LAND USE DEVELOPMENT AND INFRASTRUCTURE PLAN

TARLAC AGRICULTURAL UNIVERSITY

2023-2032

MESSAGE FROM THE UNIVERSITY PRESIDENT

Republic Act. 11396, also known as “An Act Requiring State Universities and Colleges (SUCs) to Prepare and Implement a Land Use Development and Infrastructure Plan that Shall Include the Construction of Dormitories for Students and Housing Sites for Employees” is the policy of the State to provide for a rational, holistic, efficient and just allocation, utilization, development and management of the country’s land and water resources that is consistent with the principles of equity, social justice, environmental integrity and sustainable development for the common good.

As a state university, Tarlac Agricultural University developed its Land Use Development and Infrastructure Plan (LUDIP) which outlines the comprehensive plan of the University for the use of land and the development of infrastructure to ensure that development occurs in a coordinated and efficient manner, and that it aligns with the goals and needs of its stakeholders.

The University’s LUDIP involves a careful analysis of the physical, social, economic, and environmental characteristics of the campus, as well as an understanding of the needs of the University’s clientele and the community. Thus, the process of the development of the plan involved extensive community engagement and input, as well as coordination with various stakeholders, including government agencies, private developers, and community organizations.

The LUDIP of the University is envisioned to be a key factor in future-proofing the University by providing a detailed framework for forthcoming developments while safeguarding sustainability and resiliency. Thus, this comprehensive plan ensures that Tarlac Agricultural University shall remain relevant and significant in the future.

(Sgd.) MAX P. GUILLERMO, PhD
University President

FOREWORD

The Tarlac Agricultural University (TAU) is mandated by the Republic Act. 11396, also known as "An Act Requiring State Universities and Colleges (SUCs) to Prepare and Implement a Land Use Development and Infrastructure Plan that Shall Include the Construction of Dormitories for Students and Housing Sites for Employees" to formulate prospective plans and developmental projects of the university for the next 10 years (2023-2032). The TAU's Land Utilization Development and Infrastructure Plan (TAU-LUDIP) outlines the allocation of land areas and spaces for identified projects and priority programs of the university. TAU- LUDIP also provides a detailed record of the current landscape under the stewardship of the university which comprises the TAU's main campus settled in Camiling, Tarlac, and the TAU's Forest Reserve Park situated in Titi Calao, Mayantoc, Tarlac.

With the increasing population of the university, the LUDIP becomes integral in determining applicable developmental and planning strategies in ensuring the sustainable use of natural resources and by future-proofing the infrastructure and development plans of the university.

Further, the TAU-LUDIP is consistent with:

1) Camiling Comprehensive Land Use Plan (2017-2026),
2) Mayantoc Comprehensive Land Use Plan (2021-2030),
3) The Provincial Development and Physical Framework Plan
4) National Building Code of the Philippines PD.1096
5) Civil Engineering Law of the Philippines RA.544
6) Fire Code of the Philippines RA. 9514
7) Accessibility Law of the Philippines BP.344
8) Philippine Green Building Code
9) Plumbing Code of the Philippines RA. 1378
10) Electrical Code of the Philippines RA. 7920
11) Philippine Clean Water Act RA. 9275
12) Philippine Clean Air Act RA. 8749
13) Ecological Solid Waste Management Act RA.9003
14) Pertinent rules and regulations and standards set by the Housing and Land Use Regulatory Board (HLURB) in coordination with other sectoral agencies.

With the formulation of the TAU-LUDIP, the university is advancing its academic reputation and upholding its core values- excellence, integrity, and service- to alleviate the quality of life of the populace. This 10-year plan is also formulated and spearheaded by the current university administration to secure TAU's landscape as an ideal backdrop for the experiential learning of students and scholars in the country and abroad.

ACKNOWLEDGEMENT

The Tarlac Agricultural University (TAU) community expresses its warmest gratitude to the following partner agencies and institutions who assisted in recalibrating the programs and carving future paths for the university through its Land Utilization Development and Infrastructure Plan (LUDIP).

The TAU Community is indebted to Ar. Garry M. Advento and Enp, Jonathan John Maldupana for their significant insights and contributions in the formulation and CDRA process and land budgeting of the TAU-LUDIP.

The TAU's Technical Working Group (TWG) has become integral in the materialization of the university's LUDIP. Their serious dedication and commitment to aid the university in re-aligning the plans and programs according to the current trends and demands of the industry are highly appreciated.

The university is greatly indebted to the University of the Philippines School of Urban and Regional Planning (UP-SURP) headed by Prof. Carmelita R.E.U. Liwag for their invaluable contribution in formulating the salient content of TAU-LUDIP. They have become instrumental in providing thought-provoking insights into conceptualizing priority programs that needed appropriate and sustainable utilization of the university's landscape and natural resources.

The University of the Philippines Resilience Institute (UP-RI) devotedly assisted TAU in interpreting the pertinent data relative to the university's preparedness and resilience to calamities and unprecedented incidents.

The university is also grateful to the Provincial Government of Tarlac and the Local Government Units of Camiling, Mayantoc, Sta. Ignacia, and San Clemente by aiding in sharing their own future infrastructure and development plans, so TAU can also prioritize its developmental initiatives anchored with the needs of the local community.

TAU also expresses its gratitude to the Commission on Higher Education Region III (CHEDRO3) for its relentless support and contribution to polishing the content of the TAU-LUDIP. The CHEDRO3 has been one of the dedicated partners of TAU that created opportunities for development for TAU to earn global recognition.

The Planning and Development Office (PDO), the Infrastructure Development and Land-Use Zoning (IDLUZ), and Secretariat became integral in consolidating, editing, and packaging all the data results from the series of planning workshops initiated by the TWG and the UP-SURP.

All these efforts were not possible without the guidance and support of the TAU's Administrative Council (ADCO) headed by the University President, Dr. Max P. Guillermo. The council is instrumental in forwarding TAU to the global academic milieu.

Lastly, the university extends its warmest thanks to the faculty members, non-academic personnel, and students who also provided invaluable insights into crafting the plans and initiatives of TAU following the preservation of high-quality standards of education and delivery of services.

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LIST OF ACRONYMS AND ABBREVIATIONS

CAF	College of Agriculture and Forestry
CAGR	Compound Annual Growth Rate
CAS	College of Arts and Sciences
CBM	College of Business and Management
CDF	Countrywide Development Fund
CEd	College of Education
CET	College of Engineering and Technology)
CHED	Commission on Higher Education
COD	Center of Development
COE	Center of Excellence
CRHS	Camiling Rural High School
CVAS	Camiling Vocational Agricultural School
CVM	College of Veterinary Medicine
DBM	Department of Budget and Management
DepEd	Department of Education
HEI	Higher Education Institutions
LS	Laboratory School
LGU	Local Government Unit
LUDIP	Land Use Development and Infrastructure Plan
NGA	National Government Agency
PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services Administration
PD	Presidential Decree
RA	Republic Act
SDG	Sustainable Development Goals
SUC	State Universities and Colleges
TAU	Tarlac Agricultural University
TCA	Tarlac College of Agriculture
TCT-CA	Tarlac College of Technology -College of Agriculture
TCT-CAT	Tarlac College of Technology - College of Arts and Trades
TNAS	Tarlac National Agricultural School
THE	Times Higher Education
TSAT	Tarlac School of Arts and Trades
TSU	Tarlac State University
UN	United Nations
QMS	Quality Management System
QS	Quacquarelli Symonds
WURI	World's Universities with Real Impact

EXECUTIVE SUMMARY

The Tarlac Agricultural University (TAU) is endeavoring to implement the Land Use Development and Infrastructure Plan (LUDIP) throughout a ten-year planning period beginning in 2022 and lasting until 2032. In addition to creating and implementing a land use development and infrastructure plan, the university must also address issues and challenges concerning the way it utilizes its resources and meet its development goals, which include ensuring the university's financial sustainability, improving accessibility, resiliency, security, and sustainability, as well as providing environmental protection, the conservation of natural resources, and ecological sustainability.

The entire planning entails a detailed examination of the campus's physical, social, economic, and environmental qualities and a comprehension of the demands of the community and the university's patrons. As a result, there was a lot of community involvement and input during the preparation of the plan, along with collaboration with other stakeholders like government agencies, commercial developers, and community organizations.

The main objective of the LUDIP planning is to provide a framework for allocating land and resources inside the university to land uses that offer the community enormous, sustained advantages. Once approved, the LUDIP will act as a guide for the ten-year projection of the university's land resources and infrastructures' proper use, development, and management.

1 BRIEF PROFILE OF TARLAC AGRICULTURAL UNIVERSITY

1.1 Brief History

LEGAL BASES AND MANDATES

Tarlac Agricultural University (TAU), previously Tarlac College of Agriculture, derives its legal mandate as an autonomous state agricultural college from the Presidential Decree (PD) 609 dated December 18, 1974 which officially terminated its merger with the Tarlac College of Technology, now Tarlac State University (TSU). As highlighted in PD 609 (1974), Tarlac College of Agriculture was mandated to undertake instruction, research, and extension, including production programs in agriculture, agricultural engineering, veterinary science, forestry, and natural resource management in Central Luzon.

By virtue of Republic Act No. 10800 (2016). Tarlac Agricultural University (then Tarlac College of Agriculture) was converted into a state university on May 10, 2016. The mandate of TAU is to primarily provide advanced education, higher technological, professional instruction and training in the fields of agriculture, agribusiness management, science and technology, engineering, teacher education, non-traditional courses, and other relevant fields of study. It shall also undertake research, extension services, and production activities in support of the development of the Province of Tarlac, and provide leadership in its areas of specialization.

UNIVERSITY PROFILE

Tarlac Agricultural University is one of the agricultural universities in Central Luzon that mainly offers undergraduate and postgraduate courses in agriculture, forestry, education, agricultural and geodetic engineering. The University also offers undergraduate courses in business administration, tourism management, economics, psychology, Information and Technology, development communication, and Doctor of Veterinary Medicine.

Tarlac Agricultural University consists of six colleges and one laboratory, all of which are offering accredited programs:

- ***College of Agriculture and Forestry (CAF)*** is recognized as a Center of Development for its agriculture program and technical courses. The college offers a total of 12 programs - 4 doctorate, 4 master's, and 4 undergraduate degrees.

- ***College of Education (CEd)*** is known for its Center of Excellence in its Teacher Education Program as it produces numerous highly competent graduates. CEd offers 1 doctorate degree program, 1 master's degree program, 6 undergraduate programs, and 2 post-secondary programs.

- ***College of Engineering and Technology (CET)*** is also known for producing highly-qualified agricultural and geodetic engineering graduates and IT professionals. CET has a total of 4 programs: 1 master's degree and 3 undergraduate degree programs.

- ***College of Veterinary Medicine (CVM)*** produces competitive veterinary doctors working in various companies in the country and abroad with its sole program on Doctor of Veterinary Medicine.

- ***College of Arts and Sciences (CAS)*** [1] continues to offer undergraduate degrees in its Economics and Psychology programs and also launches the new offering of the Development Communication Program.

- ***College of Business and Management*** **(CBM)** [2] offers its Business Administration and Entrepreneurship courses, and also offering Tourism Management as its new program.

- ***Laboratory School*** **(LS)** offers secondary education to senior and junior high school students.

The University approximately has over 7,000 students who are usually from the nearby towns within the Province of Tarlac which are Camiling, Mayantoc, Sta. Ignacia, and San Clemente. Over the years, the Filipino students from the Central Luzon and from the provinces in North Luzon are encouraged to enroll and study in TAU. The University has also has strengthened its global partnerships with various international universities by opening its doors to various foreign students who wish to study agriculture and technical courses and immerse themselves in the community and culture of the country.

TAU continues to reaffirm its reputation as a provider of higher quality education as recognized by the Times Higher Education Impact Ranking 2021 this year by placing 601 out of 800 in the roster of world universities. TAU also joins the list of world-class universities through an international assessment of the Quacquarelli Symonds (QS) Stars Audit. With an overall rating of three (3) stars, QS affirms that TAU is nationally well-recognized and is beginning to attract international recognition. At the latest, Tarlac Agricultural University ranks 39th among the Top 50 (Student Mobility & Openness Category) in the World's Universities with Real Impact (WURI) 2021 Ranking. In 2022, TAU has been classified as reporter status for Times Higher Education (THE) which characterizes the active participation of TAU and allows the university to be in the running for future rankings.

BRIEF HISTORY OF TARLAC AGRICULTURAL UNIVERSITY

The carabao is resilient even through the ages, synonymous with actions and sustained accomplishments – that is, TAU through the years.

The institution was established in 1944 as *Camiling Boys/Girls High School*. It started with three hundred sixty-eight (368) students, thirteen (13) faculty members, and a school principal. It stopped operation in December 1944 but resumed after the liberation as *Tarlac High School, Camiling Branch*. The reopening of the school was a response to the clamor of parents whose children stopped schooling during the war and the difficulty of traveling from Camiling to Tarlac City.

On July 6, 1945, Municipal Resolution No. 34 created the *Camiling Vocational Agricultural School* (CVAS), replacing *Tarlac High School, Camiling Branch*. Its focus on vocational agriculture was considered a means to hasten the town's economic recovery from the war's ravages. CVAS had 534 students and 13 faculty. From 1945 to 1948, the school offered two curricula- the general academic to enable the former students to graduate and the agriculture curriculum for the first-year and second-year students.

On September 26, 1946, the school was renamed *Camiling Rural High School* (CRHS). In 1948, the general curriculum was phased out. Early in 1952, the Director of Public Schools served notices that the school should be relocated to a permanent site and increase the declining enrollment; otherwise, it might be closed or transferred to another town.

[1] The College of Arts and Sciences and the College of Business Management are the two youngest colleges in the TAU which were created after TCA transitioned into a University. These two colleges were from the same institute, the Institute of Arts and Sciences (IAS), under then TCA.

The most conducive for an agricultural school's expansion was found in Malacampa, a barangay seven kilometers away from the town proper. In June 1953, the school moved to the new site with one hundred fifty-five (155) students and eight (8) faculty. Classrooms and offices were made of bamboo and nipa in the "middle of the wilderness." Funds from FOA-PHILCUSA later came, and permanent buildings replaced the bamboo structures. Expansion and development accelerated when CRHS was converted to Tarlac National Agricultural School (TNAS) in 1957 under a superintendent. It became a policy to make all projects profitable - piggery, poultry, goat farming, and the cultivation of vegetables. Linkage for research started from pork barrel funds. In 1961, the two-year technical agriculture post-secondary course was opened, and in 1963, the Health Center was built out of funds from the Philippine Charity Sweepstakes Office (PCSO). TNAS already has a school hymn and a student publication, "The Carabao."

In 1965, TNAS and Tarlac School of Arts and Trades (TSAT) were merged to become the Tarlac College of Technology. TNAS became TCT-College of Agriculture (TCT-CA), while TSAT became the Tarlac College of Technology - College of Arts and Trades (TCT-CAT) under RA 4337. TCT-CA offered three-degree programs: Bachelor of Science in Elementary Education Major in Elementary Agriculture or Home Economics; Bachelor of Science in Agriculture Major in Crop Science/Animal Science and Bachelor of Science in Agricultural Engineering. Government programs related to agriculture, especially after the declaration of Martial law in 1971, boosted enrollment in these courses. Graduates found immediate employment here and abroad. From all indications, the school could well become autonomous.

Thus, on December 18, 1974, under PD 609 issued by President Ferdinand E. Marcos, the institution was created as a state college. The first College President was Mr. Jose L. Milla. During President Milla's stewardship, the campus area was increased to 60 hectares; a forestry laboratory in Titi Calao, San Jose, Mayantoc was acquired through PD 1506; Fishery was added to the existing production projects, and joint research with IRRI was undertaken. Enrollment further increased as well as the number of faculty and non-teaching personnel.

