Tezpur University Policy for Actions Towards Attaining SDGs (TUPATAS)

(Academic Council Approval Number: AC.40/2021/2/4.6)

Preamble

The present time has been globally identified as the era of sustainability. The world is facing several environmental, ecological, and economic challenges including the threat of resource denudation. Therefore, being a responsible higher education institute the need for a far-fetched comprehensive policy for the University is duly acknowledged. The 17 sustainable development goals (SDGs) adopted by the United Nations in 2015 are thoughtfully sketched "to achieve a better and more sustainable future for all". At this juncture, appreciating the inclusive and global character of the 17 sustainable development goals, this policy framework has been formulated for the University to actively participate in fulfillment of these goals. The main purposes of this policy document are:

- Design a realistic guideline which can act as a blueprint for the University community to achieve a healthy and sustainable future.
- Interlinking and identifying academic curriculums in the tune of the SDGs at local, regional, national, and global scales.
- Encourage University fraternity to contribute in social wellbeing and ecological restoration.
- Create a sound academic culture for mobilizing human resource towards achievement of the SDGs.
- Mobilize stakeholders across communities, regions, creeds, and cultures, coming together for a common purpose.

At present, a "Sustainable Campus Initiatives" framework has already been formulated for Tezpur University. The major aims of such effort can be found in the 'Sustainable Campus Initiatives' webpage. Under this context, the justifications of this policy document are:

- To take full account of available natural resource use efficiency.
- Improve and augment human resource by imparting outcome-oriented quality education.
- To enhance peer-pressure towards high quality research and technology development.
- Integrating current ecological thinking into adaptive management and sustainable resource utilization.

Physiographic description

The University is situated in rural area in Sonitpur district of Assam, India (26°69′N and 92°83′E). The University campus with 106 ha area is surrounded by two villages of Balipara Development

Block *viz.*, Napaam and Amolapaam. The river *Jiyabharali*, the tributary of the river Brahmaputra is flowing on the eastern side at 2.18 km away (aerial distance) from the University campus. The closest (aerial) distance to the river Brahmaputra is 8.92 km. These details are furnished in Figure 1 in the Annexure.

The University was established in the year 1994. However, the construction of civil structure started built up since 2000 in the present campus which was earlier covered by swampy area and natural forest.

Teaching, research, and extension (outreach) are the major activities of the University. There has been substantial growth of activities in terms of academic programmes and human resource (Figure 2 and 3 in the Annexure) since its beginning in conjunction with the growth of the civil structures and population.

According to the recent land use and land cover (LULC) statistics of the University campus, major portion of the land area is covered by plantations and natural vegetation dominated by trees (43.18 %), shrub land (24.54%) built-up area (22.14 %), water bodies (2.68 %), playground (2.03 %), and other unclassified areas including pavements and open areas (5.41 %).

A Characteristic Green Campus

Since its beginning, University remains careful to keep the desired balance of vegetative cover through proactive plantation to compensate the changes caused by essential growth of building and infrastructure. Alangium chinense, Alstonia scholaris, Albizia odoratissma, Albizia procera, Anthocephalus cadamba, Bombax ceiba, Bridelia retusa, Cassia fistula, Ficus hispida, Ficus glomerata, Macaranga denticuleta, Polyalthia longifolia, Spondius pinnata, Sterculia villosa, etc. are common tree species found in the natural vegetation patches. Species of edible fruit trees and avenue trees are selected carefully for landscape and roadside plantations. Artocarpus heterophyllus, Elaeocarpus floribundus, Emblica officinalis, Mangifera indica, Psidium guajava, Syzygium cumini, Syzygium jambos, Terminalia chebula, Zizyphus mauritiana, are major fruit trees available in the campus. Albizia saman, Azadirachta indica, Bauhinia purpurea, Bauhinia variegata, Cassia javanica, Dalbergia sissoo, Delonix regia, Gmelia arborea, Lagerstroemia speciosa, Mimusops elengi, Mesua ferrea, Peltophorum pterocarpum, Tectona grandis, etc. along with some native fruit bearing trees provide food resources and shelter to birds and animals. The woody vegetation patches are also associated with number of herbaceous plants and shrub species keeping the undergrowth vegetation patches quite dense. These vegetation assemblages not only indicate rich floristic diversity but also serve as a suitable habitat for various animals like avian, insects and herpetofauna.

Urban Characteristics

The population density in the campus (~5000 per sq km) is substantially higher than the national average (382 per sq km) and Assam state average (overall: 398; Rural: 347; Urban:3491). Thus,

university campus possesses typical urban characteristics as evidenced by its dense population and modern amenities (33/11 KV power sub-station, 1 MW captive power plants, 1 MW SPV plants, treated water supply system, bus station, health centre, day-care centre, residential quarters, hostels, Wi-fi network, market complex, and Children Park) created for its dwellers.

Activities

Apart from intended duty of development of human resources, University is also engaged in research and development in the diverse areas covering Science, Engineering, Management, Humanities and Social Sciences. Outreach activities with engagement of nearby communities are also carried out regularly as per the mandate of the University.

