure and personnel resources and thus do not provide a dynamic environment for the production of new knowledge through research activities. Generally, higher education in Ethiopia is neither sufficiently equipped nor ready for the development of research.

Moreover, research is being insufficiently used in decision-making and practice and instructors in higher institutions of learning are conducting an insufficient amount of practice-related research. Most instructors typically rely upon trial and error methods to improve their planning and practice. Even if a sufficient amount of practice-related research were being conducted, its effect on decision and practice in general is insignificant.

While research has direct and quick impact on practice in higher institutions, its applicability is generally limited. Its status has been uncertain and it has functioned in a milieu of insecurity and isolation. The challenges are due to the factors within and outside the higher institutions, which tend to make research difficult. These can be a function of the material, human and financial organization of the higher educational system as well as the level of research culture among those who are supposed to carry out and utilize research.
A genuine transformation in the prevailing environment and attitudes in our academic intuitions is urgently needed, as scholarly and creative work is a sine qua non for the very existence of a university system. Teaching and research are the two primary tasks carried out in an integrated manner by any university. In principle, all academic staff members are required doing as much research as teaching, an approach traditionally followed by universities worldwide.

Ethiopian universities are no exception and they have developed general guidelines that govern the link between teaching and research. According to the current Ethiopian Education and Training Policy, Higher Education should be research oriented (MOE, 1994) and in the legislation's of higher institutions (Higher Education Proclamation, 2004) research is also considered as one of the primary tasks of the institutions. This clearly indicates what these institutions are required to do and at least that they have the intent of becoming teaching and research centers.

The university functions have to be performed simultaneously and therefore there are conflicting demands on the time, attention and energies of the staff. The basic question that needs to be raised is how to fit research activities into the other function of the university so that it plays a vital role in the achievement of university objectives.

Traditionally, the main domain of research of universities in the advanced countries has been basic and fundamental research. There is world wide consensus that universities should be able to continue this bias, as the strength and competence even in applied research is ultimately dependent on the capability of a scientific community in basic research. There has, however, been a major shift in the universities since World War II to conduct research relevant to national needs in general and to sophisticated technological research in particular.

Our universities, similarly, should not only build capability for basic research, but should also be encouraged to develop strong programs
of mission-oriented research and link with applied research centers and institutes, in order to provide technical support to the productive sectors of economy. The technical universities and faculties (agricultural and engineering) as well as the scientific and technical departments in the general universities, should be closely linked with the specialized research establishments and the production sector and should be specially geared to generating improved production technologies.

Among the core goals of our higher institution is thus to extend the frontiers of knowledge through research. The academic staff of the institutions of higher education are in most cases, given the mandate to pursue this goal. Thus, aside from teaching, the institutions expect their academic staff to be actively engaged in research.

The expansion of higher education institutions has an influence on the development of research in Ethiopia. However, owing to the newness of their structure and the number of needs to be satisfied in the short and medium terms, many of our universities and colleges devoted their efforts to the training aspect.

Addis Ababa University and Research Undertaking

Appraising the quality of education and training in any higher education institution would be a function of inherent integration between the teaching and research sectors. Fully cognizant of this fact, the Addis Ababa University had progressively expanded both the teaching and research institutions since its establishments. The AAU should be appreciated for making research part of its mission with the explicit aim of resolving developmental problems of the country in general and for improving the quality of its training in particular.

The current policy of the university provides that each department can allocate 25% of the total staff time for research. Faculty members are also allowed six months paid research leave every four years and one calendar year of paid sabbatical leave every seven years. These
favorable conditions resulted in the creation of several research institutes in the university at various levels with various objectives.

**Progresses so Far Made in Research Undertaking by the Addis Ababa University**

The Addis Ababa University recognizes scientific research as an important prerequisite for economic growth, technological advancement, and increased societal welfare. It is in line with this that the Addis Ababa University is trying to encourage and motivate its staff members with the necessary facilities within its economic means. The commitment of Addis Ababa University to research dates back to 1971 when the office of the Associate Vice-president for research and publications was established, which was later reorganized as Research and Publications Office in 1978.