The second College President was Dr. Robustiano J. Estrada. Upon his assumption, the ten-year development program and the TCA Code were prepared. There was a significant reorganization in the administrative set-up of the College. Two (2) Vice Presidents were designated: The Vice President for Administration and Business Affairs took care of the non-academic staff and functions, while the Vice President for Academic, Cultural, and Sports Affairs was in charge of the academic programs based in different institutes under a Dean. There was an exodus of faculty to take graduate studies because of the promotion scheme of the state universities and colleges that gave the highest points to educational attainment.

Infrastructure development was also accelerated under Dr. Estrada's administration. Academic buildings rose to accommodate enrollment that reached thousands and increased yearly. Twenty-one (21) faculty cottages, the Girl's Dormitory, Boy's Dormitory, a guest house, a six-door staff apartment, a research, and development building, a multi-purpose facility, the administration building cum library, and the chapel were all constructed.

The old structures were repaired, and PAGASA established an Agro-Meteorological Station. These gave a new look to the campus. By then, the campus had expanded to 70 hectares, including a four-hectare athletic oval. Research and extension also expanded the TCA and became a byword among households in the service area. The production projects-rice, vegetables, piggery, poultry, goat, cattle, nursery, fruit trees, and canteen service also increased notably.

Dr. Feliciano S. Rosete became the 3rd President of TCA when Dr. Estrada's term expired in 1989. During the first five years of Dr. Rosete's term, other infrastructures came about. The landmark was the Farmers' Training Center, built by the Countrywide Development Fund (CDF) of then-Senator Alberto G. Romulo.

During Dr. Rosete's term, scholarships from private individuals and NGOs started pouring in, and more curricular programs were offered. Extension and research accomplishments are also multiplied.

In 2001, Dr. Philip B. Ibarra became the 4th President of TCA. His administration is noted for sustaining the gains and glories of the past while working out for more. TCA then was notable for revolutionizing its curricular offerings, computerization of enrollment and administrative system, aggressive accessing of financial and material resources, development of new leaders, aggressive accreditation of programs and strengthening existing partnerships with local and international organizations. All these initiatives have pushed TCA to be the Best Institution through Transparent and Caring Administration.

On January 14, 2010, Dr. Max P. Guillermo, assumed the presidency of the institution. He pursued a new strategic planning initiative: TCA in 2015that outlined the formulated institutional plans, based on strategic programmatic strengths supported by a comprehensive development plan to make the then TCA an energized incubator of new ideas and center of innovation. Significant milestones int he realization of the vision to be a recognized higher education institution in the Southeast Asian region are greatly demonstrated during the second term of Dr. Guillermo.

His term is characterized by more aggressive and more vigorous actions all directed towards its persistent pursuit of quality and excellence. Intensified mechanisms in the realization of the Institution's quest for quality assurance are the landmark accomplishments of Dr. Guillermo's administration. It is under his administration that the institution had been awarded an institutional accreditation status making a record as the first ACCUUP Institutionally Accredited State College in the Philippines, the second SUC granted institutional accreditation by the AACCUP under the outcomes-based quality assurance (OBQA) paradigm, and the fourth SUC awarded institutional accreditation status by AACCUP. As it strives to achieve the highest levels of excellence in delivering higher education, TCA has also undergone Institutional Sustainability Assessment (based on CMO No. 46, s. 2012) conducted by CHED.

On January 1, 2016, the Agriculture Education of the College of Agriculture and Forestry was designated by the Commission on Higher Education (CHED) as Center of Development (COD), whereas, the Teacher Education programs of the College of Education were certified by CHED as Center of Excellence (COE) effective April 1, 2016. Furthermore, all the 23 program offerings of the University are already accredited, most of which are submitted for higher accreditation status.

On May 10, 2016, a major historical leap for the Institution befall as it was officially converted into TAU by virtue of Republic Act No. 10800, "An Act Converting the Tarlac College of Agriculture in the Municipality of Camiling, Province of Tarlac into a State University to be known as the Tarlac Agricultural University," signed by his excellency the late President Benigno S. Aquino III.

TAU is mandated by law to provide advance education, higher technological, professional instruction and training the fields of agriculture, agribusiness management, science and technology, engineering, teacher education, non-traditional courses, and other relevant fields of study. It shall also undertake research, extension services, and production activities in support of the development of the Province of Tarlac, and provide progressive leadership in its areas of specialization. The change in statues and shift in perspective pose immense challenges to TAU, to which an effective, in depth, well-planned, and well-executed strategic development plan is imperative to sustain quality, competence, and competitiveness in agricultural education and all its allied courses. The TAU Strategic Development Plan (2016 to 2025) has been crafted through the stakeholders' combined wisdom and vision for TAU. It serves as the blueprint of the ten-year strategic directions carefully laid out to realize the University's breakthrough goals.

Eyeing a spot in the global academic map and being recognized as one of the top performing agricultural universities today, the University has intensified and strengthened its global partnerships, linkages and collaborations to expand its network, broaden its prospects, and strengthen resource generation

initiatives. As of 2017, the University has established numerous linkages and memberships with institutions and organizations in the international milieu. These collaborations and partnerships paved the way for faculty exchange and numerous research paper presentations and opportunities for sending OJT students abroad. All of these also ushered diversified avenues for international (cross-border) mobility of students and professional advancement of faculty members.

On December 28, 2017, the Research Extension & Training Office completed the Research, Extension and Training Office Quality Management System audit as compliance with the requirements of ISO 9001:2015. The Management of certification Association "Russian Register" signified their issuance of the Certificate of Conformity.

Consequently, the Russian Register awarded the ISO 9001: 2015 Quality Management System (QMS) Certification to the TAU-RET QMS Core Group on February 9, 2018. Being ISO certified, the TAU-RET is committed to improving its performance continually and aims to achieve university-wide QMS 9001:2015 certification. With the support of the administration, the TAU-RET successfully passed the first surveillance visit of the Russian register last January 31, 2019.

Despite the 2020 pandemic outbreak, the University continues to provide excellence service to its stakeholders. Hence, the University submitted all its processes of ISO audit in the last quarter of 2021. The ACS W3 Solutionz issued the ISO 9001:2015 certification to Tarlac Agricultural University last December 13, 2021. The said certification signifies that the TAU's Quality Management System successfully maintains quality services in its provision of instruction, research, extension and training, production (IGP), administration, and support services.

Upon reaping all the success from several years of hard work, the University has been declared as a Level IV State University, as per the CMO No.12, s. 2018 and this is under the DBM-CHED joint Circular No.1 s. 2016, otherwise known as the F.Y. 2016 leveling instrument for SUCs and guidelines for the implementation thereof.

Having been recognized as a Level IV State University, TAU achieved excellence in undertaking the full range of its functions as a state university, namely instruction, research, and extension manifested through tracking effectiveness, research competence, active community services, and efficient management of resources.

An evident change in TAU's environment is also observed with the massive infrastructure projects designed to cater to the ever-changing needs of its stakeholders. The rise of new structures and rehabilitation of existing buildings that house well-ventilated and spacious classrooms together with well-equipped laboratories have been a priority of the University administration.

VISION AND MISSION

Tarlac Agricultural University (TAU) envisions being "*one of the top 500 universities in Asia*." This has been the vision of TAU since its transition from a rural agricultural college to an agricultural university on 10 May 2016 through Republic Act No. 10800 as declared by then President Benigno S. Aquino III. TAU's vision statement was crafted to place the institution in the row of globally recognized higher education institutions all over the world through its provision of quality education, impactful community development services, relevant production, and innovative research outputs that would alleviate poverty and hunger experienced by the poor sector in the country. Included in the poorest sector in the country are the farmers and fisherfolks, in which the Philippine Institute for Development Studies (PDIS) revealed that they have a combined 57.8% poverty incidence. With this alarming issue of poverty and decline in the economic opportunity in agriculture, TAU seriously committed to its **mission *"to improve the quality of life through the production of globally competent graduates and relevant technologies in the service of society."***

Considering its vision and mission, TAU aligns its programs and projects with the Camiling Local Government Unit's (LGU) development framework to further assess the needs and gaps in the advancement of agriculture starting in the municipality's context before it expands its reach across the country and overseas. Camiling LGU has a vision that states:

"Camiling is a premier agri-industrial, commercial, eco-tourism, and educational center in the Province of Tarlac that nurtures God-centered, development-oriented, and empowered citizenry, thriving in a vibrant, strong, and inclusive local economy in a safe, resilient, climate change-adaptive and well-planned community, guided by leaders that serve and govern with utmost responsibility and transparency (Camiling CLUP 2017-2026)

Since Camiling LGU envisions ***being an agri-industrial, commercial, eco-tourism, and educational center in the province***, TAU embodies its role as a higher education institution that specializes in agriculture, Agri-business, and eco-tourism through its College of Agriculture and Forestry which is a Center of Development in the region and its BS Tourism program in the College of Business and Management. The university has been integrating agricultural aspects in most of its academic offerings to ensure that all sectors and the agro-industry will be recognized and will benefit from its modernization. TAU's College of Education currently holds the Center of Excellence status and is earning recognition in the local and global milieus.

TAU's mission ***"to produce globally competent graduates and relevant technologies"*** coincides with the vision of the Camiling LGU to ***"nurture God-centered, development-oriented and empowered citizenry, thriving in a vibrant, strong and inclusive local economy."*** With its mandate to provide quality education and innovative technologies to systematize and modernize agriculture, TAU envisions to be instrumental in responding to the community development projects of Camiling LGU. For instance, the institution regularly invites the Camiling LGU to participate in its Annual and Midyear Performance Review and Planning Workshop to ensure that all of the development programs and innovations of TAU would directly benefit the stakeholders in Camiling and neighboring communities. TAU also conducts need assessments among its stakeholders to ensure that its extension services would support LGU's existing community-based projects. With the formulation of TAU's Land Use Development and Infrastructure Plan (LUDIP), TAU intends to plan ahead its further development and initiatives which are always synchronized with the LGU's vision of progress.

GOVERNING BOARD AND OTHER INTER-DEPARTMENTAL BODIES

There are twelve members of the 2022 Board of Regents of Tarlac Agricultural University as enumerated in **Table 1-1**. It is headed by CHED Commissioner Adamat, and vice-chaired by TAU President Dr. Guillermo. On the other hand, the 2022 TAU Administrative Council is presented in **Figure 1-1**.

Table 1-1: Members of the TAU Board of Regents (2022)

Official	Designation
Hon. Ronald L. Adamat *Commissioner, Commission on Higher Education*	Chairman
Hon. Max P. Guillermo *President, Tarlac Agricultural University*	Vice-Chairman

Official	Designation
Hon. Joel Villanueva *Chair, Senate Committee on Education, Arts, and Culture*	Member
Hon. Mark O. Go *Chair, House Committee on Higher & Technical Education*	Member
Hon. Crispulo G. Bautista, Jr. *Regional Executive Director, Department of Agriculture Regional Office III*	Member
Hon. Evelyn Nacario- Castro *OIC-Regional Director, NEDA Regional Office III*	Member
Hon. Reno A. Capinpin *Prominent Citizen*	Member
Hon. Crispiniano R. Lamorena, Jr. *Prominent Citizen*	Member
Hon. Ernesto A. Viray, Jr. *Acting President, Tarlac Agricultural University Alumni Association*	Member
Hon. Junerene A. Pontanilla *President, Tarlac Agricultural University Supreme Student Council*	Member
Hon. Julius Caesar V. Sicat *Regional Director, DOST Regional Office III*	Resource Person
Hon. Leonida S. Calagui *Regional Director, CHED Regional Office III*	Resource Person

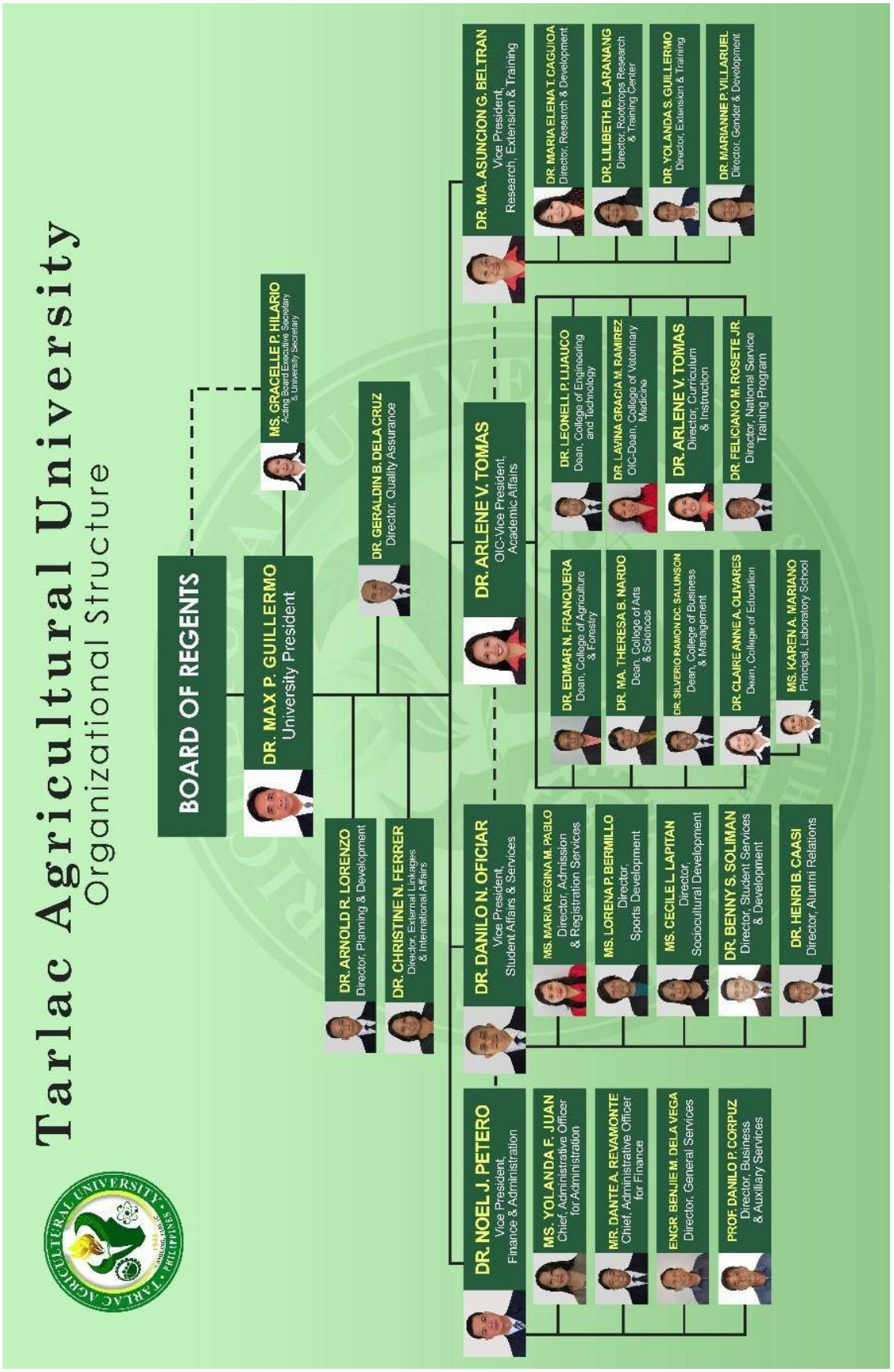


Figure 1-1: TAU Administrative Council (2022)

COURSES AND PROGRAMS OFFERED

Tarlac Agricultural University has six colleges and a laboratory school offering secondary education. TAU offers numerous programs and courses across its schools and colleges as enumerated in **Table 1-2**.