Concerns for Sustainable Development

Sustainable development has remained as core focus of the University since its inception which is reflected in its master plan, vision, mission, and perspective plan. The core activities of the University have also remained aligned with majority of the SDGs of UN declared in 2015.

More than 11000 graduates in the domains of Science, Engineering, Management and Humanities, who are serving in different areas in India and abroad, have already been trained by Tezpur University through the course curriculum containing key contents on sustainability development. Thirty one different courses of the University with significant relevance to the SDG are provided in Table 1 of the Annexure.

Highlights of contributions towards Welfare and Sustainability

The University has significant research contributions with potential for applications for the development and welfare of mankind. Some of notable research contributions related to potable water, heath care, sustainable energy, waste-to-wealth technologies, sustainable materials, and policies for conflict resolution are highly relevant to sustainability.

In addition to the academic contributions, University has also remained sensitive to the economically disadvantageous people of the nearby society and has been providing earning opportunities during development and maintenance of the infrastructures.

Reduction of GHG through increasing share of its renewable energy consumption, carbon sequestration through forestation/plantation, resource recovery, recycling, and conservation are some other notable contributions towards SDG.

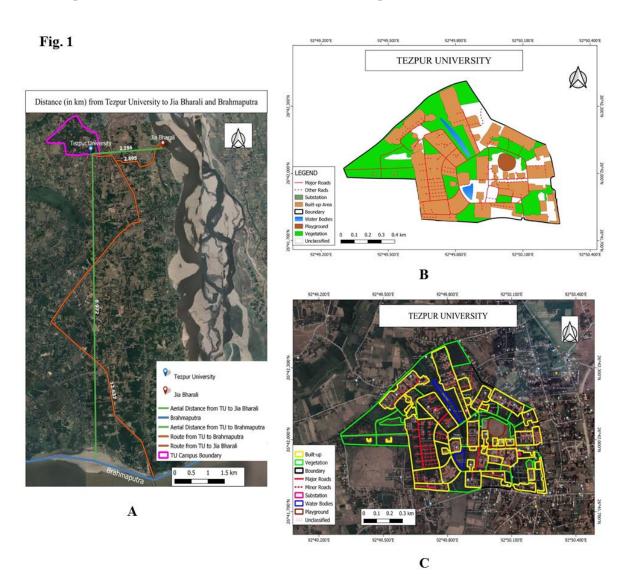
Tezpur University Policy for Actions towards Attaining SDGs

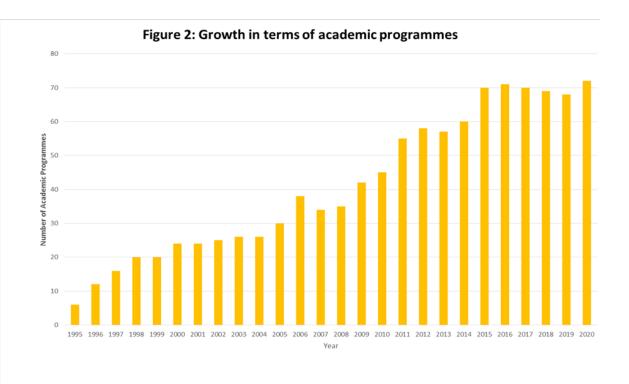
Tezpur University desires to frame a policy for actions towards attaining SDGs by 2030. The detail policy layout is given below:

1.0	Name	Tezpur University Policy for Actions Towards Attaining SDGs (TUPATAS)		
2.1	Approval of Academic Council			
2.2	Approval of Board of Management			
3.1	Provision for a standing Committee	A Standing Committee (SC) headed by Vice Chancellor and with at least 10 members representing all sections of people within the University oversees the implementation of TUPATAS. Dean, Planning and Development is Coordinator of the SC.		
3.2	Provision for Departmental Action Plans (DAP)	Academic Departments/Centres/Administrative units prepare time bound specific action plans for attaining SDGs and announce through respective website after approval of SC		
3.3	Provision for Institutional Action Plans (IAP)	Institutional action plan for attaining SDG is comprehensive mapping of the Departmental Action Plans		
3.4	Provision for Monitoring of Action plan	Meetings of Academic council and Board of Management discuss the progress of Actions of IAP. Progress of DAP is discussed in DAC or similar meetings		
4.1	Provision for motivational incentives	Incentives are provided to individuals (students/ faculties/ Departments/ Centres/Units) demonstrating remarkable progress of actions Towards Attaining SDGs as recommended by SC.		
4.2	Teaching, research and Capacity building	University encourages research, new academic programs and capacity building activities on SDGs		
5.1	Provision for financial resources to implement DAP	University earmark budget for required funds to implement DAPs as per the trends of requisition/demands by Academic Departments/Centres/Administrative units		
6.1	Assessment/bench marking of key performance indicator (KPI)	SC evaluates/assesses all activities (on-going and proposed) to determine impact of the actions on SDGs through specified KPIs and reports its status in Annual report/Webpage. SC also arranges benchmarking exercises to assess the progressive impacts and consider need based remedial actions.		
6.2	Data base and Annual Report	Notable highlights of the progress on TUPATAS are prepared by SC and provided in the University Annual Report. SC also arrange to make a provision for accessibility of the data related to DAP/IAP		
7.1	Special Provision to amend	SC reserves the right to alter and amend this policy document and notify subsequently after ratification in AC/BoM		