The status of current research undertaking by the Addis Ababa University is summarized by Endashaw (2001) as follows: Considering the inner dynamism of university functioning, the primary motivation and drive for university research is provided by the postgraduate studies and research programs. The quantum of research work undertaken by the universities is linked with the size and vigor of their research degree programs, in particular the doctoral and post-doctoral.

The currently soil and other agricultural natural resources surveys of Hararhe Region which have been launched by the Alemaya University, Faculty of Science is another important development along this line. The Graduate Study Programs which were launched in 1978/79 have greatly contributed to research output at Addis Ababa University. The M.Sc./MA theses or dissertation outputs have promoted the research interest of the various academic sectors of the university. The research conducted by the staff as well as through graduate studies has expanded institutional linkages. Currently there are 61 foreign institutes with some form of linkages.
The Addis Ababa University undertakes significant amount of projects through collaboration schemes for conducting research in different academic departments and research institutes where both staff and postgraduate students actively participate. One major strategy adopted by the Addis Ababa University to achieve its objectives in research and training has been linking up graduate training with foreign universities as a component of international cooperation. Forgoing good linkages with well developed universities abroad for the purpose of collaborative research in areas of common interest has proved to be an effective way of overcoming national limitations in research and training. This has for years been the model opted by Addis Ababa University for shaping the technical skills and professional capabilities of researchers with support through access to research funds that are linked with academic training.

However, due to the unfavorable conditions, many of the academic staff are not engaged in research undertakings. Research administration is not seriously taken by university officials at different levels; it has been rather left to the discretion and self-service of the research staff. The research procedures to be followed are not clearly framed in the university senate’s legislation as compared to the teaching activity.

Dissemination and Utilization of Research Findings

The dissemination and utilization of research findings are seen as an important part of and as a basic means of expanding the positive impact of research on development practices. Though much remains to be improved, these areas have been accorded increasing attention. Research findings of major projects are disseminated in a quite organized way through international and national workshops, seminars, and publications of proceedings and journals. Scientific journals, worthy of the name, are also loading for the dissemination of research results.
The dissemination of research findings at the national level can take several forms. One popular way is to present these findings at workshops, seminars and conferences. These forms have now become a popular venue to present research findings.

Dissemination of research results is done through seminars, symposia, workshops, occasional reports, newsletters and publication in local and international scholarly journals. It is noteworthy to list the following reputable journals sponsored and published under the university, which include:

- Journal of Ethiopian Studies
- Ethiopian Journal of Education
- Ethiopian Journal of Development Research
- SINET: An Ethiopian Journal of Science
- Journal of Ethiopian Law
- Ethiopian Pharmaceutical Journal
- The Ethiopian Journal of Health Science
- Ethiopian Medical Journal
- ZEDE: Journal of Ethiopian Engineers and Architects
- Bulletin of the Chemical Society of Ethiopia
- Ethiopian Journal of Economics

In addition to the above reputable Journals, faculties and Research Institutes have different forms of Bulletins such as the IER-Flambeau. Senior Essays, MA/M.Sc. theses and Ph.D Dissertations are other forms of dissemination of research findings. The dissemination and utilization of research findings are seen as an important part of research and as a basic means of expanding the positive impact of research on development practice.

Problems Hindering Research Production and Utilization in Addis Ababa University

In spite of quantitative and qualitative improvement of research in AAU, it is agreed and recognized that it should have more influence
than it has had so far on development policies and activities. The insufficient use of research products in the development process is due to several factors; the most significant are institutional, cultural and logistic in nature.

Lack of Research Culture as an Impediment

The attitude of instructors and decision-makers towards research and researchers is one of the primary factors. In fact, people in a position to influence policies often forget to consider research as an integral part of the process of decision-making. The necessary researches could very well have been conducted, but the results are generally ignored by decision makers. If many policy decisions are taken without any contribution from research, it is not always the fault of research (Derebssa 2000).