Table 1-2: Programs Offered in Tarlac Agricultural University (2022)

Name of College / School	Programs Offered	CERTIFICATE OF PROGRAM COMPLIANCE	
		COPC #	DATE ISSUED
College of Agriculture and Forestry (CAF)	• Doctor of Philosophy ○ Major in Agronomy ○ Animal Science ○ Rural Development • Master of Science in Agriculture ○ Major in Agricultural Extension ○ Major in Agronomy ○ Major in Animal Science ○ Major in Horticulture ○ Farming System Development • Master of Science in Forestry ○ Major in Reforestation Management ○ Major in Community Forestry • Bachelor of Science in Agriculture ○ Major in Agricultural Economics ○ Major in Agricultural Extension ○ Major in Agronomy ○ Major in Animal Science ○ Major in Horticulture ○ Major in Soil Science ○ Major in Crop Protection • Bachelor of Animal Science • Bachelor of Science in Food Technology • Bachelor of Science in Forestry	On Process On Process On Process On Process On Process 081s 2014 On Process 119s 2014 082s 2014	June 30,2014 November 4, 2014 June 30, 2014
College of Arts and Sciences (CAS)	• Bachelor of Arts in Economics • Bachelor of Science in Development Communication • Bachelor of Science in Psychology	077s2014 012s 2014 086s 2014	June 30, 2014 August 6, 2018 June 30, 2014
College of Business and Management (CBM)	• Bachelor of Science in Tourism Management • Bachelor of Science in Business Administration ○ Major in Human Resource Management ○ Major in Financial Management ○ Major in Marketing Management • Bachelor of Science in Entrepreneurship • Bachelor of Science in Agribusiness	037s 2021 009s 2018	October 11,2021 June 21,2018

College of Education (CEd)	• Doctor of Philosophy in Developmental Education	093s 2022	December 29, 2022
	• Master of Arts in Education		
	○ Major in Educational Management	090s 2022	December 29,2022
	○ Major in Mathematics	091s 2022	December 29,2022
	○ Major in Science	092s 2022	December 29,2022
	○ Major in Technology and Livelihood Education	039s 2020	September 18,2020
	• Bachelor of Secondary Education	079s 2014	June 30, 2014
	○ Major in Mathematics		
	○ Major in Science		
	• Bachelor of Elementary Education	078s 2014	June 30, 2014
	• Bachelor of Technology and Livelihood Education	032s 2018	August 16, 2018
	○ Major in Agriculture and Fishery Arts		
	○ Major in Home Economics		
	○ Major in Information and Communications Technology		
	• Bachelor of Early Childhood Education Certificate in Home Technology Management	013s 2018	August 16, 2018
College of Engineering and Technology (CET)	• Master of Science in Agricultural Engineering	On Process	
	○ Major in Soil and Water Management		
	• Bachelor of Science in Agricultural Engineering/Agricultural and Biosystems Engineering	080s 2014	June 30, 2014
	• Bachelor of Science in Geodetic Engineering	087s 2014	June 30, 2014
	• Bachelor of Science in Information Technology	084s 2014	June 30, 2014
College of Veterinary Medicine (CVM)	• Doctor of Veterinary Medicine	085s 2014	June 30, 2014
Laboratory School (LS)	• Senior High School		
	• Accountancy, Business and Management		
	• Humanities and Social Sciences		
	• Science, Technology, Engineering and Mathematics		
	• Junior High School		

RECOGNITION AND AWARDS

THE IMPACT RANKINGS

QS April 2021- April 2024

UI GreenMetric 2021 World University Rankings RANKED 261

Tarlac Agricultural University also continues to reaffirm its reputation as a provider of quality higher education as recognized by various award-giving bodies and institutional rankings in the country and abroad.

In 2019, Civil Service Commission conferred TAU the PRIME-HR Bronze Award. Per CSC Resolution No. 1801443, promulgated December 4, 2018, with Maturity Level II Accreditation, TAU's Human Resource Management Office (HRMO) has met Prime-HRM level II maturity indicators of all the core HR systems, practices, and management and has been continuously compliant with service law imposed by the CSC based on the evaluation conducted by Commission and as per the recommendation of CSC Region 3 to the CSC Central Office.

Times Higher Education Impact Ranking 2021 conferred TAU the 601st-800th rank in the roster of world universities. The Times Higher Education Impact Rankings Methodology assessed the global performance of universities against the United Nations' Sustainable Development Goals (SDGs). In 2023, Tarlac Agricultural University (TAU) made it to the list of the Times Higher Education (THE) World University Rankings (WUR) 2023 edition. Universities with reporter status are recognized for their active participation and shall be assisted by THE in working "towards admission to future rankings." THE received data from more than 2,500 higher education institutions (HEIs) all over the world but only 1,799 universities made it to the top 1,000 cut and reporter status list.

Using carefully calibrated indicators to provide comprehensive and balanced comparison across four broad areas: research, stewardship, outreach, and teaching. TAU also joined the list of world-class universities through an international assessment of the QS Stars Audit. With an overall rating of three (3) stars, QS affirmed that TAU is nationally well-recognized and is beginning to attract international recognition.

In 2021, Tarlac Agricultural University ranked 39th among the Top 50 (Student Mobility & Openness Category) in the World's Universities with Real Impact (WURI) 2021 Ranking.

The UI Green Metric WUR released the results of its evaluation of the ecological footprint and sustainability in education and research of Higher Education Institutions (HEIs) in the global milieu. Among Philippines SUCs who were evaluated, TAU was leading by seizing the 261st spot with a total score of 6,900 points. It was the first attempt of the University to be included in the said global list.

Despite the impact of the 2020 pandemic, the University continues to provide excellent service to its stakeholders. Hence, the University submitted all its processes for ISO audit in the last quarter of 2021. The ACS W3 Solutionz issued the ISO 9001:2015 certification to the Tarlac Agricultural University last December 13, 2021. After a year, TAU has undergone its first surveillance audit and successfully passed. The said certification signifies that the TAU's Quality Management System successfully maintains quality services in its provision of instruction, research, extension and training, production (IGP), administration, and support services.

ROLE OF TARLAC AGRICULTURAL UNIVERSITY IN LOCAL & REGIONAL DEVELOPMENT

Tarlac Agricultural University serves as the center of education of agriculture and industry-based undergraduate and graduate programs in Camiling. It primarily provides advanced education, higher technology, professional instruction, and training in the fields of agriculture, agribusiness management,

science and technology, engineering, teacher education, non-traditional courses, and other relevant fields of study.

The university is among the municipality's numerous educational institutions catering to Camiling and its neighboring municipalities' educational needs. While maintaining its position as the prime producer of agriculture professionals in the Province of Tarlac and providing leadership in its areas of specialization, it also undertakes research, extension services, and production activities in support of the development of the province.

1.2 Demographic Profile

The university community consists of the students and employees of the Tarlac Agricultural University. The profile and background of both populations are discussed in this section.

STUDENT POPULATION

Tarlac Agricultural University consists of six colleges offering bachelor's, master's, doctorate and certificate programs, and a laboratory school for upper and lower secondary education. In the past decade, the total student population in the university demonstrates an increasing trend. Between 2013 to 2022, the compound annual growth rate (CAGR) of the student population over the 10-year period is at 6.89%. The 5-year CAGR from 2018 to 2022 is higher at 11.79% growth annually.

As illustrated in **Figure 1-2**, Year 2021 recorded the highest student population in TAU in the past ten years at 7,179 students. In terms of growth rate, the period between 2018 to 2019 saw the highest growth by 31.16%.

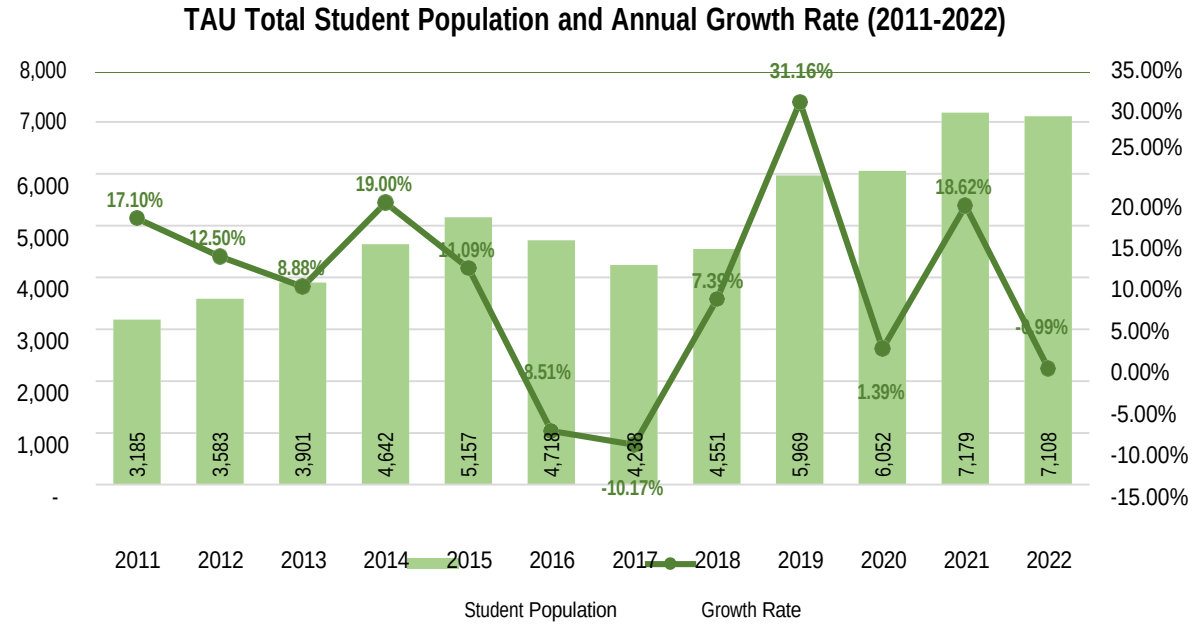


Figure 1-2: TAU Student Population and Annual Growth Rate (2011 – 2022) [2]

Data Sources: TAU Planning and Development Office, and TAU Admission and Registration Services

Among the factors that may have influenced changes and fluctuations in the student population include the enactment of following national policies:

- ***Republic Act No. 10533 in 2013***, also known as the Enhanced Basic Education Act, which has added two additional years in secondary school which have impacted enrollment rates from 2016 to 2017.
- ***Republic Act No. 10931 in 2017***, also known as the Universal Access to Quality Tertiary Education Act, which has made the tuition and other fees for tertiary education in state universities and colleges free.

[2] First Semester Enrollment Statistics have been used from data sources to maintain consistency.

Moreover, the consequences of the mobility restriction due to the COVID-19 starting 2020 may also influence the enrolment of students in the university.

Student Population by College

The College of Agriculture and Forestry (CAF) has consistently held the highest share of students among the colleges and schools of the university in the past decade. Since 2019, The College of Business and Management (CBM) holds the second largest share of the total student population. In the years prior the Laboratory School and the College of Education accounted for the second highest share in student population as shown in **Figure 1-3**.

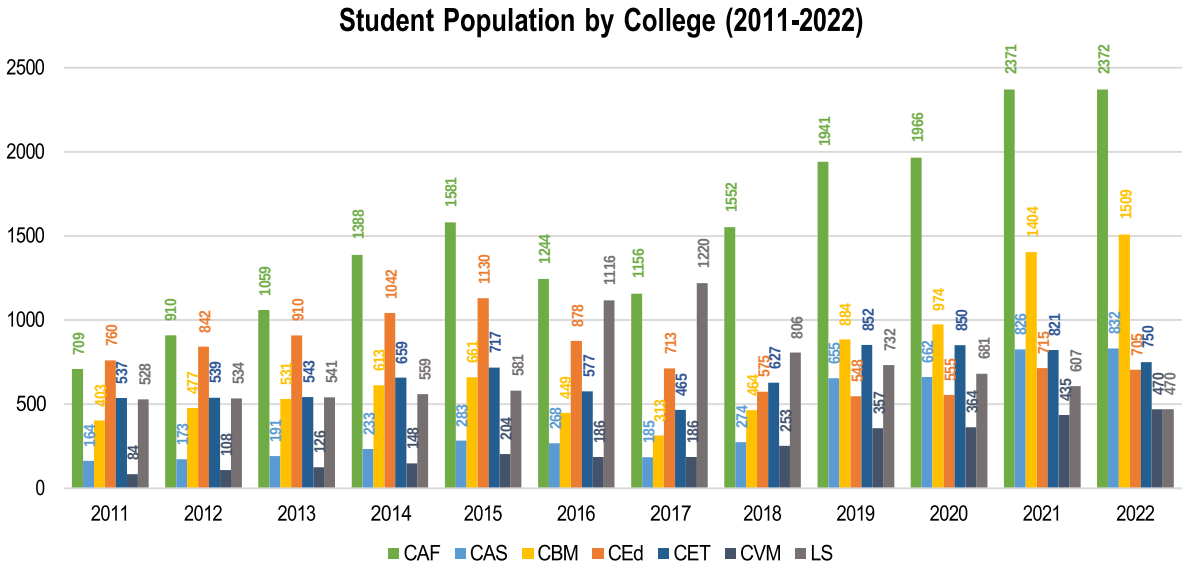


Figure 1-3 TAU Total Student Population by College (2011 – 2022)

Data Sources: TAU Planning and Development Office, and TAU Admission and Registration Services

As of 2022, the CAF had the greatest number of students accounting for one-third (33.37%) of the total student population. This is followed by CBM and CAS at 21.23% and 11.71%, respectively. Despite CAF holding the highest number of students, in the past decade, CAS saw the highest growth in total students, followed by CBM and CAF. In more recent years, CBM and CAS both have been growing at over 30% per year. The 2022 Student Population and Compound Annual Growth Rates are enumerated in

Table 1-3: Student Population and Growth Rates by College and School (2022)

College / School	2022 Population		10-year CAGR (2013-2022)	5-year CAGR (2018-2022)
	Number	Percent		
College of Agriculture and Forestry (CAF)	2372	33.37%	9.37%	11.19%
College of Arts and Sciences (CAS)	832	11.71%	17.76%	32.01%
College of Business and Management (CBM)	1509	21.23%	12.31%	34.29%
College of Education (CEd)	705	9.92%	-2.80%	5.23%
College of Engineering and Technology (CET)	750	10.55%	3.65%	4.58%
College of Veterinary Medicine (CVM)	470	6.61%	15.75%	16.75%
Laboratory School (LS)	470	6.61%	-1.55%	-12.61%

College / School	2022 Population		10-year CAGR (2013-2022)	5-year CAGR (2018-2022)
	Number	Percent		
Total - TAU	**7108**	**100.00%**	**6.89%**	**11.79%**

Data Sources: TAU Planning and Development Office, and TAU Admission and Registration Services

Student Population by Sex

In terms of sex-disaggregation, since 2011, the student population has consistently had a higher number of female students as shown in **Figure 1-4**. Wider disparities are observed at the college level with CAS, CBM, CEd and LS being majority female, while CAF and CET being majority male. For CVM, there are fluctuations in sex distribution, with the last five years recording a mostly-female student population.

