



Wisdom at the source of the Blue Nile

BAHIR DAR UNIVERSITY

BAHIR DAR INSTITUTE OF TECHNOLOGY

STRATEGIC PLAN 2016-2020

Oct, 2015
Bahir Dar, Ethiopia

Contents

Executive Summary	iv
Directors Forward	v
1. Historical Background	1
2. Vision, mission and core value	3
3. Assessment of existing situation	5
3.1. Teaching-Learning Process	5
3.2. Research and community service	6
3.3. Leadership and governance	7
3.4. Resources and Infrastructure	7
3.5. Cross-Cutting Issues	7
3.6. SWOT Analysis	8
4. Strategic Issues, Goals and Objectives	11
4.1. Key Strategic Issues	11
4.2. Strategic Goals and Objectives,	12
4.3. Baseline and targets for Key performance measuring indicators	22
Remark from Strategic Plan Developing Committee	28
References	29

Executive Summary

BiT's institutional achievements and enrolment growth in the past 50 years have increased the momentum to concentrate its energy and resources on continuous improvement of practice oriented quality education. As the 2011-2015 strategic plan drew to completion, the institute needs to carry forward its rolling strategic planning process to ensure that its vision can be realized.

The 2016-2020 strategic plan of BiT is mainly crafted by conducting situational analysis, extensive discussion and consultation with stakeholders, reviewing, GTP I and GTP II plan of the country.

Thus the vision, “to be the centre of excellence in education, research and technological innovation; and remain a source of pride for all Ethiopians”, will be realized through effective implementation of its embedded mission, goals and objectives.

The plan comprises of six strategic goals and twenty three corresponding objectives. The goals are mainly focused on education quality, relevance and accessibility; interdisciplinary research, technology transfer and outreach services; provision of adequate and reliable infrastructures and effective governance systems.

The measure of success of this strategic plan targets on achieving milestones in teaching learning, research and technology transfer, community service, good governance and wealth creation.

Thus by the end of 2020:

- New academic programs and research centers will be launched
- The breadth and depth of the institute problem solving research will be improved through attracting and retaining best faculty members.
- Faculties, scholars and students will play a greater role in technological development of the nation.
- BiT will be known internally and externally as a leading institution in practice oriented technological education

Directors Forward

The need for longer-term planning and development of strategies is widely recognised as the foundation for institutional development. Since the implementation of its operational autonomy (IOT's Autonomy Directive 001/2013), the institute has been striving to sustain its reputation in quality technical education while promoting and enhancing interdisciplinary research and community based engagements. However, almost without exception, increased autonomy over a wide range of institutional operations has been accompanied by the introduction of more sophisticated challenges that we need to cope. This has shifted responsibility for our institute from mainly operational and tactical issues to more strategic approaches. Without over coming these challenges the institute can no longer take its continued reputation. This strategic plan is therefore, an indication of BiT's initiative to move forward with it's reputation with technical education.

Hence, as part of Bahir Dar University, the institute has to work hard both to meet the criteria embedded in being the centre of excellence in education, research and technological innovation; and remain a source of pride for all Ethiopians and at the same time to strengthen its position in the market place. This needs sharing of the strategic plan and creating aspiration to all institute's community. Moreover, creating coordinated motivation of both internal and external stakeholders including researchers, local and international partners and government is an important dimension to be considered in our strategic plan. Now more than ever our institute is in a dynamism of change; a change that leads to self sustainability and to develop better linkages with the wider society. In this context this strategic plan is prepared in view of achieving long term institutional goals by focusing on institutional development through institutional capacity building and establishing good governance system by combining academic mission and executive capacity.

To meet these expectations, our institute has to respond to its major challenges: it must achieve a level of quality education and research that stands the test of international and national appraisal. These major aims presuppose changes in BiT that have to be among the top priorities in line with national strategies.

We expect that this strategic plan will continue to be the basis for preparing annual plans of actions that guide activities of the institute as a whole.

Finally, we wish to warmly thank the strategic plan preparation team for their contributions, which we hope will provide assistance to the development of our institute.

1. Historical Background

Bahir Dar Institute of Technology (BiT) at Bahir Dar University is the pioneer institute of technology offering higher education in the field of engineering and technologies since its establishment as Bahir Dar Poly Technique Institute. It was established under the technical cooperation of the **Government of USSR** and the Imperial **Government of Ethiopia in 1963**. Since then, the Institute had undergone number of program changes within the area of technology (Agro-Mechanics, Industrial Chemistry, Metal, Textile, Electrical and Wood Technologies) until the commencement of the Engineering degree program in 1996. In May 6, 2000, Bahir Dar Poly technique institute with its engineering program and Bahir Dar Teachers College was formally integrated and formed Bahir Dar University. The institute was entitled to constitute the engineering faculty of Bahir Dar University and renamed as engineering faculty. Latter in the year 2010 with the realization of the Engineering Capacity Building Program (ECBP) the faculty has been identified as one of the ten Institute of Technology in the country and renamed as Bahir Dar Institute of Technology (BiT). Following the IOT's autonomy directive 001/2013, the institute is becoming more empowered with leadership and managerial activities within the university.

Proudly throughout these program evolutions, the institute contributes to the labour market with the best technologist who are now running most of the businesses in the industrial, educational, agricultural and other economic development sectors in Ethiopia. The Institute's alumni have played important roles in technical and scientific innovation, economic, social development and technical education both in Ethiopia and abroad. The institute strives to develop knowledge, which benefits for the sustainable development of the society. BiT has a distinctive role and a comprehensive offering practical education in the countries higher education landscape and provides opportunities for progression and reputation for students at different stages of their careers. With a history stretching back over fifty years, today, BiT is one of the largest and well-known higher education institutes in Ethiopia, with over 13,000 students.