Until recently, research reports have tended to remain on bookshelves, unread and untouched by policy makers, other researchers or practitioners. Efforts to attract policy makers in these reports have elicited complaints that they are too bulky, or are written in a format and language which is quite incomprehensible to readers, and that the subject matter of the reports is of little relevance to policy formulation or implementation.

Some of these complaints are in deed applicable to some of the research reports. However, many of the reports do have relevant and interesting findings which could be utilized to improve practices. Steps are now being taken to correct the situation. Researchers are now producing executive summaries and simplified reports for lay readers.

Habtamu (2000) also writes the following about the link between decision-makers and researchers in Ethiopia: “Though there are some links between some of the policy statements and research findings, it leaves a lot to be desired. Lack of trust between decision-makers, researchers and practitioners seem to have been existing for
decades. Researchers not providing options, underdeveloped culture and discourse and verification, and differences in goals and outlook are some of the major contributing factors for the poor link”.

Another equally determining factor is the attitude generally adopted by the authorities who care more about immediate results than about the medium or long-term. Decision-makers are generally in a hurry to see results but are not normally ready to wait for a long process to furnish them with relevant information for the decisions that they have to take. This impatience influences the moral and the motivation of researchers and reduces the impact of their research on the decisions.

Another factor that should not be overlooked is the cultural context, which has not evolved enough to recognize and accept research and researchers. This state of mind affects public opinion as well as official decisions. A culture of secrecy and fear of unknown still remain one of the dominant traits of the mentality of some our societies. In this regard Derebssa (2000) states that today in Ethiopia, due to cultural inhibitions, people are generally reluctant towards researchers and can even supply false data. Such information is not useful and can even prove to be dangerous when research results are based on them.

In the light of this, one could justifiably argue that the most urgent problem facing research is that of changing the attitudes of researchers, practitioners and policy-maker so that they begin to view research as the prerequisite for rational and responsible development.

Funding of Research Activities

One of the key factors that seem to be affecting volume and quality of research in the university is under-funding. Under-funding of research is manifested in university budget. Funds for conducting research in the University are relatively scarce.
Out of the total budget, the amount set aside for research is relatively small as compared to other nations. In advanced nations, it is around 33 percent of the budget in general universities and much higher in research universities. Most universities in developing countries are spending less than 5 per cent of their total university budgets on research. It is recommended by many that the allocations for research should be at least 25 percent of the budget of the universities in the county.

Governments’ budget for the Addis Ababa University in the year 2003/2004 was Birr 141, 898,900, out of which only 1.2% (Birr 1,554, 900) was allocated for research undertaking at different faculties ad colleges of the university, which is less than what most developing countries allocate for research. However, as indicated in the table below, the Addis Ababa University has secured Birr 18, 677,389 for research funds from different sources in the same year.

**Table 1: Amount of Addis Ababa University Current Research Funding from Different Sources**

<table>
<thead>
<tr>
<th>No</th>
<th>Funding organization</th>
<th>Amount in Birr</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Government</td>
<td>1,554,900</td>
</tr>
<tr>
<td>2</td>
<td>International Universities</td>
<td>251,452</td>
</tr>
<tr>
<td>3</td>
<td>Other international Organizations</td>
<td>17,125,937</td>
</tr>
<tr>
<td>4</td>
<td>Local organizations</td>
<td>1,300,000</td>
</tr>
<tr>
<td></td>
<td>Total Research Funding</td>
<td>20,232,289</td>
</tr>
<tr>
<td></td>
<td>Total University funding</td>
<td>141,898,900</td>
</tr>
<tr>
<td></td>
<td>Proportion of Research funding against</td>
<td>14.26%</td>
</tr>
<tr>
<td></td>
<td>total funding</td>
<td></td>
</tr>
</tbody>
</table>

Most of the funds earmarked for research in the university were mainly used for post graduate research projects. Insignificant amount were used for large pure research projects meant to advance and refine knowledge or lead to major discoveries and innovation. Many of the research institutes were externally funded hence future sustainability of such reestablishments is in doubt. The writer is,
however, of the view that the problem is not only lack of funds for research but rather misdirection of research fund to research units which rarely do any meaningful research, but could always find easy ways of spending research money and accounting for it.