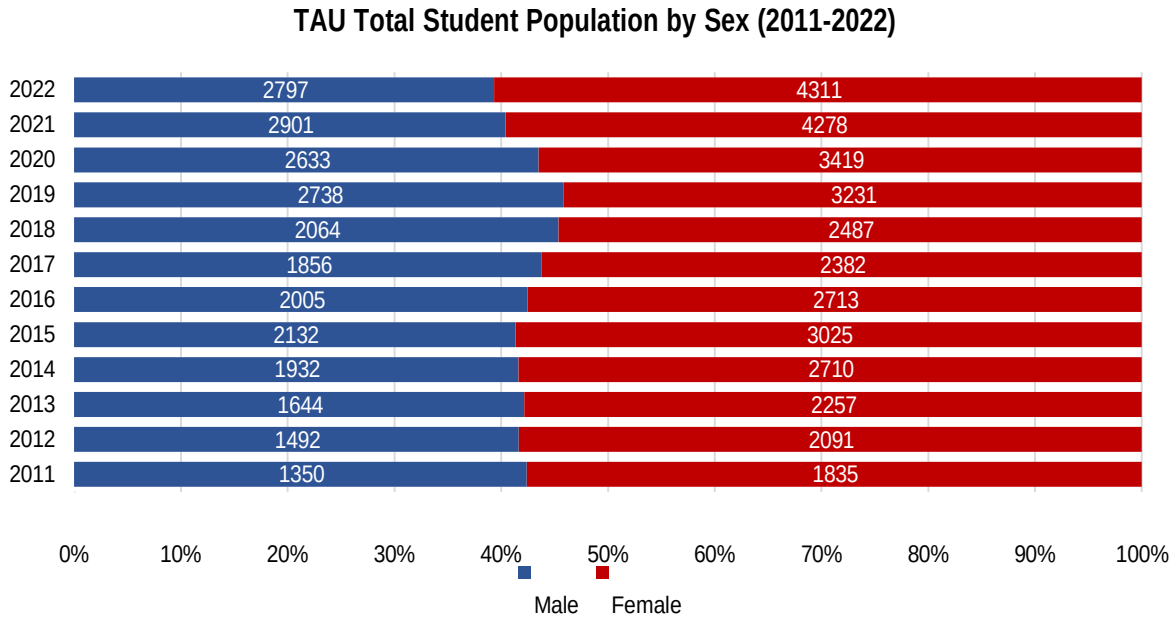


Figure 1-4: TAU Total Student Population by Sex (2011 – 2022)

Data Sources: TAU Planning and Development Office, and TAU Admission and Registration Services

The TAU student population disaggregated by College, Program, and Sex from years 2010 to 2022 is shown in **Table 1-4**.

Table 1-4: Student Population by College, Program, and Sex (2010-2022)

College / Program	2010			2011			2012			2013			2014			2015			2016			2017			2018			2019			2020			2021			2022		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
College of Agriculture and Forestry																																							
Doctor of Philosophy in Agronomy	-	-	-	2	4	6	-	-	-	-	1	1	1	-	1	1	2	3	2	1	3	1	-	1	1	-	1	1	-	1	2	3	5	-	-	-	-	-	-
Doctor of Philosophy in Animal Science	-	-	-	-	1	1	1	3	4	1	3	4	1	3	4	1	3	4	1	2	3	1	-	1	1	1	2	1	-	1	1	2	3	-	-	-	-	-	-
Doctor of Philosophy in Poultry Production	-	-	-	2	8	10	6	13	19	8	17	25	5	18	23	5	10	15	7	14	21	-	-	-	-	-	-	-	-	-	-	-	-	2	1	3	4	1	5
Doctor of Philosophy in Rural Development	-	-	-	2	3	5	1	2	3	3	4	7	1	2	3	-	1	1	1	1	2	1	-	1	3	1	4	4	1	5	4	2	6	5	3	8	4	1	5
Master of Science in Agriculture*	-	-	-	1	2	3	1	2	3	-	4	4	-	2	2	1	4	5	3	3	6	33	13	46	35	19	54	33	33	66	27	28	55	12	10	22	20	21	41
Master of Science in Forestry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	3	2	4	6	1	1	2	2	2	4	5	1	6	1	1	2	2	2	4
Master of Forestry major in Reforestation Management	-	-	-	-	-	-	1	1	2	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Master of Forestry major in Community Forestry	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bachelor of Science in Agriculture	99	42	141	147	74	221	181	140	321	223	177	400	284	265	549	340	308	648	306	258	564	334	258	592	415	283	698	496	326	822	443	347	790	430	392	822	443	388	831
Bachelor of Animal Science	191	40	231	249	61	310	309	103	412	350	134	484	440	203	643	481	240	721	356	169	525	278	140	418	376	203	579	432	260	692	455	286	741	657	356	1,013	536	361	897
Bachelor of Science in Food Technology	35	70	105	42	91	133	38	90	128	26	73	99	19	71	90	19	80	99	12	52	64	6	40	46	49	58	107	51	116	167	55	134	189	67	187	254	82	207	289
Bachelor of Science in Forestry	1	-	1	13	7	20	15	3	18	24	10	34	41	32	73	46	39	85	21	32	53	17	28	45	41	64	105	92	91	183	70	101	171	111	136	247	158	142	300
CAF - Subtotal	**326**	**152**	**478**	**458**	**251**	**709**	**553**	**357**	**910**	**635**	**424**	**1,059**	**792**	**596**	**1,388**	**894**	**687**	**1,581**	**712**	**532**	**1,244**	**673**	**483**	**1,156**	**922**	**630**	**1,552**	**1,112**	**829**	**1,941**	**1,062**	**904**	**1,966**	**1,285**	**1,086**	**2,371**	**1,249**	**1,123**	**2,372**
College of Arts and Sciences																																						
Bachelor of Arts in Economics	18	35	53	9	44	53	7	34	41	15	46	61	14	43	57	28	61	89	19	48	67	13	30	43	19	49	68	86	141	227	75	130	205	70	145	215	83	158	241
Bachelor of Science in Development Communication	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	33	43	82	142	224	76	150	226	86	202	288	87	221	308
Bachelor of Science in Psychology	24	87	111	21	90	111	24	108	132	25	105	130	36	140	176	35	159	194	46	155	201	32	110	142	34	129	163	46	158	204	49	182	231	55	268	323	47	236	283
CAS - Subtotal	**42**	**122**	**164**	**30**	**134**	**164**	**31**	**142**	**173**	**40**	**151**	**191**	**50**	**183**	**233**	**63**	**220**	**283**	**65**	**203**	**268**	**45**	**140**	**185**	**63**	**211**	**274**	**214**	**441**	**655**	**200**	**462**	**662**	**211**	**615**	**826**	**217**	**615**	**832**
College of Business and Management																																						
Bachelor of Science in Tourism Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	20	26	45	99	144	39	104	143	75	232	307	86	294	380
Bachelor of Science in Business Administration	72	216	288	84	254	338	96	298	394	104	325	429	113	376	489	106	428	534	74	291	365	51	208	259	56	227	283	98	309	407	119	386	505	138	551	689	145	547	692
Bachelor of Science in Entrepreneurship	12	20	32	21	44	65	17	66	83	24	78	102	26	98	124	34	93	127	21	63	84	14	40	54	42	113	155	98	235	333	83	214	297	91	244	335	95	239	334
Bachelor of Science in Agribusiness	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	22	29	19	54	73	31	72	103
CBM - Subtotal	**84**	**236**	**320**	**105**	**298**	**403**	**113**	**364**	**477**	**128**	**403**	**531**	**139**	**474**	**613**	**140**	**521**	**661**	**95**	**354**	**449**	**65**	**248**	**313**	**104**	**360**	**464**	**241**	**643**	**884**	**248**	**726**	**974**	**323**	**1,081**	**1,404**	**357**	**1,152**	**1,509**
College of Education																																						
Doctor of Philosophy in Development Education	-	-	-	2	8	10	6	13	19	8	17	25	5	18	23	5	10	15	7	14	21	6	16	22	9	13	22	14	18	32	15	13	28	12	8	20	11	9	20
Master of Arts in Education*	-	-	-	18	77	95	11	70	81	14	48	62	16	61	77	17	64	81	19	58	77	38	105	143	36	123	159	46	146	192	35	90	125	36	79	115	32	63	95
Bachelor of Secondary Education	52	120	172	61	118	179	66	141	207	78	180	258	106	205	311	111	241	352	83	180	263	66	138	204	34	99	133	27	64	91	38	79	117	52	112	164	50	104	154
Bachelor of Elementary Education	68	281	349	81	336	417	77	351	428	71	364	435	78	401	479	74	422	496	63	329	392	43	221	264	21	145	166	19	80	99	17	77	94	21	96	117	21	119	140
Bachelor of Techology and Livelihood Education	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	25	33	22	54	76	23	74	97	35	108	143	35	108	143
Bachelor of Early Childhood Education	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	18	6	47	53	5	69	74	10	92	102	15	99	114
Bachelor of Science in Home Technology Management	-	-	-	-	-	-	-	-	-	20	74	94	13	116	129	13	162	175	9	108	117	8	72	80	4	40	44	-	5	5	-	-	-	-	-	-	-	-	-
Bachelor of Science in Home Technology	4	32	36	9	50	59	11	96	107	5	31	36	1	18	19	-	4	4	-	1	1			-			-			-			-			-			-
Certificate in Home Technology Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	6	14	20	17	37	54	13	26	39
Teacher Certificate Program	-	-	-	-	-	-	-	-	-	-	-	-	3	1	4	2	5	7	2	5	7			-			-			-			-			-			-
CEd - Subtotal	**124**	**433**	**557**	**171**	**589**	**760**	**171**	**671**	**842**	**196**	**714**	**910**	**222**	**820**	**1,042**	**222**	**908**	**1,130**	**183**	**695**	**878**	**161**	**552**	**713**	**112**	**463**	**575**	**134**	**414**	**548**	**139**	**416**	**555**	**183**	**532**	**715**	**177**	**528**	**705**
College of Engineering and Technology																																						
Master of Science in Agricultural Engineering major in Soil and Water Management	-	-	-	-	-	-	1	2	3	1	2	3	3	3	6	5	1	6	7	5	12	12	9	21	14	6	20	9	5	14	13	5	18	7	2	9	11	5	16
Bachelor of Science in Agricultural and Biosystems Engineering	38	15	53	36	17	53	49	27	76	53	22	75	70	30	100	74	38	112	93	39	132	92	45	137	141	74	215	174	97	271	165	92	257	139	89	228	116	87	203
Bachelor of Science in Geodetic Engineering	82	28	110	74	34	108	86	25	111	87	35	122	89	49	138	115	65	180	94	46	140	77	37	114	103	59	162	158	99	257	147	102	249	140	109	249	123	103	226

College / Program	2010			2011			2012			2013			2014			2015			2016			2017			2018			2019			2020			2021			2022		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Bachelor of Science in Information Technology	223	213	**436**	202	174	**376**	189	160	**349**	198	145	**343**	240	175	**415**	246	173	**419**	174	119	**293**	110	83	**193**	139	91	**230**	206	104	**310**	208	118	**326**	218	117	**335**	209	96	**305**
CET - Subtotal	**343**	**256**	**599**	**312**	**225**	**537**	**325**	**214**	**539**	**339**	**204**	**543**	**402**	**257**	**659**	**440**	**277**	**717**	**368**	**209**	**577**	**291**	**174**	**465**	**397**	**230**	**627**	**547**	**305**	**852**	**533**	**317**	**850**	**504**	**317**	**821**	**459**	**291**	**750**
College of Veterinary Medicine																																						
Doctor of Veterinary Medicine	44	40	**84**	43	41	**84**	55	53	**108**	61	65	**126**	73	75	**148**	110	94	**204**	91	95	**186**	97	89	**186**	124	129	**253**	174	183	**357**	158	206	**364**	169	266	**435**	169	301	**470**
CVM - Subtotal	**44**	**40**	**84**	**43**	**41**	**84**	**55**	**53**	**108**	**61**	**65**	**126**	**73**	**75**	**148**	**110**	**94**	**204**	**91**	**95**	**186**	**97**	**89**	**186**	**124**	**129**	**253**	**174**	**183**	**357**	**158**	**206**	**364**	**169**	**266**	**435**	**169**	**301**	**470**
Laboratory School																																						
Senior High School	-	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**	-	-	**-**	217	288	**505**	270	365	**635**	125	163	**288**	124	152	**276**	135	157	**292**	97	162	**259**	44	85	**129**
Junior High School	214	304	**518**	231	297	**528**	244	290	**534**	245	296	**541**	254	305	**559**	263	318	**581**	274	337	**611**	254	331	**585**	217	301	**518**	192	264	**456**	158	231	**389**	129	219	**348**	125	216	**341**
LS - Subtotal	**214**	**304**	**518**	**231**	**297**	**528**	**244**	**290**	**534**	**245**	**296**	**541**	**254**	**305**	**559**	**263**	**318**	**581**	**491**	**625**	**1,116**	**524**	**696**	**1,220**	**342**	**464**	**806**	**316**	**416**	**732**	**293**	**388**	**681**	**226**	**381**	**607**	**169**	**301**	**470**
TOTAL - TAU	1,177	1,543	2,720	1,350	1,835	3,185	1,492	2,091	3,583	1,644	2,257	3,901	1,932	2,710	4,642	2,132	3,025	5,157	2,005	2,713	4,718	1,856	2,382	4,238	2,064	2,487	4,551	2,738	3,231	5,969	2,633	3,419	6,052	2,901	4,278	7,179	2,797	4,311	7,108

Data Sources: TAU Planning and Development Office, and TAU Admission and Registration Services
Note: First Semester Enrollment Statistics have been used from data sources to maintain consistency.

Legend: M – Male
F – Female
T – Total

Student Population by Area of Origin

In 2021, a survey of the undergraduate student population was conducted to gather information on the areas of origin of the students.

As shown in Figure 1-5, the majority (80.53%) of the undergraduate student population originated from areas within the Province of Tarlac. On the other hand, 12.51% of the students are from outside the province.

Apart from the students coming from Central Luzon, majority are coming from Tarlac, the following region with where the highest number of students originate from is Ilocos Region at 9.15%. Majority of these students from Ilocos Region come from the Province of Pangasinan. Only a small percentage of the undergraduate population are international students.

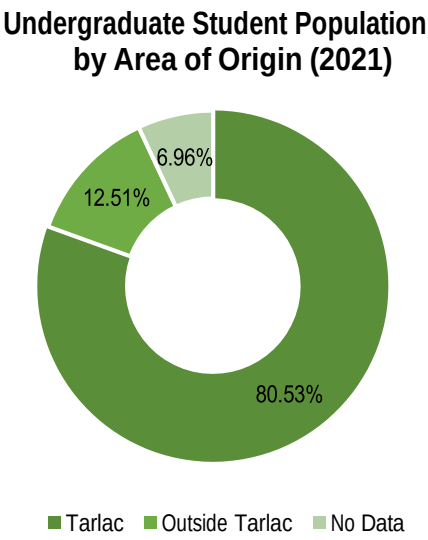


Figure 1-5: Undergraduate Student Population by Area of Origin (2021)

Data Sources: TAU Planning and Development Office

Table 1-5: Undergraduate Student Population by Area of Origin (2021)

Region	Number	%
Luzon		
Metro Manila	20	0.32%
CAR	3	0.05%
Ilocos Region	580	9.15%
Cagayan Valley	7	0.11%
Central Luzon	5233	82.55%
CALABARZON	23	0.36%
MIMAROPA	4	0.06%
Bicol Region	14	0.22%
Visayas		
Western Visayas	2	0.03%
Central Visayas	0	0.00%
Eastern Visayas	0	0.00%
Mindanao		
Zamboanga Peninsula	0	0.00%
Northern Mindanao	1	0.02%
Soccsksargen	0	0.00%
Caraga	0	0.00%
BARMM	0	0.00%
Others		
Outside Philippines	11	0.17%
No Data	441	6.96%
Total	**6,339**	**100.00%**

Data Sources: TAU Planning and Development Office

Other Groups within Student Population

Student Dormers

The university offers residential facilities within the campus for students, particularly Mens' Dormitory and Ladies' Dormitory located at the University Housing District at the Eastern portion of the TAU Campus. Since 2020, international students have utilized the bachelor's pad units resulting from the COVID-19 lockdown. As of November 2022, these units are still being utilized to house the international students attending the university.

As of December 2022, the Ladies' Dormitory consists of 24 rooms that can accommodate a total of 168 persons. On the other hand, the Mens' Dormitory is designed with 20 rooms that can accommodate 120 persons. However, only 15 of the rooms are being used as the rest require repairs, thus reducing the current total capacity of the Men's Dormitory at 90 persons. For the Bachelors' Pad, it consists of 5 rooms with a total capacity of 10 persons.