Figure 1.1. Presents the historical progressive development of the institute.

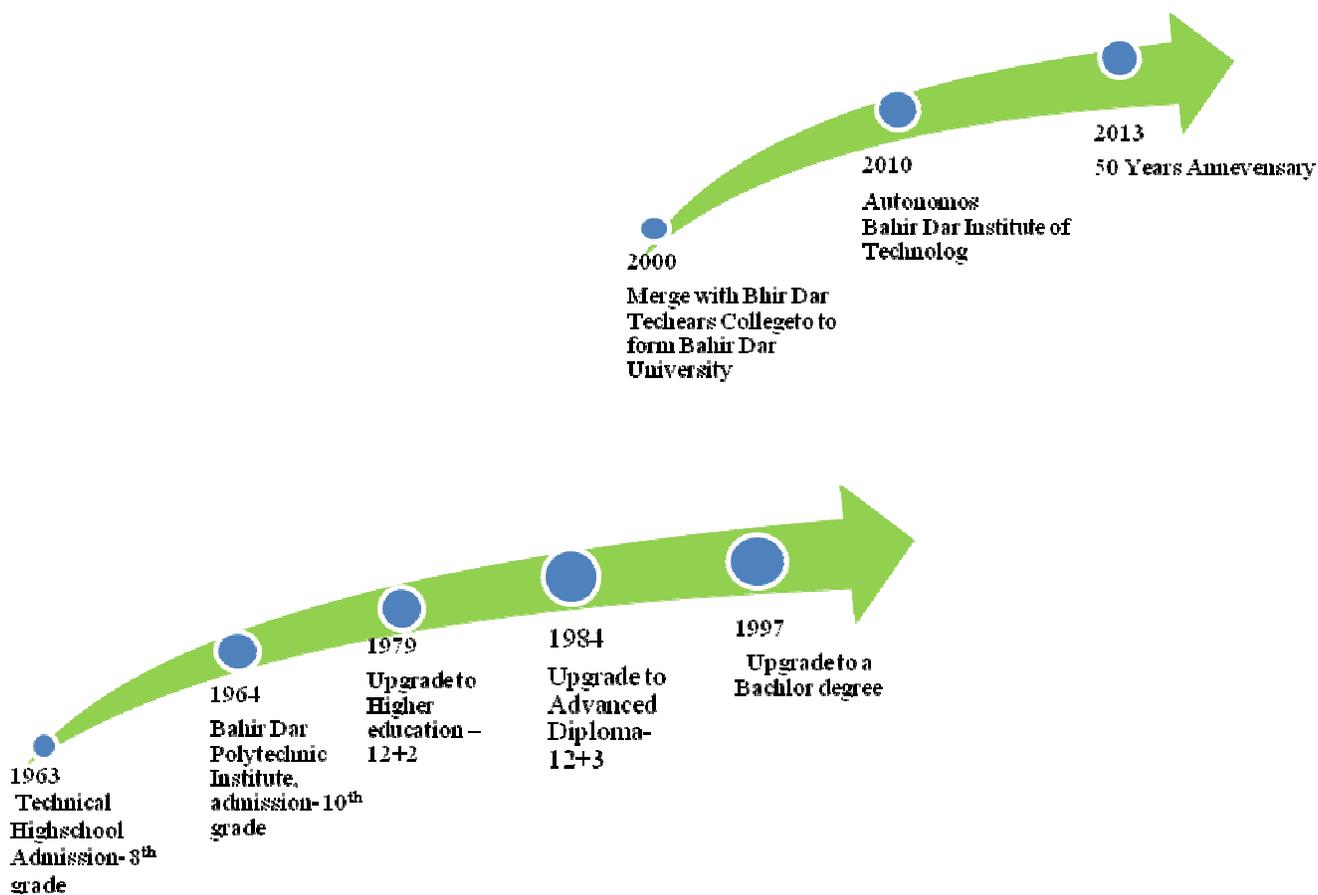


Figure 1.1: Historical progressive development of Bahir Dar Institute of Technology

2. Vision, mission and core value

Vision:

To be the centre of excellence in technological education, research and innovation; and remain a source of pride for all Ethiopians.

Mission:

- To prepare knowledgeable, skilled, and attitudinally matured graduates in various fields of technology through undergraduate, and graduate studies;
- To produce problem-solving research outputs by promoting and enhancing researches focusing on knowledge and technology transfer consistent with the country's priority needs;
- To strengthen and increase technological based services and supports that respond to the developmental needs of the nation through consultancy and community services;
- To enhance wealth creation through technological innovation and entrepreneurship.

Core Values:

- **Quality:** The institute upholds quality as the ruling standard in teaching, research, and community service, and commits itself to the attainment of the highest standards in academic performance.
- **Diversity:** The institute understands that each individual is unique, recognizes individual differences, and promote academic discourse
- **Integrity and honesty:** The institute promotes honesty, integrity, ethical conduct, justice, fairness, and nurtures a culture of teamwork, collegiality and mutual support among members of the University community.
- **Transparency and accountability:** The institute is committed to ensure accountability at institutional, group, and individual levels in the effort to implement its functions by openly displaying its scholarly ideas and works to the society.
- **Social responsibility:** BiT recognizes the obligation to act and behave ethically with sensitivity toward social, cultural, economic and environmental issues so as to the benefit of society at large and maintaining the health and integrity of ecosystems.

- **Recognition of merit:** BiT has a strong belief on the importance of giving public and/or institutional recognition to persons who have made extraordinary works that has significant contribution to the socio-economic development and environmental sustainability.
- **Technology and Innovation:** The institute believes that encouraging its staff and students to focus on technological innovations of translating an idea or invention into a good or service that creates value is highly fundamental to its success
- **Continuous improvement:** BiT recognizes the importance of Kaizen also known as continuous improvement which believes on the principle of systematically seeking to achieve small, incremental changes in processes is very vital in order to improve efficiency and quality.