*Personnel Capacity to Conduct Research in the AAU*

University teaching and research are painstaking and time-consuming activities. For superior teaching and research, it is necessary for the university teacher to devote a great deal of time to the study of current literature in order to keep abreast of scientific developments, as there is a veritable explosion of new knowledge. The widespread lack of motivation of our university instructors is directly attributable to the poor preparation of both teaching and research which adversely affect the quality of instructions as well as the output of research.

The research capacity among some faculty members especially in quantitative data analysis and effective use of computers is low. The vast majority of the university staff members are very young and they do not have senior members to supervise them in both their teaching and research work. The availability of senior university staff has now become a serious problem. The senior faculty members have not, on a consistent basis been empowered (resource wise) to provide leadership in research by teaming up with junior colleague to conduct significant research.

This has resulted in gradual deterioration of the quality of both teaching and research work. Researchers are often hired to do research without appropriate credentials. Initially they were not trained to become researchers. Rather they are professionals in other fields of study having a wide range of skills and competencies. Naturally their interest in research is limited to its instrumentality in promoting their career.

The future of research depends on the successful training of researchers. This is best done at university level. Unfortunately,
however, there are indications that the university has not managed to produce adequate research personnel and equip them with sufficient training in research methodology. In addition to the usual academic qualifications such as Bachelors, Masters or Ph.D. degrees, professional researchers must have a training background and at least some year's of experience in research undertaking. This function is being partly fulfilled by graduate programs and research institutes. It needs to be strengthened and there are a number of available alternatives for that purpose.

One alternative is to provide additional support to graduate programs particularly in the area of research methodology, data analysis and report writing. Diversified means need to be employed for the in-service training, including paid study-leave for advanced courses at universities, international and national or local seminars and workshops on related topics and study visits abroad for the upgrading of professional knowledge and skills.

**Teachers' Load and Research Undertaking**

For achieving excellence in teaching and research, the scientific and technical staff in universities have to be provided with more time. It is usually stated that each teaching staff is expected to devote about 25% of his/her time to research work. In actual fact, however, very little of the university staff subscribe to this expectation. Some drastic measures will have to be taken to change this situation.

The teachers complain that they carry at present heavy work load: the student teacher ratio in the university is around 30:1 as against 7:1 in the U.K universities, leaving the scientists on the faculty little time for research and guidance of students. Only a very small percentage of university teachers report research activity on a part time basis. This situation requires serious considerations.

In fact considering that our best trained manpower is in the university, they should be encouraged and enabled to budget for nearly one third
of the faculty time for research. Furthermore, a high level of motivation and the requisite conditions for research would have to be arranged in order for the university to achieve the desired research output or quality.

*Infrastructure and Equipment*

Materials and equipment for doing basic scientific research are also short supply or out of order. There is also a shortage of current literature. For research activities to flourish, it is necessary to have an appropriate physical environment with infrastructures and equipment, which facilitate the reproduction and circulation of research results. Structural support and stationery are necessary to encourage potential researchers to venture into research. Databases, libraries and documentation centers, computers with accessories for processing data, conducive working place and office equipment, and sufficient means of communication are some of the necessary physical facilities.

**Table 2: Availability of basic Infrastructure and Equipment**

<table>
<thead>
<tr>
<th>No</th>
<th>Facilities</th>
<th>Sufficient</th>
<th>Not Sufficient</th>
<th>Not Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Computers</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Printers</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Photocopy services</td>
<td></td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Duplicating services</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>5</td>
<td>Stationary</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>6</td>
<td>Internet connections</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Conducive working offices</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>8</td>
<td>Necessary office equipments</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>9</td>
<td>Relevant reading materials</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>10</td>
<td>Telephone services</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>11</td>
<td>Fax services</td>
<td></td>
<td></td>
<td>√</td>
</tr>
</tbody>
</table>
As indicated in the table above, except for few research based institutions and some faculties, basic facilities for conducting research in many of the departments and faculties are not sufficient.