For First Semester (SY 2022-2023), the occupancy in the Ladies' Dormitory, Mens' Dormitory and Bachelors' Pad are 157 slots or 93.45% occupied, 90 slots or 55.56% occupied, and 10 slots or 100.00% occupied, respectively. As shown in **Table 1-6**, the Ladies' and Mens' Dormitories have not been fully occupied since the Second Semester (SY 2016-2017).

The average number of student dormers across all dormitory facilities from 2017 to 2022 is at 203, excluding years 2020 and 2021 when its operations were limited due to the shift to online classes due to the COVID-19 Pandemic. Majority of the accommodated students are from the provinces of Tarlac, Pangasinan, and Nueva Ecija, along with some international students, as shown in **Figure 1-7**. From 2017 to 2022, the majority of the students in the dormitories are from provinces within Luzon, and only a small share are from Visayas and Mindanao. The areas of origin of the student dormers from this period are enumerated in **Table 1-6**.

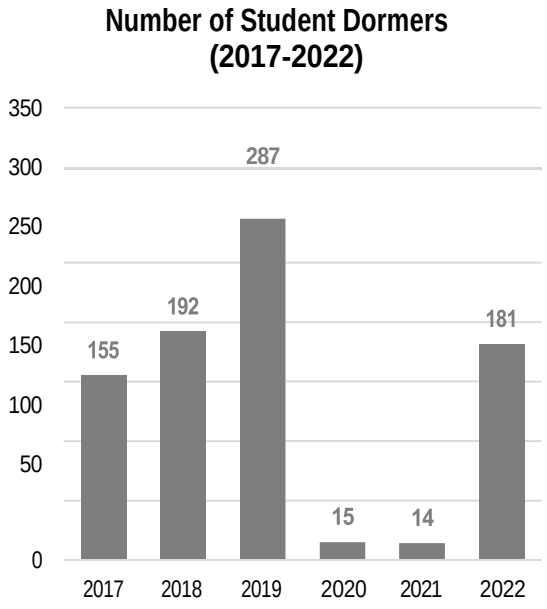


Figure 1-6: Number of Student Dormers (2017-2022)

Data Source: TAU Planning and Development Office

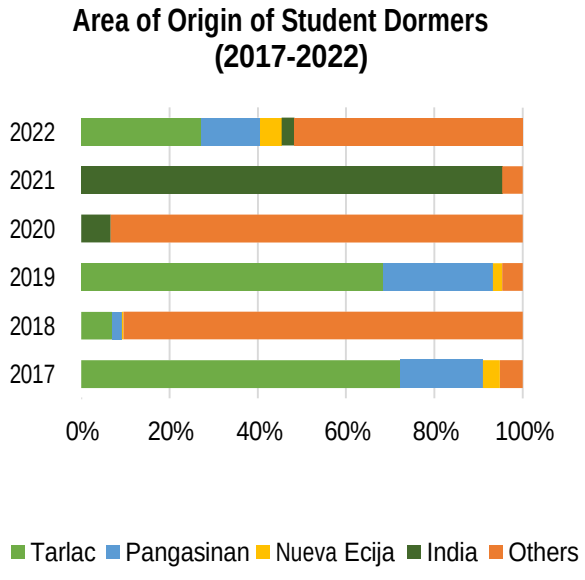


Figure 1-7: Area of Origin of Student Dormers (2017-2022)

Data Source: TAU Planning and Development Office

Table 1-6: Occupancy of Student Dormitory Facilities (2016-2022)

School Year	Semester	Ladies' Dormitory			Mens' Dormitory			Bachelors' Pad			Total			
		Capacity	Slots Occupied	Occupancy Rate	Capacity	Slots Occupied	Occupancy Rate	Capacity	Slots Occupied	Occupancy Rate	Total Capacity	Slots Occupied	Occupancy Rate	Average Occupancy
2016 - 2017	Second	160	100	62.50%	84	68	80.95%	-	-	0.00%	244	168	68.85%	47.82%
2017 - 2018	First	144	93	64.58%	84	64	76.19%	-	-	0.00%	228	157	68.86%	46.92%
	Second	144	81	56.25%	84	48	57.14%	-	-	0.00%	228	129	56.58%	37.80%
2018 - 2019	First	168	112	66.67%	102	82	80.39%	-	-	0.00%	270	194	71.85%	49.02%
	Second	168	119	70.83%	102	69	67.65%	-	-	0.00%	270	188	69.63%	46.16%
2019 - 2020	First	176	175	99.43%	114	114	100.00%	-	-	0.00%	290	289	99.66%	66.48%
	Second	176	137	77.84%	114	96	84.21%	-	-	0.00%	290	233	80.34%	54.02%
2020 - 2021	First	176	8	4.55%	114	-	0.00%	10	11	110.00%	300	19	6.33%	38.18%
	Second	176	8	4.55%	114	-	0.00%	10	10	100.00%	300	18	6.00%	34.85%
2021 - 2022	First	176	8	4.55%	114	-	0.00%	10	10	100.00%	300	18	6.00%	34.85%
	Second	176	8	4.55%	114	-	0.00%	10	10	100.00%	300	18	6.00%	34.85%
2022 - 2023	First	168	157	93.45%	90	50	55.56%	10	10	100.00%	268	217	80.97%	83.00%

Data Source: TAU Planning and Development Office

Table 1-7: Total Number of Student Dormers by Area of Origin (2017-2022)

Area of Origin	2017		2018		2019		2020		2021		2022	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Tarlac	112	72.26%	134	69.79%	197	68.64%	0	0.00%	0	0.00%	95	52.49%
Pangasinan	29	18.71%	42	21.88%	71	24.74%	0	0.00%	0	0.00%	47	25.97%
Nueva Ecija	6	3.87%	7	3.65%	6	2.09%	0	0.00%	0	0.00%	17	9.39%
India	0	0.00%	0	0.00%	0	0.00%	14	93.33%	13	92.86%	10	5.52%
Bataan	2	1.29%	2	1.04%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Bulacan	1	0.65%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	2	1.10%
Isabela	1	0.65%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Occidental Mindoro	1	0.65%	1	0.52%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Benguet	2	1.29%	6	3.13%	2	0.70%	0	0.00%	0	0.00%	0	0.00%
Zamboanga del Norte	1	0.65%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Area of Origin	2017		2018		2019		2020		2021		2022	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Cavite	0	0.00%	0	0.00%	2	0.70%	0	0.00%	0	0.00%	1	0.55%
Pampanga	0	0.00%	0	0.00%	5	1.74%	0	0.00%	0	0.00%	2	1.10%
Camarines Sur	0	0.00%	0	0.00%	1	0.35%	0	0.00%	0	0.00%	0	0.00%
Camarines Norte	0	0.00%	0	0.00%	1	0.35%	0	0.00%	0	0.00%	0	0.00%
Zambales	0	0.00%	0	0.00%	1	0.35%	0	0.00%	0	0.00%	0	0.00%
Rizal	0	0.00%	0	0.00%	1	0.35%	0	0.00%	0	0.00%	0	0.00%
Metro Manila	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	2	1.10%
Aurora	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	0.55%
La Union	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	0.55%
Quezon	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	0.55%
Nueva Vizcaya	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	0.55%
Ghana	0	0.00%	0	0.00%	0	0.00%	1	6.67%	1	7.14%	1	0.55%
Total - Student Dormers	**155**	**100.00%**	**192**	**100.00%**	**287**	**100.00%**	**15**	**100.00%**	**14**	**100.00%**	**181**	**100.00%**

Data Source: TAU Planning and Development Office

Persons with Disabilities

TAU supports positive societal changes and ensures equal access to employment and education of persons with disabilities (PWD). As of 2021, there are two students in the university with disability [3], both of which are from the College of Engineering and Technology. The reported disability of the students are cerebral palsy and a mobility disability due to broken legs.

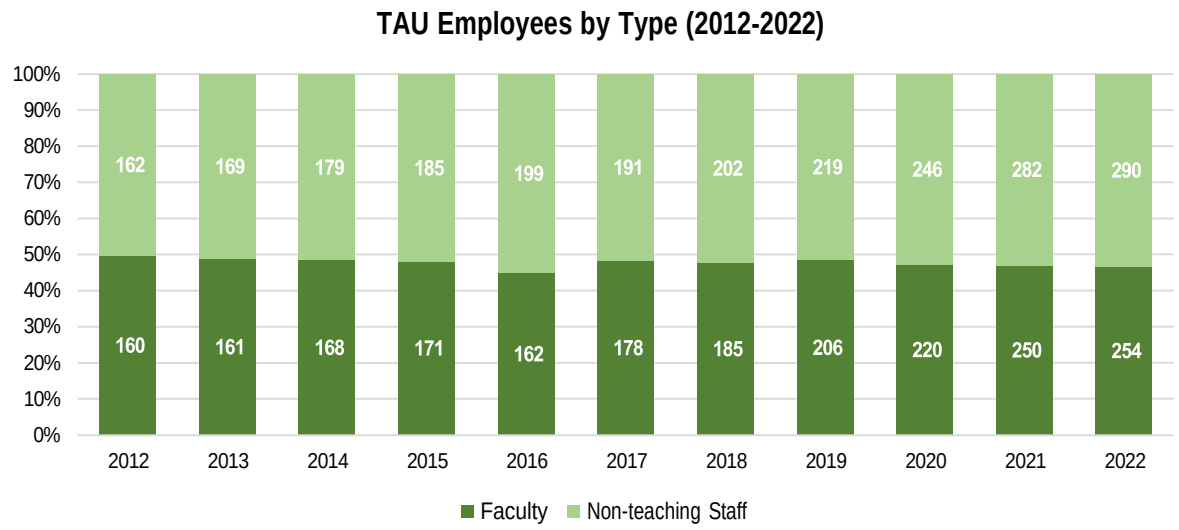
Indigenous Peoples

TAU believes that good education is a right afforded to all ethnicities and backgrounds, including students belonging to indigenous peoples (IP) groups and communities. Based on the 2022 student profiling, 2.40% of the student population belong to an IP community[4], namely the Ayta Abelling, Aeta, Igorot, Tinguian, and Kankanaey. Among these students 22 are from CAF, 9 from CAS, 5 from CBM, 4 from CET, 2 from CEd, and 1 from CVM.

EMPLOYEE POPULATION

TAU Employees consist of faculty and non-teaching staff. While the total number of university employees is relatively equal between these two, in recent years, the share of non-teaching staff has marginally been increasing and accounting for a higher share in the total employee population. In 2022, of the 544 TAU employees, 290 (53.31%) are non-teaching staff while the rest are faculty as shown in **Figure 1-8.**

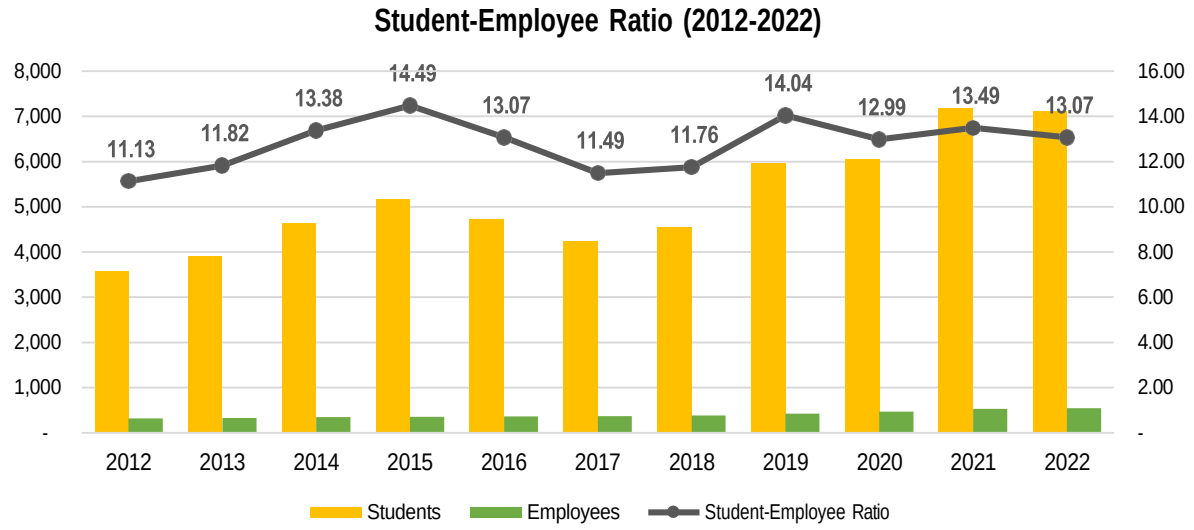
Figure 1-8: Distribution of Type of TAU Employees (2022)



In terms of the ratio of students to employees, it has ranged from 1:11 to 1:14 from 2012 to 2022 as presented in **Figure 1-9**. In 2022, there are 13 students for each university employee. In contrast to the increase in student population, the trend of the employee population is relatively flat in the past few years.

[3] Data from survey gathered by TAU Office of Student Services and Development in June 2021.
[4] Ibid.

Figure 1-9: Student-Employee Ratio (2012-2022)



In terms of nature of work, the majority are engaged in Higher Education Services, followed by General Administration and Support Services and Auxiliary Services, respectively, as shown in **Figure 1-10**. In terms of type of tenure, half of the total TAU employees are permanently employed, followed by Contract of Service, Temporary employment, and Part-time employment in 2022. The gap between the share of permanent staff has started closing since 2021. On the other hand, the share of temporary employees is showing an increasing trend between 2012 to 2022. These trends are shown in **Figure 1-11**.

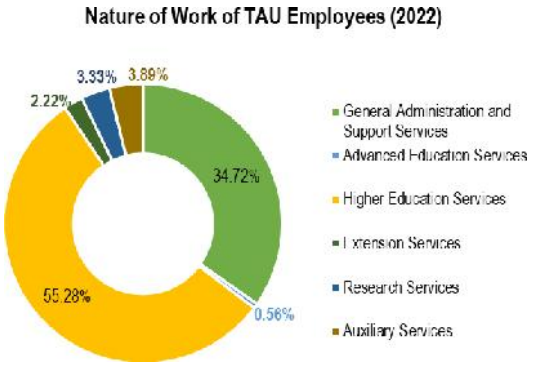


Figure 1-10: Nature of Work of TAU Employees (2022)

Data Source: TAU Human Resources Management Office

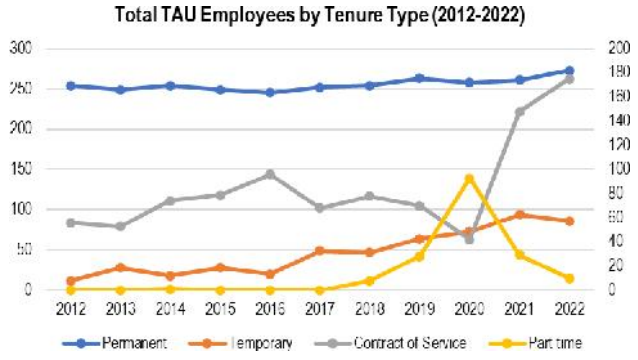


Figure 1-11: : Total TAU Employees by Tenure Type (2012-2022)

Data Source: TAU Human Resources Management Office

Faculty Population

Aligned with the increasing student population, the faculty population has increased in the past decade, with exception to years 2013 and 2022.The 10-year CAGR from 2013 to 2022 is at 4.87%. The rate since the implementation of the free tuition in SUCs is higher at 8.01% from 2017 to 2022.

In terms of tenure type, despite permanent staff still representing almost half (48.82%) of the faculty population as of 2022, there is an increasing trend observed among temporary faculty since 2019, as shown in **Figure 1-12.** In terms of gender distribution, there has been consistently more female faculty than the male as seen in **Figure 1-8**.