Motto: Wisdom at the Source of the Blue Nile

3. Assessment of existing situation

Assessment of existing situation is a critical step in the development of our strategic plan. It helps to scan the internal and external environment of the institute. In the subsequent sections assessment of the current situations emphasised on the present teaching-learning practices, research and community service engagement, the working governance structure and the level of available infrastructures has been presented.

3.1. Teaching-Learning Process

Education quality: Currently BiT has fifteen undergraduate and twenty graduate academic programs. The number of undergraduate and graduate students enrolled is 13089 and 726 respectively. The teaching learning process is carried out by 348 academic staff and 102 technical supporting staff. One of the key indicators for quality education is staff: student ratio. As per this dimension the institute staff: student ratio is 1:39 which is below the expected target ratio of 1:19. Moreover the current staff profile of the institute (%) BSc:MSc:PhD is 53:41:6. This is very low compared to GTP II expected ratio (0:70:30) which is seemingly affecting the quality of education particularly the graduate program. As part of the effort to alleviate this limitations 166 (32 %) of the institute's academic staff are on long term trainings. Yet continuous staff capacity building is one of the critical issues that the institute needs to address.

To improve the quality of the teaching and learning process several initiatives have been implemented including adopting a modular approach for course delivery, continuous assessment and peer led learning for all undergraduate programs so as to enhance active learning. Despite significant reduction in attrition rate (<2.5%), the level of acquiring practical knowledge and skill still needs further efforts.

Other inputs to foster quality education are provision of standardized laboratories and reference and text books. With this regard, the institute has made an encouraging progress in terms of providing teaching and research facilities in the past three years. For instance, about 250 million ETB has been invested since 2012 to purchase laboratory equipment. To support the teaching learning process with ICT one digital library system has been established. Though there is a tremendous effort to attain student: text book ratio of 10:1 and provision of adequate laboratories, this is still insufficient due to rapid student enrolment growth.

Education Accessibility: One of the key targets of higher institutions is to make education more accessible to nationalities through the provision and implementation of relevant curricula that fit with the national economic priorities. With this regard BiT has expanded its undergraduate and graduate programs in different modes of delivery (regular, continuing education, distance, summer and week end) in the last five years. The number of undergraduate and graduate programs has increased from 8 to 15 and 4 to 20 respectively. Due to such rapid expansion, a twofold intake capacity has been achieved. Even though the number of programs increased significantly the intake capacity is below the national and regional demand for higher education.

Education Relevance: Evaluation of curricula and academic programs to assure their relevance to the national economic development is an important component of higher education programs. With this regard, all BiT's curricula have been revised. Moreover, most programs are evaluated to ensure their relevance with the need of the labour market by conducting graduate tracer study. BiT is expected to have a rigorous system of internal quality audit, in order to deliver quality and relevant education to the society, but the current BiT quality assurance office is at the establishment stage. However, two undergraduate programs, Civil and Electrical Engineering, were evaluated to get national accreditation.

3.2. Research and community service

Conducting problem solving research and rendering community service are integral components of higher institutions core processes. Thus the institute has implemented its research strategic issues through defining core research thematic areas (<http://bit.bdu.edu.et/rto/content/research-area>) on the basis of the priority needs of the country and the region.

Research and Publication: Though there is a progressive increase in allocating research fund from the federal government, the level of academic staff engagement in research activities is still poor. For example the average amount of budget allocated in the past three years is ETB 2,138,773 while the utilized average amount is ETB 1,984,941. This is partly due to the insufficient budget allocation to attract individual research projects. Moreover the lengthy research fund management system and lack of incentives are among the reasons for the poor practice. This indicates that extensive capacity building in terms of human resource development and research fund raising is required.

Community and Consultancy Service: As one of the core processes, the institute has been involved in different community engagements. For instance the institute takes part in providing consultancy and supervision services in road, water and sanitation, ICT, and energy sectors. However, the effort made to support the regional government and the community is constrained by lack of clear strategies on community and consultancy services. Due to this the scope and depth of our engagement is limited. Thus, a clear and well-defined guideline needs to be developed in the next strategic period.

3.3. Leadership and governance

The institute is organized in five faculties, sub-organized in chairs and internal administration units comprising organs which are necessary to make effective and efficient decisions. The current decision making practice is a top down approach which gives less empowerment for the respective units which makes the top management to be highly engaged in routine activities. Moreover, despite its autonomy to exercise its operational affairs, the presence of considerable dependency on the university and lack of due recognition from each level of the federal government has limited its decision making capacity. Thus, the process of establishing efficient and autonomously functioning, academic and administrative leadership and governance at all levels need to be given top priority in the next five years.

3.4. Resources and Infrastructure

The presence of adequate resources and infrastructures are the key inputs for quality education and research. With this respect, though the institute is the oldest and pioneer institute, its physical infrastructure is below the required level. For instance more than 40% of the institute students are resided in different campus of the university. And the number of students working in a laboratory session is more than forty. Moreover, the institute is largely dependent on federal government budget with limited internal revenue generation capacity.

3.5. Cross-Cutting Issues

Besides its main objectives, BiT also works towards many cross-cutting issues. These include but not limited to Gender, HIV AIDS and issues related to disables. Affirmative action for traditionally disadvantaged groups and students with special needs has been given through

preferential access and academic support programs. Following the growing national interest in the role of policy reforms to promote gender equality and empower women, the institute has made promising progress. A considerable share of resources has been allocated to limit HIV/AIDS expansion and to control biases related to disabilities, sexual harassment, gender biased violence, and discrimination.