**Summary and Conclusion**

The present weakness of research capacity in Ethiopia is connected with several constraints most of which have more or less been mentioned all along this paper. Even if numerous research structures exist in the country, very few really conduct research. Many of the existing structures evolve in an environment, which does not favor their radiance.

- The component of a strong research capacity includes trained and motivated personnel, a technical support-staff, and organizational arrangement for conducting research and disseminating results. Few colleges and faculties in the university have developed this capacity. The ability to design, develop and adopt effective policies and programs is constrained as a consequence.

- In spite of the substantial progress that has been achieved, local training of researchers in the university is still somewhat limited. Institutes that specifically train researchers are limited in number and are often handicapped by shortage of staff, research materials and in many cases funds. As part of their education at universities, researchers must go through rigorous training exercise emphasizing on research production and research consumption. This can be done through: formal graduate education at research universities and in-service training of researchers for upgraded professional development.

- The generally low level of salaries of researchers diverts a good number of gifted researchers towards other sectors, which offer better salaries. Some who are engaged in it, do so for motives of personal attachment to research activities rather
than for earning a living. This situation naturally has repercussions on the orientation of their activities, which, in certain cases, are dictated by mercantile preoccupation.

- If one considers all the basic dimensions which shape a good research environment (infrastructure and equipment, technical skills of personnel, funds for operation, research culture), the present research environment in many higher institutions, in spite of the efforts made in this area, does not as yet provide the favorable conditions for emergence of a research culture in line with current requirements in the context of the new perspectives.

- In order to make research relevant, efficient and effective, there is a need for constant flow of ideas from researchers to policy-makers and vise-versa. In the Ethiopian situation this dialogue has not existed at the level it should exist. This has partly been due to the absence of a clear-cut policy on the role of research for development.

- There is a tendency to favor studies, designed and conducted or sponsored by external funding agencies in governmental decisions, ignoring equally valid, if not more valid, research products that emanate from indigenous researchers. The need to strengthen the links between research and decisions is urgent and timely by the fact that Ethiopia, like the rest of the developing world, is facing many challenges in all sectors of development.

**Measures to be adopted for Activating and Strengthening Research in AAU**

The quality of research in institution of higher learning is affected by contextual environment, the availability of basic inputs from outside and within the institutions. Hence, any viable future policy and strategies for promoting quality research must be holistic in nature. It
is in this regard that, the following measures are proposed for activating and strengthening research in the universities:

- Research in the university should be treated as priority goal and the requisite budgetary provision be made to achieve it; for this purpose well equipped laboratories must be provided as quickly as possible. Budget should be prepared in a manner that funds the research of each faculty and department.

- The share of the university in the total research expenditure of the nation should be raised to a level that is commensurate with their meaningful research program.

- The Research and Publications Office of the university should be greatly strengthened. Its function should include: a) receiving research proposal from university researchers, b) coordination and approval of research program, c) sanctioning research grants against specific projects, d) monitoring of faculty research and e) bringing to the attention of users the research results of their respective universities.

- The general faculties and colleges should endeavor to maintain an adequate attention to basic research and the technical faculties to mission-oriented research. Interdisciplinary research should receive special attention in view of the availability of scientists at the campus in many disciplines.

- The university should become responsive to societal needs and include in its research programs a sizeable component of research applied to national needs, including technological research for the solution of problems in such fields as food, industry, energy, irrigation, housing, natural resources development, etc.

- “Centers of excellence” should be established at the university for undertaking quality research and high-level man-power training in selected subjects. The “Centers” should be made fully effective and used for the objectives for which they are
established, namely advanced scientific research and research degree and post-doctoral level training.

- High priority should be accorded to vigorous program of advanced training locally and abroad, at doctoral and post-doctoral level, of talented university teachers, with a target of 30% of the faculty during the next ten years. This is particularly important for the young instructors who lack expertise in the area of research.

- University library and documentation facilities should be expanded to make it possible for research scholars to have speedy access to latest scientific information in their fields of specialization. Adequate number of journals of international reputeability in each of the scientific disciplines should be subscribed to by a university science department.

References