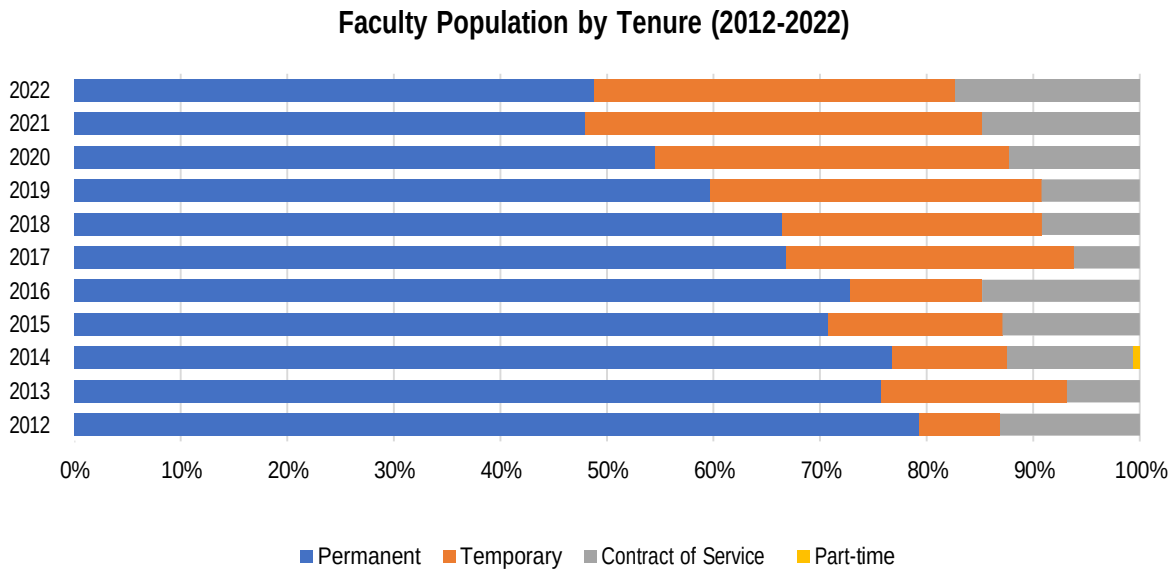


Figure 1-12: TAU Faculty Population by Tenure Type (2012-2022)

Data Source: TAU Human Resources Management Office

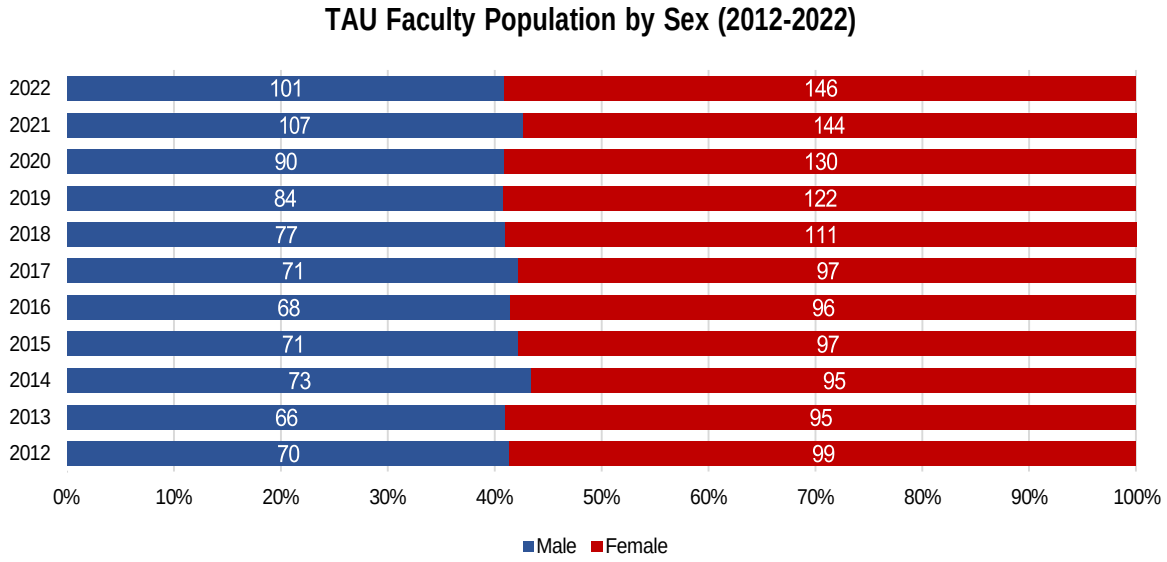


Figure 1-13: TAU Faculty Population by Sex (2012-2022)

Data Source: TAU Human Resources Management Office

From 2012 to 2018, the majority of the faculty held master's degrees as their highest educational attainment. With the increasing trend in faculty population, those with bachelor's as their highest educational attainment has accounted for the majority of the faculty population since 2019, as shown in **Figure 1-14**.

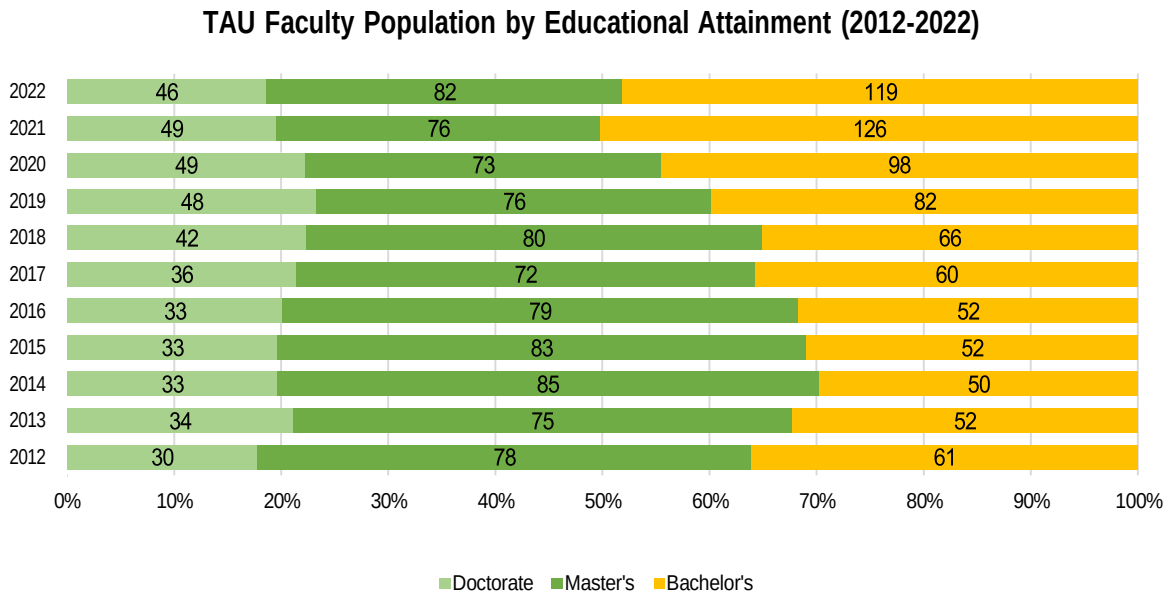


Figure 1-14: Highest Educational Attainment of TAU Faculty (2012-2022)

Data Source: TAU Human Resources Management Office

Non-Teaching Staff Population

As of 2022, there are 141 permanent and temporary non-teaching staff in TAU. Apart from these staff with such employment staff, there are also 158 employees whose employment status fall under Contract of Service and Job Order. Growth in the non-teaching staff has been fluctuating from 2013 to 2022, with a compound growth rate of 1.17% per year. The 5-year CAGR from 2018 to 2022 is marginally higher at 1.47% annually.

In terms of tenure type, an increasing trend has been observed among Contract of Service (COS) and Job Order (JO) employees among non-teaching staff, albeit the figures fluctuating in 2020, as seen in **Figure 1-15**.

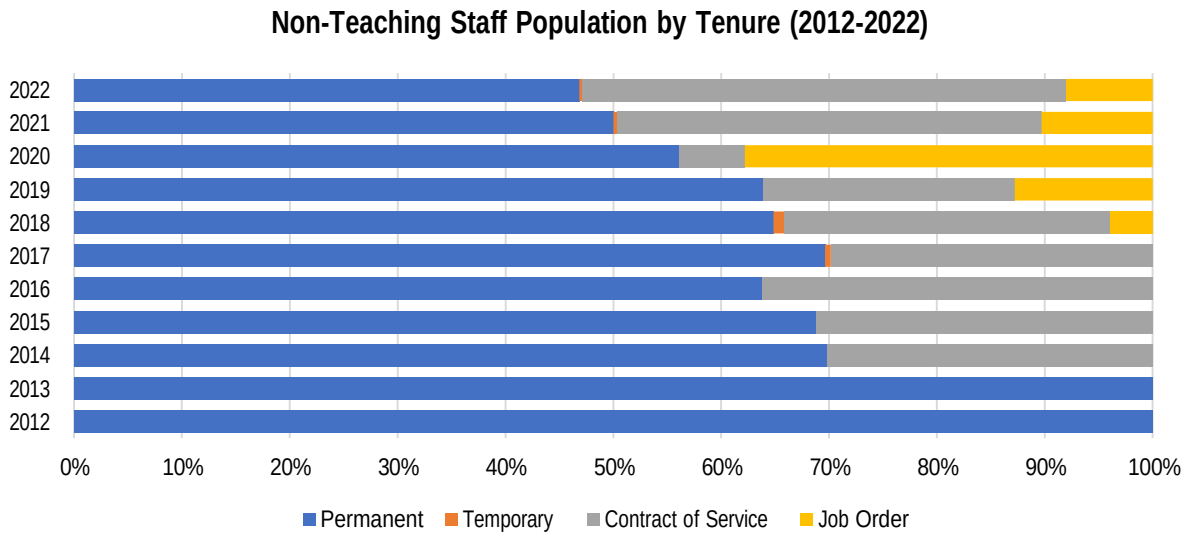


Figure 1-15: TAU Non-Teaching Staff Population by Tenure Type (2012-2022)

Data Source: TAU Human Resources Management Office

In contrast to the faculty population, there are more male non-teaching staff than females in the past ten years as shown in **Figure 1-16**. The gap between male and female staff has incrementally been closing in for the past five years. In 2022, 56.03% are male staff, while 43.97% are female staff.

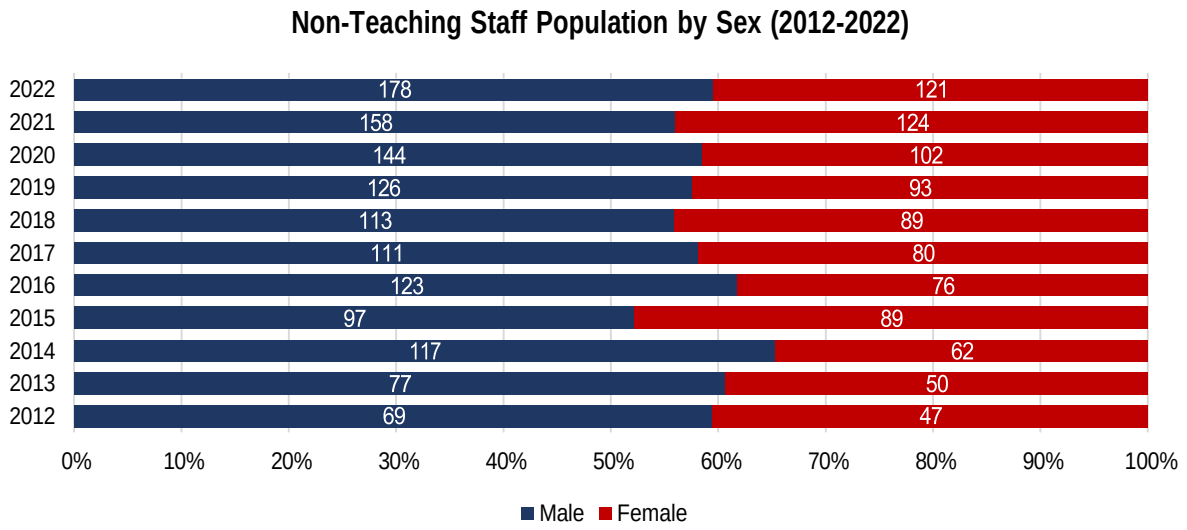


Figure 1-16: TAU Non-Teaching Staff Population by Sex (2012-2022)

Data Source: TAU Human Resources Management Office

Table 1-8: Projected Number of Faculty and Students based on Faculty-Student Ratio

Academic Year	No. of Faculty (Permanent, Temporary, and COS)	No. of Students	Faculty – Student Ratio
2022-2023	248	7,361	1:30
2023-2024	255	7,655	1:30
2024-2025	265	7,961	1:30
2025-2026	276	8,280	1:30
2026-2027	287	8,611	1:30
2027-2028	298	8,955	1:30
2028-2029	310	9,313	1:30
2029-2030	322	9,685	1:30
2030-2031	335	10,072	1:30
2031-2032	349	10,475	1:30

Data Source: TAU Human Resources Management Office

Table 1-9: Projected Number of Employees (2022-2032)

Academic Year	No. of Faculty (Permanent, Temporary, and COS)	No. of Non-Academic	Unfilled items for non-academic staff
2022-2023	248	145	76 Unfilled Plantilla
2023-2024	255	240	Additional Plantilla from Phase 2 ROSS and Phase 3 ROSS
2024-2025	265	250	
2025-2026	276	260	
2026-2027	287	270	
2027-2028	298	280	
2028-2029	310	290	

2029-2030	322	300	
2030-2031	335	310	
2031-2032	349	320	

Data Source: TAU Human Resources Management Office

Table 1-10: Data on Staff Housing with Area of Origin

Location	Hometown/Province	Number of Occupants
Sta. Maria – old cottage	Science City of Munoz, Nueva Ecija	5
Sta. Maria – old cottage	Bayambang, Pangasinan	2
Sta. Maria - old cottage	Santa Ignacia, Tarlac	5
Sta. Maria – old cottage	Tabuk, Kalinga	5
Sta. Maria – old cottage	Echague, Isabela	7
Sta. Maria – old cottage	Camiling, Tarlac	3
Sta. Maria – new cottage	Santa Ignacia, Tarlac	3
Sta. Maria – new cottage	Santa Ignacia, Tarlac	3
Sta. Maria – new cottage	Samar	2
Sta. Maria – new cottage	Baguio City	5
Sta.Maria – old cottage	Tarlac City/Binalonan, Pangasinan	2
Sta. Maria – old cottage	Tarlac City	5
Sta. Maria – Executive House	Santa Ignacia, Tarlac	4
Sta. Maria – Old Apartment	Science City of Munoz, Nueva Ecija	2
Sta. Maria – Old Apartment	Santa Ignacia, Tarlac	3
Sta. Maria – Old Apartment	Santa Ignacia, Tarlac	3
Sta. Maria – Old Apartment	Pangasinan	4
Sta. Maria – Cottage (at the back of the Dormitory	Camiling, Tarlac	5
Sta. Maria – Cottage (at the back of the Dormitory	Camiling, Tarlac	4
Palayaman Area	Valencia, Bukidnon	5
Palayaman Area	Tabuk, Kalinga	5
Inside the campus – near animal production projects	Camiling, Tarlac	5
Inside the campus – near animal production projects	Camiling, Tarlac	5
Inside the campus – near animal production projects	Isabela	3
Inside the campus /Lover's Lane	Camiling, Tarlac/Isabela	2
Inside the campus /Lover's Lane	Santa Ignacia, Tarlac	5
Inside the campus – near animal crop production projects	Victoria, Tarlac	5
Inside the campus /Lover's Lane	Perez, Quezon	3
Inside the campus /Lover's Lane	Perez, Quezon	3
Sta. Maria – near the R and D gate	Norzagaray, Bulacan	5
Sta. Maria – near the R and D gate	Bay, Laguna	4
Sta. Maria – near the R and D gate	Isabela	
Sta. Maria – near the R and D gate	Bolinao, Pangasinan	
Sta. Maria – near the R and D gate	Surigao	
Ladies' Dormitory	San Carlos, Pangasinan	
Ladies' Dormitory	San Carlos, Pangasinan	1