3.6. SWOT Analysis

Background information on the institute’s Strengths and Weakness in relation to the Opportunities and Threats (SWOT) are useful in considering strategic issues. Extensive discussions and consultations have been made with stakeholders to analyse and review the internal and external environment in which the institute operates. As a result, a list of the institute’s Strengths, Weaknesses, Opportunities, and Threats in four operational pillars (Teaching-learning, Research and community service, Resources and infrastructures, and Leadership and Governance) has been generated. The identified SWOT of the institute is presented in Tables 4.1 and 4.2.

Table 4.1 SWOT analysis (Internal)

Strategic Issues	Strength	Weakness
Teaching Learning	<ul style="list-style-type: none"> • Diversified programs and practice oriented curricula in technology • Young, committed, and energetic staff • Positive reputation in technical education • Implementing Student management information system • Practice in staff industrial internships 	<ul style="list-style-type: none"> • Poor staff development and retention • Poor management system for graduate studies • Extreme instability of academic curricula and regulation • Inappropriate utilization teaching aids • Lack of interest in participating in extra curricula activities • Resistance for change • Poor student evaluation practice • Limited inputs • Limitation in continuing education accessibility

Strategic Issues	Strength	Weakness
Research and community service	<ul style="list-style-type: none"> • Increment in research budget • Increased staff interest and engagement in research • Good practice in organizing annual research conference and weekly seminars • Establishments of centre of excellences • Good start in securing research grants 	<ul style="list-style-type: none"> • Lack of experience and capacity in research • Lack of subscribed scientific journals • Lack of own journal • Lack of clear understanding on community service and technology transfer • Weak participation in nation/international research calls • Poor interdisciplinary/joint research practice • Limitation in research grade laboratories • Weak of integration of graduate studies and research • Loose university-industry linkage • Discouraging financial and procurement regulations
Resources and infrastructure	<ul style="list-style-type: none"> • Existence/availability of good laboratory and workshop facilities • Good financial and resource administration practices • Improvement in Lab/workshops equipment procurements • Promising start in physical infrastructure expansion • Good maintenance practice • Good start in automation of procurement and property administration 	<ul style="list-style-type: none"> • Insufficient classrooms, libraries, laboratories, internet access, and teaching facilities • Limited Income generation • Insufficient entertainment facilities • Limited utilization of laboratory/workshop facilities • Poor preventive maintenance system • Poor space management
Leadership and governance	<ul style="list-style-type: none"> • Transparency • committed management • Positive attitude • Readiness for change • Decentralized decision making system • Healthy working environment • Implementing Chair system 	<ul style="list-style-type: none"> • Too much engagement of the top management in routine activities • Organization structure instability • Leadership instability • Lack of follow up and monitoring • Lack of leadership experience • Lack of leadership motivation and courage

Table 4.2 SWOT analysis (External)

Threats	Opportunities
<ul style="list-style-type: none"> • Lack of high qualified teaching and research staff • High staff turnover and brain drain • Campus space limitation for expansion • Poor pre-university students preparation • Rigid government procurement and finance regulation • Slow rate of industrial expansion • Low level of understanding of industries on institutional linkage • Inappropriate government interference • Negligence for indigenous knowledge and technological products 	<ul style="list-style-type: none"> • Government Priority and autonomy to technology • Government industrial policy • Positive reputation in technical education • Access to global market and information • Advancement of technology • Location and heritage • Young and energetic staff • Institutional Growth potential • stakeholders willingness for collaboration • Country growth • Expansion of micro and small scale enterprises

4. Strategic Issues, Goals and Objectives

4.1. Key Strategic Issues

Excellence in Teaching Learning: The major strategic issues of the institute in regard to teaching learning are: improve quality, ensure relevance and increase accessibility of technological education that can fulfil the future economic demand of the country. These can be achieved by growing and diversifying academic programs and retain best faculty members.

Excellence in research and technology transfer: The institute's investment in research and knowledge transfer requires favouring interdisciplinary and collaborative research. This will be intensified through investing on individual research excellence by supporting high potential graduate/doctoral training programs. By doing so, our researchers bring their research into the teaching-learning process and expose students to the latest innovation ideas and discoveries. Moreover the technology developed through the interdisciplinary research will be transferred to the community.

Provision of adequate resources and infrastructures: This strategic issue emphasizes on improving the provision of adequate and reliable infrastructure facilities. This requires standardizing and expanding physical infrastructure and ICT facilities; expanding revenue generation capacity; and implementing quality management tools so as to create conducive environment in achieving the institute's academic aspirations.

Leadership and governance: Develop robust governance system to improve service quality and respond the demands of the society through effective and efficient management. To achieve this, the institute needs to focus on the development of a clear governance structure backed by decisive and coordinated implementation to create effective leadership capacity at each stage; and balance between academic and executive capacity.

4.2. Strategic Goals and Objectives,

Goal 1: Impart high quality and relevant education to prepare competent graduates equipped with entrepreneurial skills and are ready for a variety of challenging careers.

Objective 1.1: Enhance institutional reputation through diversified programs and practice oriented curricula with due consideration of the country's development priority and international standards

Indicators:

- By 2017 Tracer study has conducted for all programs
- By 2018, the curricula of all the institute programs have been evaluated and validated with the revised national demand and priorities and international standards
- By 2020, Staff(lecturer and above): student ratio has reached 1:20
- By 2020 at least 50% of the curricula have been nationally accredited
- By 2020, based on GTP2 higher education demand our undergraduate programs has been reached 25

Activities:

- ✓ Develop and launch demand driven and practice oriented course curricula
- ✓ Revise curricula with active participation of stakeholders
- ✓ Conduct program evaluation

Objective 1.2: Enhance staff profile, knowledge, skills and attitude through a variety of internal and external human resource development efforts.