Annexure

Figure 1 Map of TU showing the current LULC. A. Aerial and route distance from nearby rivers. B. Sketch map of current land use and land cover. C. Satellite map of current land use and land cover







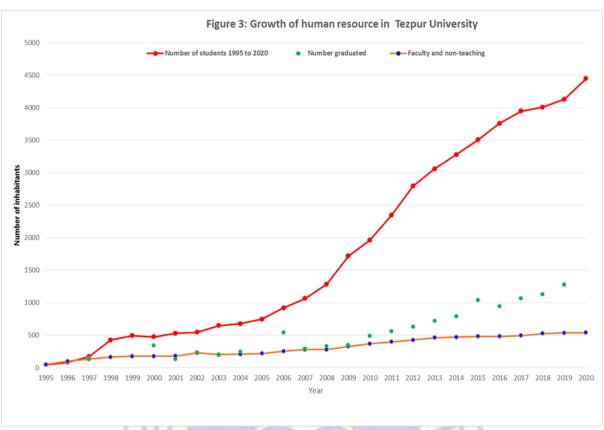




Table 1. SDG relevance courses offered at Tezpur University

Sl No	Course Name/Code	Program	Department	Related SDGs
1.	Nuclear Energy (EN 521)	Masters (M. Tech)	Energy	7 & 8
2.	Energy Environment Interaction (EN 535)	Masters (M. Tech)	Energy	2, 3, 7 & 8
3.	Advanced Bioenergy (EN 516)	Masters (M. Tech)	Energy	4 &7
4.	Energy and Society (EN 550)	Masters (M. Tech)	Energy	1, 2, 3, 7 & 8
5.	Biomass Energy and Application (EN 564)	Masters (M. Tech)	Energy	2, 3, 7 & 8
6.	Energy and Environment (ES 569)	Masters (M. Sc.)	Environmental Science	3,6 & 13
7.	Environmental Pollution and Management (ES 565)	Masters (M. Sc.)	Environmental Science	3,6 & 13
8.	Agriculture and Environmental Sustainability (ES 564)	Masters (M. Sc.)	Environmental Science	1, 2, 8, 12, & 13
9.	Soil Science (ES 566)	Masters (M. Sc.)	Environmental Science	1, 2, 8, 12, 13 & 15
10.	Solid Waste Management & Technology (ES 556)	Masters (M. Sc.)	Environmental Science	6, 11, 12, 13 & 16
11.	Environmental Impact Assessment (ES 563)	Masters (M. Sc.)	Environmental Science	2, 8, 12, 13 & 15
12.	Earth Processes and Natural Hazards (ES 554)	Masters (M. Sc.)	Environmental Science	4, 13 & 14
13.	Ecology and Ecosystem Dynamics (ES 553)	Masters (M. Sc.)	Environmental Science	4, 8, 12 & 15
14.	Natural Resource & Biodiversity Conservation (ES 572)	Masters (M. Sc.)	Environmental Science	2, 4, 8, 12, 13 & 15
15.	Climate Change & its Impacts (ES 571)	Masters (M. Sc.)	Environmental Science	12, 13 & 15
16.	Women and Development (WS 109)	PG Diploma	Chandraprabha Saikiani Centre for Women Studies	3 and 10
17.	Cultural Theory: Key concepts (CT 421)	Masters (MA)	Cultural Studies	3, 16, 17
18.	Society and Culture (CT 424)	Masters (MA)	Cultural Studies	3, 16, 17
19.	Human Rights & Social Justice (SW 527)	Masters (MSW)	Social Work	16 & 17
20.	Peace Education & Conflict Regulation (SW 572)		Social Work	16 & 17
21.	Social Work & Livelihood Promotion (SW 574)	Masters (MSW)	Social Work	16 & 17
22.	Sociology of Development (SC 522)	Masters (MA)	Sociology	3, 10 & 17
23.	Environmental Sociology (SC 574)	Masters (MA)	Sociology	3, 10 & 17
24.	Urban sociology (SC 580)	Masters (MA)	Sociology	3, 10 & 17
25.	Gender and Society (SC 571)	Masters (MA)	Sociology	3, 10 & 17
26.	Project Management ((BA 651)	MBA	Business Administration	1 and 4
27.	Fundamentals of Tourism (TM 501)	Masters	Business Administration	1, 4, 8 and 9
28.	Project Planning & Control (IC 633)	Int. M Com	Commerce	8 and 9
29.	Comparative Criminal Procedure (LW 505)	LLM	Law	16 and 17
30.	International Migration Law (LW 506)	LLM	Law	16 and 17
31.	Transport Phenomena in Biological and Bio-environmental Systems	PG (CBCS)	FET	6 and 13