Apartment vacated by Elizabeth R. Dela Cruz	Benguet	5
Vacated by Ms. Julia Manzano	Benguet	5
Vacated by Dr. Feliciano M. Rosete, Jr.	Benguet	3

Data Source: TAU Housing Committee

1.3 Geographic Location of TAU

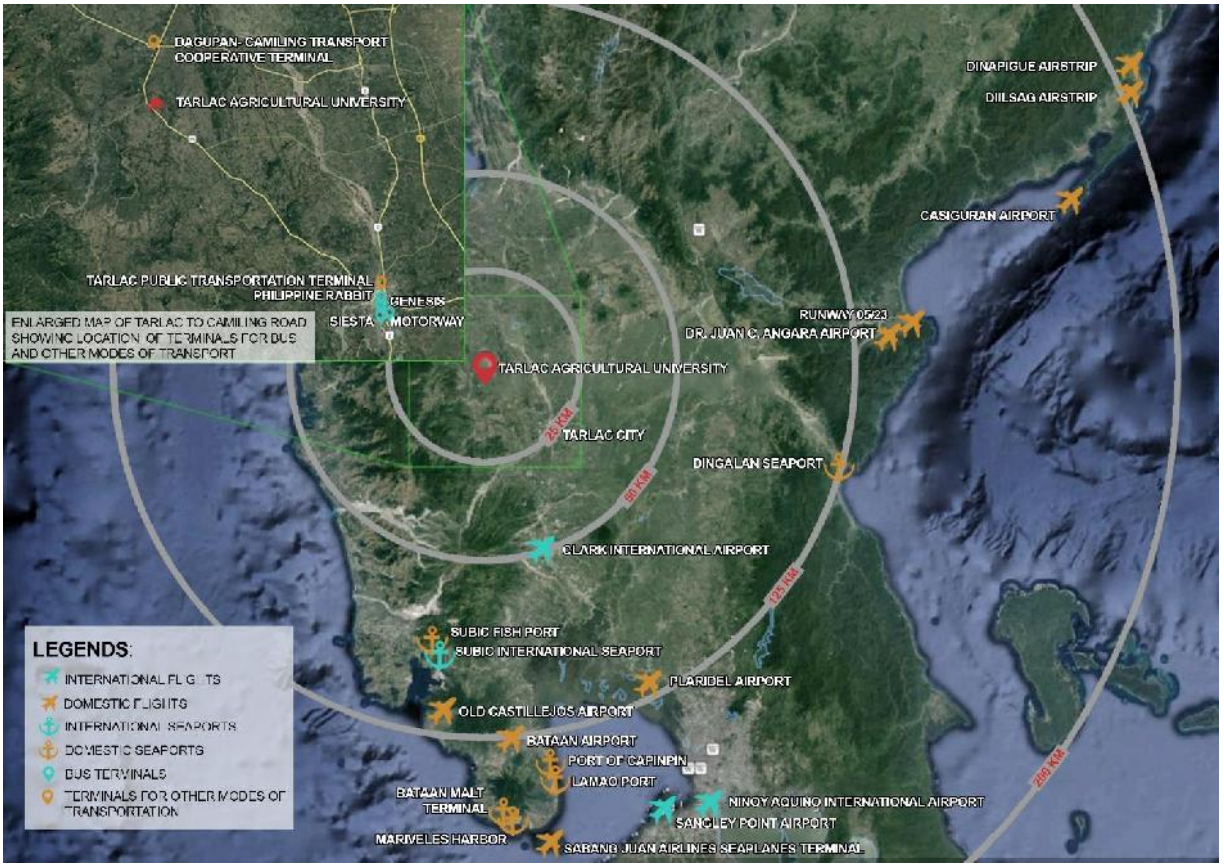


Figure 1-17: Vicinity Map

Tarlac Agricultural University is situated within the Province of Tarlac, which belongs to the Central Luzon Region, one of the key agricultural regions in the Philippines. Tarlac is bound by the Pangasinan on the north, Nueva Ecija on the East, Zambales on the West, and Pampanga on the South. It comprises 3 congressional districts consisting of 1 component city,17 municipalities, and a total of 511 Barangays.

As of 2020, Tarlac has a total population of 1,503,456. Tarlac's economy is predominantly agricultural, with sugarcane and rice as the principal crop, majority of which are intended for domestic consumption. Apart from the agriculture sector, the province is expected to benefit from the development of the New Clark City in the Municipality of Capas.

Meanwhile, Camiling is a first-class municipality located in the north-western part of the Province of Tarlac. It is found about 36 kilometers from the provincial capital of Tarlac City and has a total land area of about 14,368.44 hectares. Camiling is part of the first congressional district of Tarlac and is politically subdivided into 61 Barangays. As of 2020, the Municipality has a total population of 87,319.

Similar to Tarlac Province, the local economy of Camiling is predominantly agricultural, with palay serving as the main crop while corn and vegetables like eggplant, beans, okra, and ampalaya serve as secondary

crops. Camiling is known for its green native rice cake called “Nilubyan” and the famous “Chicharon Camiling.” The topography of Camiling is characterized by a plain terrain, with scattered, limited rolling terrain.

The strategic role of Camiling, according to the Provincial Development and Physical Framework Plan (PDPFP) of the Province of Tarlac, as the center of education of the province is linked to the role of TAU to develop a skilled labor force (Provincial Government of Tarlac, 2019). The municipality also belongs to the Agriculture/Agri-Processing Cluster, and Urban Services Cluster of Tarlac’s Multi-Nodal Spatial Strategy. Camiling assumes its functional role as reflected in its vision as a premier agri-industrial, commercial, eco-tourism and educational center within Tarlac (Municipal Government of Camiling, 2017)

As shown in **Figure 1-18**, the TAU campus lies within the boundary of two rural barangays in Camiling, namely Barangay Malacampa and Barangay Sta. Maria. The university can play a crucial role to fulfil the functional role of both the Municipality of Camiling and the Province of Tarlac in agriculture and agri-industrial development through labor force development and research and development initiatives.

PHYSICAL ACCESSIBILITY OF THE UNIVERSITY

There are three (3) international airports near the university: Clark International Airport (CRK) in Pampanga, Subic Bay International Airport (SFS) in Bataan, and Ninoy Aquino International Airport (NAIA) in Pasay City, Metro Manila. Various domestic airports, airstrips, and air bases are also present in Aurora, Bataan, Bulacan, Zambales, and Tarlac.

Table 1-11: Proximity of Aviation Transport Infrastructure to Tarlac Agricultural University

Name of Airport	Classification	Location	Distance from TAU (km)
Clark International Airport	Passenger and Cargo	Pampanga	74
Subic Bay International Airport	Passenger and Cargo	Bataan	138
Ninoy Aquino International Airport (NAIA)	Passenger and Cargo	Pasay City	176
Bataan Airport	Cargo	Bataan	136
Baler Airport	Cargo	Aurora	187
Old Castillejos Airport	Cargo	Zambales	167
Casiguran Airport	Cargo	Aurora	271

The major ports near the university are the Subic International Seaport in (Subic Freeport Zone) in Bataan and Zambales and the Sual International Seaport in Pangasinan. Various domestic airports within the region include the Port of Mariveles, Capinpin, Orion, and Lamao in Bataan, and Dingalan in Aurora.
The provincial bus terminals which have routes from Metro Manila to parts of Northern Luzon and vice versa are concentrated in the Central Business District of the province in Tarlac City. Terminals present in the city are Motorway Tarlac, Siesta Bus Terminal, Genesis Bus Terminal, and Philippine Rabbit Bus Terminal. Pangasinan Solid North Transit, Inc., which has daily trips from San Clemente to Dau and Cubao, also has a satellite bus terminal in San Clemente, Tarlac.

The Tarlac Public Transportation Terminal, in Tarlac City, still serves as the major terminal for other modes of transport in the province. It caters to jeepneys and buses with routes from Tarlac City to different towns in the province, as well as nearby towns in Nueva Ecija. The Dagupan-Camiling Transport Cooperative Terminal, which has buses that have daily trips from Camiling to Mangatarem and Dagupan. This is near the Camiling jeepney terminal which has trips from Camiling to Tarlac City.
Nearby tricycle terminals in Barangay Santa Maria and Malacampa in Camiling and in Mayantoc also

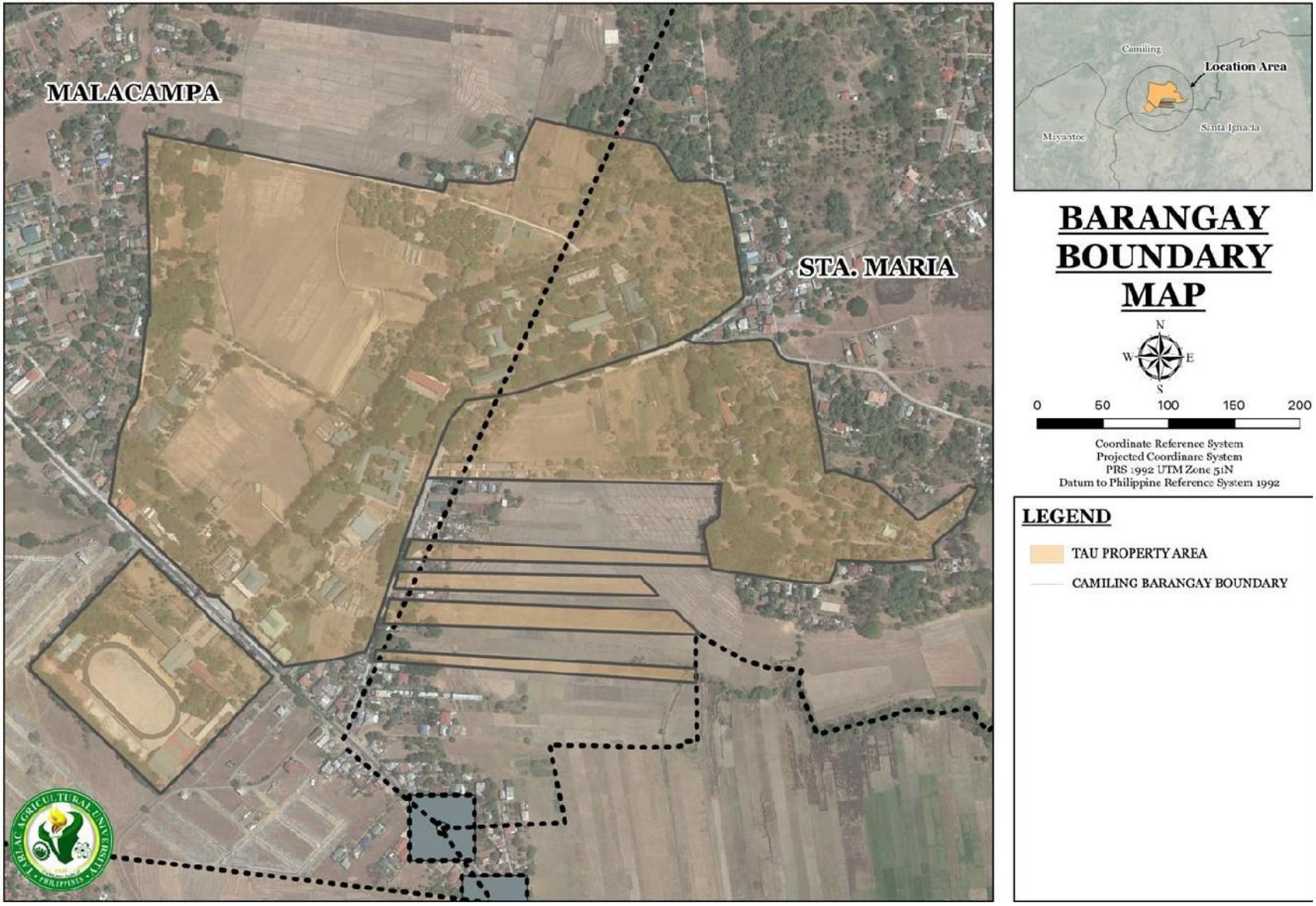


Figure 1-18: Map of Political Boundaries of TAU

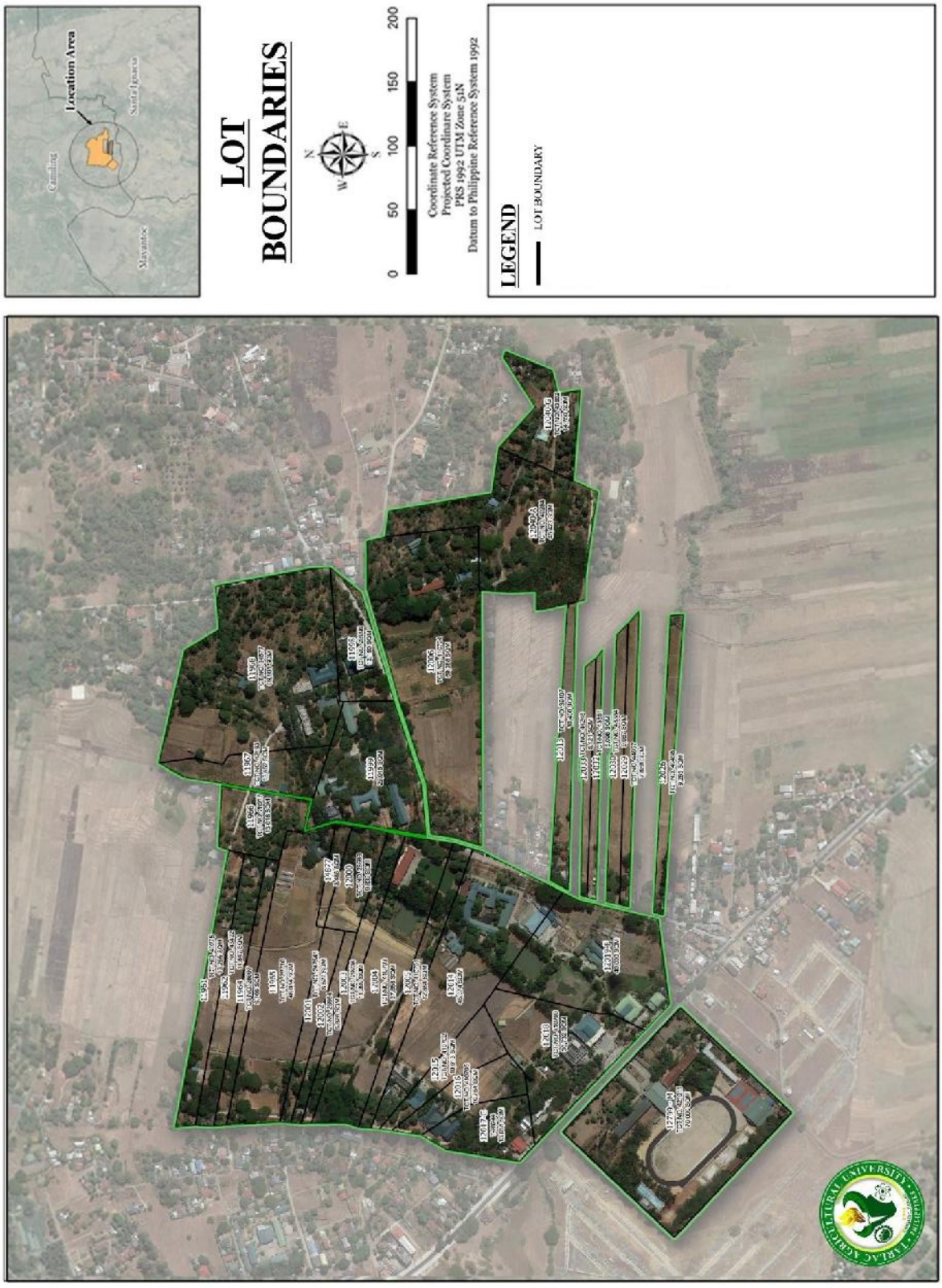


Figure 1-19: Lot Boundaries

INVENTORY OF TAU LANDHOLDINGS

The TAU campus is located approximately 25km northwest of Tarlac City and approximately 5km south of Camiling. It is traversed by a first-class road - the concrete paved Romulo Highway which links Tarlac and Pangasinan. TAU is less than 20km east of the foot of Zambales Mountain Range where the 665- hectare forest reservation is located. It is bounded on the east of Brgy Sta. Maria and Sitio Malasin. The campus site is almost equidistant to Camiling and Santa Ignacia.