Indicators:

- By 2018 at least 75% of the technical supporting staff have fulfilled laboratory accreditation requirement
- By 2018, 75% of the academic staff is certified with pedagogical and didactical skills and attitude
- By 2020, the ratio of BSc:MSc:PhD has reached 5:70:25
- By 2020, 60% of the staff have involved in industrial internship

Activities:

- ✓ Recruiting staff with more emphasis to PhD holders
- ✓ Foster staff industrial internship
- ✓ Develop short and long term training packages
- ✓ Provide pedagogical and didactical training

Objective 1.3: Enhance active learning and ensure that all academic units have robust form of student assessment.

Indicators:

- By 2016, Student evaluation and assessment system has been revised and implemented
- By 2017, Peer led learning has been fully implemented in all courses
- By 2017, student feedback system has been in place

Activities:

- ✓ Standardize continuous assessment techniques
- ✓ Design and promote student feedback system
- ✓ Provide adequate training on peer led learning

Objective 1.4: Enhance graduate entrepreneurial orientation and job creation capability

Indicators:

- Initiate disciplinary based entrepreneurial training to all graduate classes by 2016
- By 2020, 90% of graduates have create either their own business enterprise or get employed in a year.

Activities:

- ✓ Introduce entrepreneurial project course into course curricula
- ✓ Inspire students and staff to acquire and use their entrepreneurial skills
- ✓ Foster academic unit venture entrepreneur and start incubation
- ✓ Promote our student achievements through various media

Objective 1.5: Enhance educational accessibility through diversified mode of delivery mechanisms

Indicators:

- By 2018, the number of students enrolled in continuing education has been at least doubled
- By 2019 E-teaching has been in placed
- By 2020, enrolment of regular students has been reached at least 12000
- By 2020, Three new educational centers have been established following the national economic corridor

Activities:

- ✓ Establish new educational centers in different areas of the country to maintain institutional competence and educational affordability

- ✓ Implementing e-teaching
- ✓ Develop tailor made for short term trainings
- ✓ Expand continuing, distance and weekend education programs.

Goal 2: Promote and enhance problem-solving research characterized by interdisciplinary and focusing more on knowledge and technology transfer

Objective 2.1: Identify key research thematic areas and facilitate the establishment of research centers

Indicators:

- By 2016, the national and regional research demand and priorities have been identified and documented
- By 2017, Three new research centres have been established

Activities:

- ✓ Conduct national and regional research demand assessment based on government policies and priorities
- ✓ Develop clear guideline for establishing research centers.

Objective 2.2: Enhance research culture by encouraging interdisciplinary and collaborative research while maintaining support to disciplinary based research

Indicators:

- By 2016, Approved guideline and incentive package that foster interdisciplinary research has been in placed
- By 2016, each chair has at least one research group
- By 2020, The number of graduate programs has reached 40
- By 2020, number of publications has been quadrupled

Activities:

- ✓ Facilitate the establishment of research group within chairs
- ✓ Develop guideline and incentive package that foster interdisciplinary research
- ✓ promote strong collaboration and partnership between universities and stakeholders that can make use of strengthen BiT's research
- ✓ Expand postgraduate studies and create strong synergy with the institute's main research priorities

Objective 2.3: Ensure the quality of research

Indicators:

- By 2016, approved research quality standard guideline has been in placed
- By 2016 anti-plagiarism policy has been in placed
- By 2017, has been Subscribed at least two scientific journal publishers
- By 2020, 10 accredited research grade laboratories have been established

Activities:

- ✓ Develop criteria, and procedures for evaluating and tracking the quality of research
- ✓ Establish multidisciplinary research grade laboratories
- ✓ Provide supportive environment for scholar inquiry to increase research opportunities for faculties
- ✓ Build the capacity of researchers with state of the art knowledge and skills
- ✓ Facilitate access for scientific journals and other resources
- ✓ Develop better database

Objective 2.4: Enhance research output dissemination

Indicators:

- By 2018, at least two scientific journals have been established by BiT
- Five scientific conferences per year have been organized
- One technical festival per year has been organized
- Has been provided financial support for at least one research article in each chair to be published in internationally recognized journal per year
- By 2020, publications per year has been reached 200 in science indexed journals

Activities:

- ✓ Start and strengthen publishing BiT's own Journal, conference proceedings, and bulletin
- ✓ Organize conferences, seminars, festivals
- ✓ Encourage staff participation on various national and international conferences
- ✓ Support and encourage staff on publicizing their articles in high impact factors scientific journals
- ✓ Use different public and social media

Goal 3: Develop institute wide mechanism to promote interconnection across different types of public engagement (outreach service, technology transfer and service learning).

Objective 3.1: Invest in and build on public engagement programs with strong, mutual beneficial ties to research, community services and educational programs

Indicators:

- By 2016, three model community service areas have been identified

- By 2018, All Model communities have been gotten access to sufficient energy, potable water and sanitation services
- By 2020, Postharvest loss has been halved in the model communities
- By 2020, at least five technologies have been transferred to the communities in collaboration with partner institutions

Activities:

- ✓ Identify model community service areas and provide problem solving community services with active engagement of staff
- ✓ Identify and work on common interest areas with TVET colleges, industries, research institutions, civil societies, NGOs and others
- ✓ Facilitate the dissemination of research outputs to the local community
- ✓ Identify and disseminate best practiced technologies to the community

Objective 3.2: Improve level of community engagement through volunteering activities of staff and students

Indicators:

- By 2016, Community service guideline has been developed and approved
- By 2018, At least 15% of the staff has been engaged in the model communities
- By 2020, at least 50% of the institute community has been involved in voluntary community services
- Two panel discussions and four public lectures have been delivered per year

Activities:

- ✓ Create awareness on community services through workshops and public lecture, panel discussion and public media
- ✓ Support and strengthen the involvement of volunteer clubs in community engagement
- ✓ Develop volunteer community service guideline
- ✓ Encourage staff and students to provide trainings and other services to the community that improve their living standards.

Objective 3.3: Enhance university industry linkage

Indicators:

- By 2020 each chair has been created at least one strong industrial partnership
- By 2020, 50% of BiT's student internship placement has been based on industries request

Activities:

- ✓ Encourage staff to perform industry based projects
- ✓ Conduct annual workshop on university-industry linkage
- ✓ Develop working document and incentive package
- ✓ Facilitate staff and student internship placement

Goal 4: Improve the provision of adequate, and reliable infrastructure facilities for the advancement of our academic aspirations

Objective 4.1: Upgrade and standardize physical infrastructures

Indicators:

- By 2016, All infrastructure requirement has been identified
- By 2017, BiT has quality and reliable Utility supply services
- By 2017, BiT has fully automated library system
- By 2020, All academic units have standard laboratories, classrooms, libraries, and offices
- By 2020, BiT has its own approved master plan

Activities:

- ✓ Assess and determine the infrastructure requirement of the institute
- ✓ Secure enough space for expanding the institute physical infrastructures
- ✓ Expand laboratories, workshops, Libraries, classrooms, halls, and offices
- ✓ Develop and implement strategically focused, cost effective enhancements to the infrastructure support for research, including libraries, shared research facilities across academic units
- ✓ Develop and rehabilitate the institute's power supply, water supply and sewerage system
- ✓ Develop standards for laboratories, classrooms, libraries, and offices

Objective 4.2: Rehabilitate and expand ICT infrastructure to ensure reliable and fast internet access

Indicators:

- By 2017, High speed internet access has been in placed throughout the campus
- By 2018, all students have been gotten access to digital library
- By 2020, BiT has its own ICT master plan
- By 2020, student to internet connected computer has been reached 5:1

Activities:

- ✓ Extend Wi-Fi zone across the campus

- ✓ Develop effective network system
- ✓ Upgrade data center

Objective 4.3: Provide adequate residence and entertainment facilities so as to create conducive environment

Indicators:

- By 2018, BiT has its own community school
- By 2020, BiT has full-fledged sport facility
- By 2020, staff and students have got standardized residence, Cafeteria and dining facility

Activities:

- ✓ Construct staff and student residences
- ✓ Build model community school
- ✓ Provide inclusive and extensive recreational and sport facilities

Objective 4.4: Improve resource utilization through implementation of quality management tools

Indicators:

- By 2016, All offices and laboratories have been organized with kiazen
- By 2016, procurement and property administration systems have been automated
- By 2017, financial, human resources, staff evaluation systems have been automated
- By 2017 GPS based transport management system has been implemented

Activities:

- ✓ Provide training to sustain Kiazen
- ✓ Implement modern financial and property management system
- ✓ Implement fleet management system

Objective 4.5: Equipped with state-of-the-art teaching facilities so as to enable BiT to be a competent institution in education, research and services.

Indicators:

- By 2018, in place robust laboratory management system
- By 2018, Technology Park has been established
- By 2019, the teaching learning has been supported by state-of-the-art laboratory facilities
- By 2020, at least 60% of undergraduate courses have been supported by E-learning

Activities:

- ✓ Establish a system of identifying the specific demand on teaching facilities according to the academic course content and technological development
- ✓ Assess existing facilities; repair and replace malfunctioned equipment
- ✓ Provide training to all academic staff on e-learning system.

Goal 5: Growing and diversifying our income from a wide range of financially sustainable academic, research and business activities

Objective 5.1: Increase and sustain the required financial resources through intelligent engagement of intellectual capital;

Indicators:

- Has been Secured at least five research project grants every year starting from 2017
- At least fifty consultancy services have been provided every year
- By 2020, the income generated from academic services has been doubled

Activities

- ✓ Provide need based consultancy services
- ✓ Compute in national and international research grant calls and bids
- ✓ Collect tuition and training fees from diversified continuing, distance education, and tailor made trainings

Objective 5.2: Raise revenue generation capacity by establishing institute owned business enterprises

Indicators:

- By 2016, the institute has a business strategy
- By 2017, The institute has owned at least three business enterprises
- By 2017, BiT has incentive guideline

Activities:

- ✓ Develop business plans
- ✓ Establish economically feasible and knowledge based business enterprises
- ✓ Secure business licence.
- ✓ Develop incentive guideline for staff and students who generate implementable business ideas

Goal 6: Enhance the institute's efficiency and effectiveness by designing widely understood governance system and building leadership capacity

Objective 6.1: Fostering a culture of high aspiration and performance, drawing on excellent leadership, effective management and employee engagement

Indicators:

- By 2016, all academic and administrative units get full empowerment to exercise their authority
- By 2017, BiT has finalized & implemented performance-based staff remuneration system
- By 2019, all management personnel in BiT have attended at least three leadership capacity developments training

Activities:

- ✓ Provide leadership training
- ✓ Encourage participatory decision making
- ✓ Establish performance based staff promotion, motivation, retention, and remuneration systems
- ✓ Share the institute strategy periodically to the community

Objective 6.2: Improve continuously our internal management system and governance structure

Indicators:

- By 2016, BiT's governance structure has been fully operational
- By 2017, BiT has clear internal financial and procurement procedures
- By 2017, BiT has clear system of personnel recruitment, administration, remuneration, promotion, demotion, and dismissal guidelines
- By 2019, BiT has implemented effective workflow monitoring system

Activities:

- ✓ Introduce workflow monitoring system
- ✓ Monitor the compatibility of the institute organizational structure with its work load
- ✓ Develop different internal academic and administrative regulations, manuals, and guidelines

Objective 6.3: Strengthen internal and external communication and networking

Indicators:

- By 2016, BiT has well organized and clearly defined information and communication strategies
- By 2017, BiT has approved communication and collaboration policy document
- Publicize the institute achievements through public media quarterly

- By 2020, BiT have 10 international and 20 national partner institutions
- By 2020, BiT's web site visibility has been ten fold
- Publicizing the institute's periodic achievements to the public and other institutions through various media

Activities:

- ✓ Strengthen the information and strategic communication office in different resources
- ✓ Identify potential partnership and networking areas
- ✓ Develop communication networking guideline

Objective 6.4: Mainstreaming gender, HIV AIDS and other crosscutting issues

Indicators:

- By 2020, BiT has 30% women leaders
- Provide training on HIV/AIDS to BiT community biannually
- Organize environmental protection campaign biannually
- All disables have got special support

Activities:

- ✓ Provide leadership to women
- ✓ Provide support to HIV/AIDS clubs
- ✓ Actively engaging all our communities in efforts to reduce/minimize
- ✓ Organise workshops and seminars on gender and HIV/AIDS.

4.3. Baseline and targets for Key performance measuring indicators

Knowing the current status as a baseline and setting a target for the strategic period enable us to see the change brought and the results accrued by the strategic plan. Table 4.2 presents the base line and targets of the strategic plan.

Table 4.2 Baseline and targets of performance measuring indicators

Objectives	Indicators	Base line (2015)	Target (2020)	Annual Targeted				
				2016	2017	2018	2019	2020
1.1. Enhance institutional reputation through diversified program and practice oriented curricula with due consideration of the country's development priority and international standards	quality and relevant education to prepare competent graduates equipped with entrepreneurial	15	20	1	-	1	1	2
	Number of undergraduate programs							
	Percent of evaluated and validated curricula	70	100%	80	90	100	100	100
	Staff to student ratio	1:39	1:20	1:34	1:30	1:27	1:25	1:20
	Number of nationally accredited curricula	2 (on process)	10	1	2	2	2	3
	Number of programs assessed by tracer study	5	15	3	3	3	3	3
1.2. Enhance staff profile, knowledge, skills and attitude through a variety of internal and external human resource development efforts.	BSc:MSc:PhD staff ratio	45:50:5	5:70:25	40:54:6	30:60:10	20:65:15	10:70:20	5:70:25
	Percent of certified academic staff on pedagogical and didactical skills and attitude	25	100%	30	60	80	90	100
	Percent of academic staff who are involved in industrial internship	20	60%	30	40	50	55	60
	Percent of the technical supporting staff who have fulfilled Laboratory accreditation requirement	0	50%	5	25	35	45	50
1.3. Enhance active learning and ensure that all academic units	Percent of courses that are supported with Peer led learning	50	100%	70	90	95	100	100
	Implementation of mid semester	None	100%	25	100	100	100	100

have robust form of student assessment	student feedback system							
	Revised and implemented Student evaluation and assessment system	-----	Implemented	Imple mented	Impleme nted	Impleme nted	Impleme nted	Implem ented
1.4. Enhance graduate entrepreneurial orientation and job creation capability	Number of graduating students attended disciplinary based entrepreneurial training	0	All	20	50	75	100	100
	Percent of graduates who have created their own business enterprise	2	10%	2	3	5	7.5	10
1.5. Enhance educational accessibility through diversified mode of delivery mechanisms	Number of new centre established	0	3	1	2	3	3	3
	the number of students enrolled in continuing education	4027	8000	5000	6000	7000	8000	8000
	Number students enrolled in regular undergraduate and graduate students	9000	120100 (10000 UG, 2000 MSc, and 100 PhD)	9000	10000	11000	12000	120100
	Implementation of E-teaching	---	10%	2.5	10	30	70	100
	Availability of standard laboratories, classrooms, Libraries, and offices to all academic units	limited	Adequate					
	Provision of reliable Utility supply services	Very low reliability	More reliable Service (>90%)	50	70	80	90	100
2.1. Rehabilitate and expand ICT infrastructure to ensure reliable and fast internet access	Areal coverage of high speed internet service	60	100					
				70	90	100	100	100
2.2. Provide adequate	Provision of full-fledged sport	Basic	Full-fledge					

residence and entertainment facilities so as to create conducive environment	facility							
	Available community school	-----	1				1	1
	Percent of staff and students who have got adequate residence, Cafeteria and dining facility	Basic (60)	100	70	80	90	100	100
2.3. Improve resource utilization through implementation of quality management tools	Percent of offices and laboratories that are organized in kiazen	50	100	60	80	100	100	100
	Implementing Automated procurement and property administration systems	At pilot stage	Fully Implemented (100%)	70	90	100	100	100
	Implementing Automated human resources, staff evaluation systems	none	Fully Implemented (100%)	25	100	100	100	100
	Implementing GPS based transport management system	none	Fully Implemented (100%)	-	25	50	100	100
2.4. Equipped with state-of-the-art teaching facilities so as to enable BiT to be a competent institution in education, research and services.	Percent of E-learning supported undergraduate courses	0	60	10	30	60	80	80
	Number of research grade laboratories that are supported by state-of-the-art equipments	6	10	7	8	9	10	10
	Implementing very robust laboratory management system	None	Fully implemented					
	Established Technology Parks	0	1				1	1
3.1. Increase and sustain the required financial resources through intelligent engagement of intellectual capital	Research project grants secured every year	5	10	6	8	9	10	10
	Number of consultancy services provided every year	10	50	15	20	30	50	50
	Income generated from academic services(ETB)	5Million	50 Million	20	30	40	50	50
3.2. Raise revenue generation capacity by	Number of business enterprises	0	5	1	2	3	5	5

establishing institute owned business enterprises								
4.1. Identify key research thematic areas and facilitate the establishment of research centres	Number of research centres established	1	5	2	3	4	5	5
4.2. Enhance research culture by encouraging interdisciplinary and collaborative research while maintaining support to disciplinary based research	Approved and implemented guideline and incentive package that foster interdisciplinary research	None	Fully implemented			Fully implemented		
	Number of research groups established in each chair	0	≥ 1	2	5	20	26	26
	Number of graduate programs	20	40	23	30	35	40	40
4.3. Ensure the quality of research	Approved and in placed research quality monitoring guideline	none	In placed	>>>>	>>>>	>>>>	>>>>	>>>>
	Number of accredited research grade laboratories	1	10	2	3	5	7	10
	Number of subscribed scientific journal publishers	0	At least 2	-	1	2	3	3
4.4. Enhance research output dissemination	Number of BiT's own scientific journals	0	At least 2	1	2	2	3	5
	Number of scientific conferences organized per year	2	5	3	4	4	5	5
	Number of publications per year	32	150	45	60	100	120	150
5.1. Invest in and build on public engagement programs with strong, mutual beneficial ties to research, community services and	Number of model community service areas	1	3	2	2	3	3	3
	Coverage of sufficient energy, potable water and sanitation services in model community in percent	-----	90%	10	25	50	90	90
	Post harvest loss reduction in the	-----	50	25	30	40	50	50

educational programs	model communities in percent							
	Number of technologies transferred to the communities in collaboration with partner institutions	-----	≥ 5	2	3	5	10	10
5.2. Improve level of community engagement through volunteering activities of staff and students	Developing and implementing Community service guideline	none	In placed	Preparation		In placed	In placed	In placed
	Percent of staff engaged in community service per year	5	40	10	25	30	40	40
5.3. Enhance university industry linkage	Number of industrial partnership established	2	≥ 26	5	10	20	30	40
	Percent of student internship placement based on industries demand	15	50	20	30	40	50	50
6.1. Fostering a culture of high aspiration and performance, drawing on excellent leadership, effective management and employee engagement	Number of leadership capacity development trainings provided per year	3	5	4	5	5	5	5
	Implementing performance-based staff remuneration system.	none	Fully implemented	>>>>	>>>>	>>>>	>>>>	>>>>
	Empowered academic and administrative unit leaders	Deans, Directors	All(chairs, team leaders)	Chairs	chairs, team leaders	chairs, team leaders	chairs, team leaders	chairs, team leaders
6.2. Improve continuously our internal management system and governance structure	Implementation of fully operational Governance system	Moderate	Fully operational	Fully operational	Fully operational	Fully operational	Fully operational	Fully operational
	implementing effective workflow monitoring system	none	Fully implemented	Fully implemented	Fully implemented	Fully implemented	Fully implemented	Fully implemented
	Availability of clear internal financial and procurement procedures , rules, regulations in percent	60	100	100	100	100	100	100

	Availability of clear system of personnel recruitment, administration, remuneration, promotion, demotion, dismissal etc rules and regulations in percent	70	100	100	100	100	100	100
6.3. Strengthen internal and external communication and networking	Availability of approved communication and collaboration policy document	None	Preparation		Available		Available	
	Availability of well organized and clearly defined information and communication strategies	None	Preparation	Available	Available	Available	Available (Revised)	
	Number of events used to Publicize the institute achievements through public media per year	2	≥4	3	5	7	10	10
	Number of international and national partner institutions	15	30	17	20	25	30	30
6.4. Mainstreaming gender, HIV AIDS and other crosscutting issues	Percent of women leaders	15	30	16	18	22	25	30
	Number of trainings on HIV/AIDS Provided to BiT's community annually	2	5	3	4	5	5	5
	Number of organized environmental protection campaign annually	0	2	1	2	2	2	2
	Percent of special support given to disables	40	100	50	70	80	90	100

Remark from Strategic Plan Developing Committee

BiT's strategic Plan (2016–2020) lay down specific targets in every sphere of activity of the Institute. These targets includes excellence in academics, research and community service, development of infrastructure and facilities, human resource development, outreach service, technology transfer, governance and leadership, and collaboration with partner institutions. These targets have been set after extensive discussion and consultation with stakeholders to ensure that they are both ambitious and achievable. The targets will likely be exceeded if the contributions of faculties, staff, students, national and international partners and collaborators from industry are aligned and reinforce each other. The vision outlined in the Plan will then be realized, and BiT can be justifiably proud. Finally we must stop putting off for latter the hard decisions necessary to lead and manage our institute we need today.

References

BDU, 2011, Bahir Dar University (BDU) Five-Year Strategic Plan (2011-2015)
BiT. 2011. Bahir Dar Institute of Technology (BiT) Five-Year Strategic Plan (2011-2015)
BDU, 2016-220, Five year strategic plan
The Federal Democratic Republic of Ethiopia. 2009. Higher Education Proclamation No. 650/2009. Federal Negarit Gazeta. Addis Ababa.

በኢትዮጵያ ፋዩሪልድ ዲፕሎሞሲያዊ ሪፐብሊክ የትምህርት ሚኒስቴር. 2007. የከፊተኛ ትምህርት ዘርፍ የሁለተኛ ወደባድ ገና ትራንስፎርሜሽን ዕቅድ (2008-2012 ዓ.ም).

Federal Democratic Republic of Ethiopia Ministry of Education. 2015. Draft document on Education Sector Development Program V (ESDP V). Ministry of education. Addis Ababa.

Michael Allison and Jude Kaye. 2005. Strategic planning for nonprofit organizations: a practical guide and workbook. 2nd ed. John Wiley & Sons, Inc. Hoboken, New Jersey.

John M. Bryson. 2004. Strategic planning for public and nonprofit organizations: a guide to strengthening and sustaining organizational achievement. 3rd ed. John Wiley & Sons, Inc. San Francisco.