The Total land area of TAU Campus is 722,264 sqm or 72.2has. Land titling of the TAU campus was initiated during the term of Dr. Philip Ibarra. Twenty-seven (27) of the thirty-five (35) lots of the campus have land titles comprising a total land area of 549,075 sqm or 54.9has of the total campus land area.

The table below shows the list of land properties of TAU Campus. Each lot number is also described by its location, land area, title number, and name of owner as per title.

Table 1-12: Land Properties of Tarlac Agricultural University

No	Land (Campus Location)	Land area (sq.m)	Title No.	Name of owner as per Title	Remarks
1	Lot No. 12799-M	70000	TCT no. 421011	TARLAC COLLEGE OF AGRICULTURE represented by College President Philip B. Ibarra, PhD.	TITLED
2	Lot No. 11961	13266	TCT no. 49275	REPUBLIC OF THE PHILIPPINES	TITLED
3	Lot No. 11962	14847	TCT no. 43422	REPUBLIC OF THE PHILIPPINES represented by the Superintendent of the Tarlac National Agricultural School, Camiling ,Tarlac, Philippines	TITLED
4	Lot No. 11964	9166	TCT no. 28997	REPUBLIC OF THE PHILIPPINES	TITLED
5	Lot No. 11965	46084	TCT no. 28716	REPUBLIC OF THE PHILIPPINES	TITLED
6	Lot No. 11966	13018	TCT no. 28917	REPUBLIC OF THE PHILIPPINES	TITLED
7	Lot No. 11967	13452	TCT no. 42493	REPUBLIC OF THE PHILIPPINES , represented by Antonio M. Soriano	TITLED
8	Lot No.11968	69801	TCT no. 34577	REPUBLIC OF THE PHILIPPINES	TITLED
9	Lot No. 11998	13190	TCT no. 28996	REPUBLIC OF THE PHILIPPINES	TITLED
10	Lot No. 11999	29015		Provincial Government of Tarlac – Administrator/ Beneficial User: Tarlac College of Agriculture	NO TITLE
11	Lot No. 12000	9839	TCT no. 28566	REPUBLIC OF THE PHILIPPINES	TITLED
12	Lot No. 12001	8522	TCT no. 247541	REPUBLIC OF THE PHILIPPINES	TITLED
13	Lot No. 12002	5876	TCT no. 29984	REPUBLIC OF THE PHILIPPINES	TITLED

14	Lot No. 12003	11399	TCT no. 29234	REPUBLIC OF THE PHILIPPINES represented by Conrado G. Genilo	TITLED
15	Lot No.12004	37658	TCT no. 410703	TARLAC COLLEGE OF AGRICULTURE represented by its President , Robustiano J. Estrada	TITLED
16	Lot No. 12005	12884	TCT no. 410701	TARLAC COLLEGE OF AGRICULTURE, represented by its President, Robustiano J. Estrada	TITLED
17	Lot No. 12006	69388	TCT no. 410704	TARLAC COLLEGE OF AGRICULTURE, represented by its President, Robustiano J. Estrada	TITLED
18	Lot No.12013	10400	TCT no. 39107	REPUBLIC OF THE PHILIPPINES	TITLED
19	Lot No. 12014	45074		DOROTEO AUSTRIA SIMON- Administrator/ Beneficial User: Supt. Tarlac College of Agriculture	NO TITLE
20	Lot No. 12015	10913	TCT no. 410702	TARLAC COLLEGE OF AGRICULTURE represented by its President, Robustiano J. Estrada	TITLED
21	Lot No. 12016	10754	TCT no. 410705	TARLAC COLLEGE OF AGRICULTURE represented by its President, Robustiano J. Estrada	TITLED
22	Lot No. 12017-C	13018	T-26244	Provincial Government of Tarlac- Administrator/ Beneficial User: c/o Tarlac College of Agriculture	NO TITLE
23	Lot No. 12018	30732	TCT no. 410700	TARLAC COLLEGE OF AGRICULTURE represented by its President, Robustiano J. Estrada	TITLED
24	Lot No. 12019-F	40000		ON PROCESS	ON PROCESS
25	Lot No. 12026	9285	TCT no. 49498	REPUBLIC OF THE PHILIPPINES	TITLED
26	Lot No. 12029	7858	TCT no. 44657	REPUBLIC OF THE PHILIPPINES	TITLED
27	Lot No. 12030	9067	TCT no. 43384	TARLAC COLLEGE OF AGRICULTURE represented by the Superintendent of the Tarlac National Agricultural School, Camiling ,Tarlac, Philippines	TITLED
28	Lot No. 12032	5098	TCT no. 43851	REPUBLIC OF THE PHILIPPINES, represented by Antonio M. Soriano	TITLED
29	Lot No. 12033	5421	TCT no. 44246	REPUBLIC OF THE PHILIPPINES, represented by Antonio M. Soriano	TITLED
30	Lot No. 14877	3486		ON PROCESS	ON PROCESS
31	Lot No. 12040-A	45423	TCT no. 40284	REPUBLIC OF THE PHILIPPINES, represented by Jovencio M. Bacalso	TITLED
32	Lot No. 12040-G	14750	TCT no. 43852	REPUBLIC OF THE PHILIPPINES, represented by Antonio M. Soriano	TITLED
TOTAL	**708,684**				

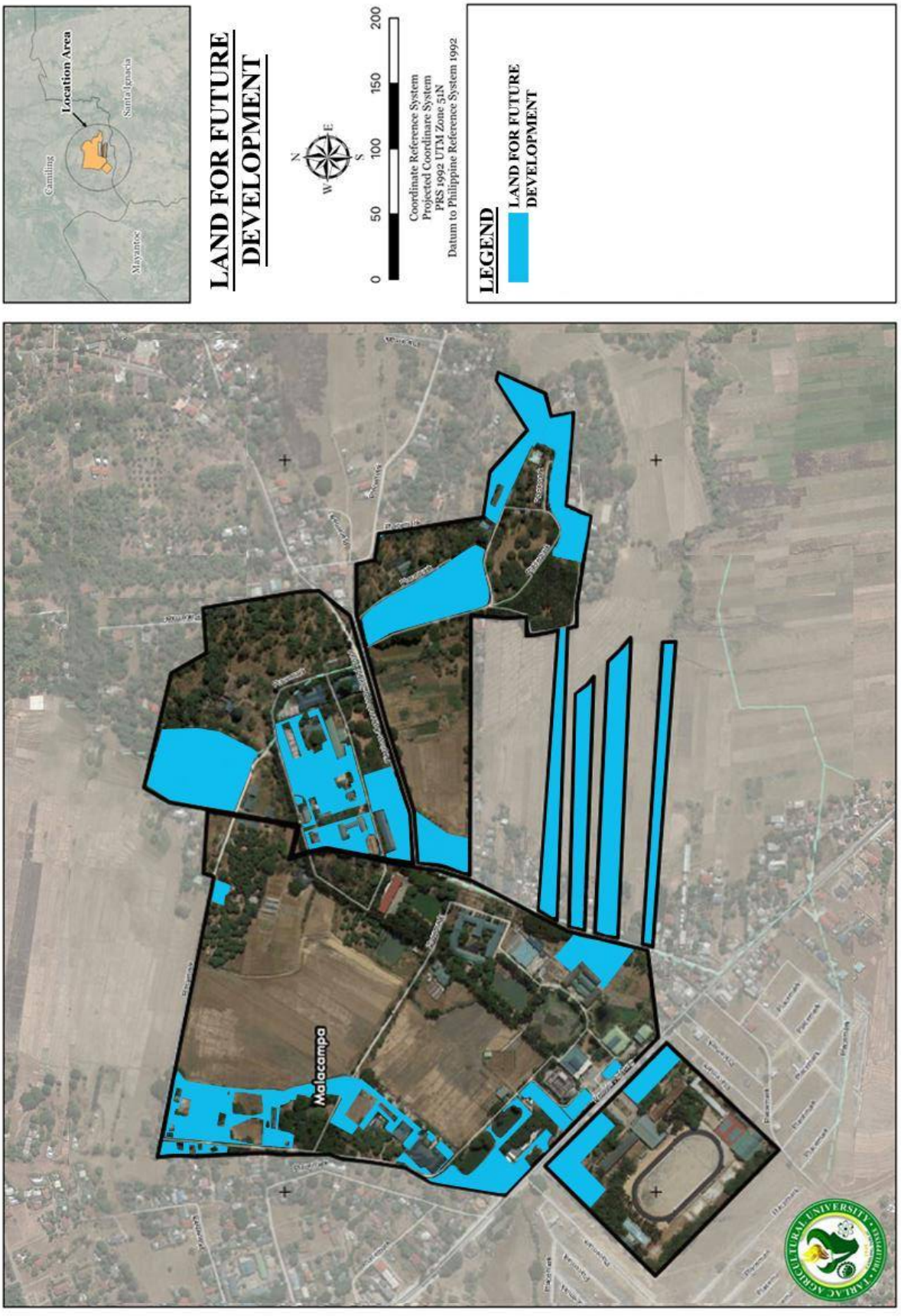


Figure 1-20: Land for Future Developments

LAND FOR FUTURE DEVELOPMENT

As an agricultural university and in support to the carbon neutrality programme of the Philippine government, TAU must properly manage and conserve much of its land for production, vegetation for green spaces, and open areas. However, there are parts of the land inside the university designated for future developments which are strategically located to maximize its usage and to serve better and provide comfort for its constituents. **Refer to Figure1-20 above**

DESCRIPTION OF THE NATURAL BIOPHYSICAL ENVIRONMENT

Topography

Ninety-five percent (95%) of the terrain or a total of 66 hectares of the TAU Main campus is being characterized to be level to undulating or with slope of less than 8% as illustrated in **Figure 1-21.** This relative steepness of the landform conforms that the movement over these slopes is easy. In general terms, these are suitable for extensive agriculture and pasture use.

The remaining landforms of the campus comprise the 4% of the total area or three (3) hectares which is being characterized to be rolling to moderately steep or with slopes between 18 to 30%. These are located near the northwest boundary where ascent to these slopes is difficult. Lastly, the last one percent (1%) of the total area or 0.49 hectares were distributed over the rest of the total area are slopes between 8 to 18% or moderately sloping to rolling. These are the transition slopes around the flat areas where movement across these slopes requires some effort but not difficult. Refer to figure 1-21.

Table 1-13:Total Area and Percentage Share by Slope Category

Slope Category	Description	Total Area (ha)	Percentage Share (%)
0-8%	Level to undulating	66	95
8-18%	Moderately sloping to rolling	0.49	1
18-30%	Rolling to moderately steep	3	4
TOTAL		69.49	100

Vegetation

As the municipality's main source of income is agriculture, the university aligned its vision in becoming an agricultural university. In line with this, about 3.26% or 22,756.172 sq.m. or 3.28 has. was allotted for forested vegetation, 65.28% or 453,609.901 sq.m. or 45.36 has. for planted vegetation, and 10.32% or 71,658.665 sq.m. or 7.17 has. for other areas for water absorption as illustrated in **figure 1-22**

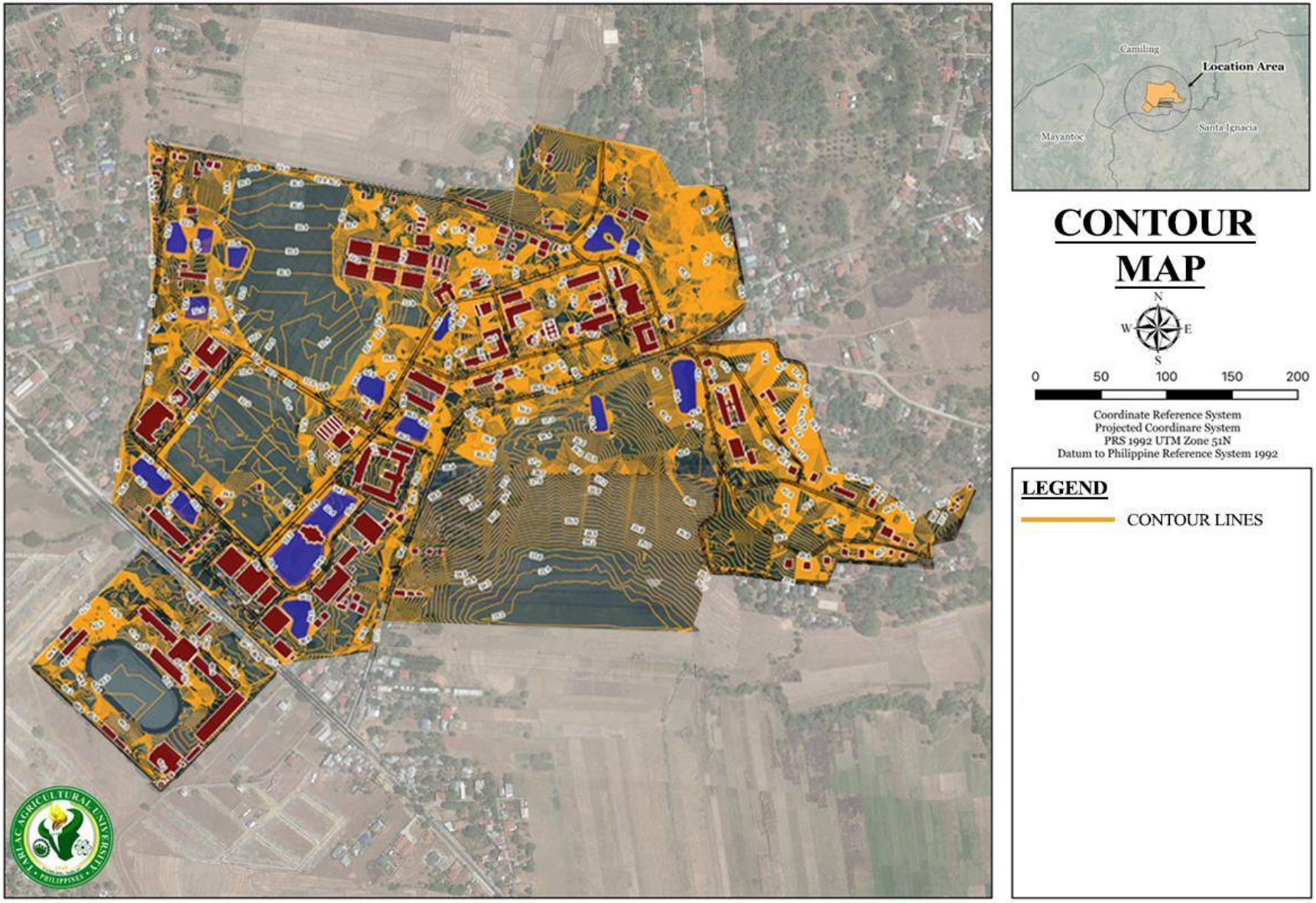


Figure 1-21: Contour Map of TAU

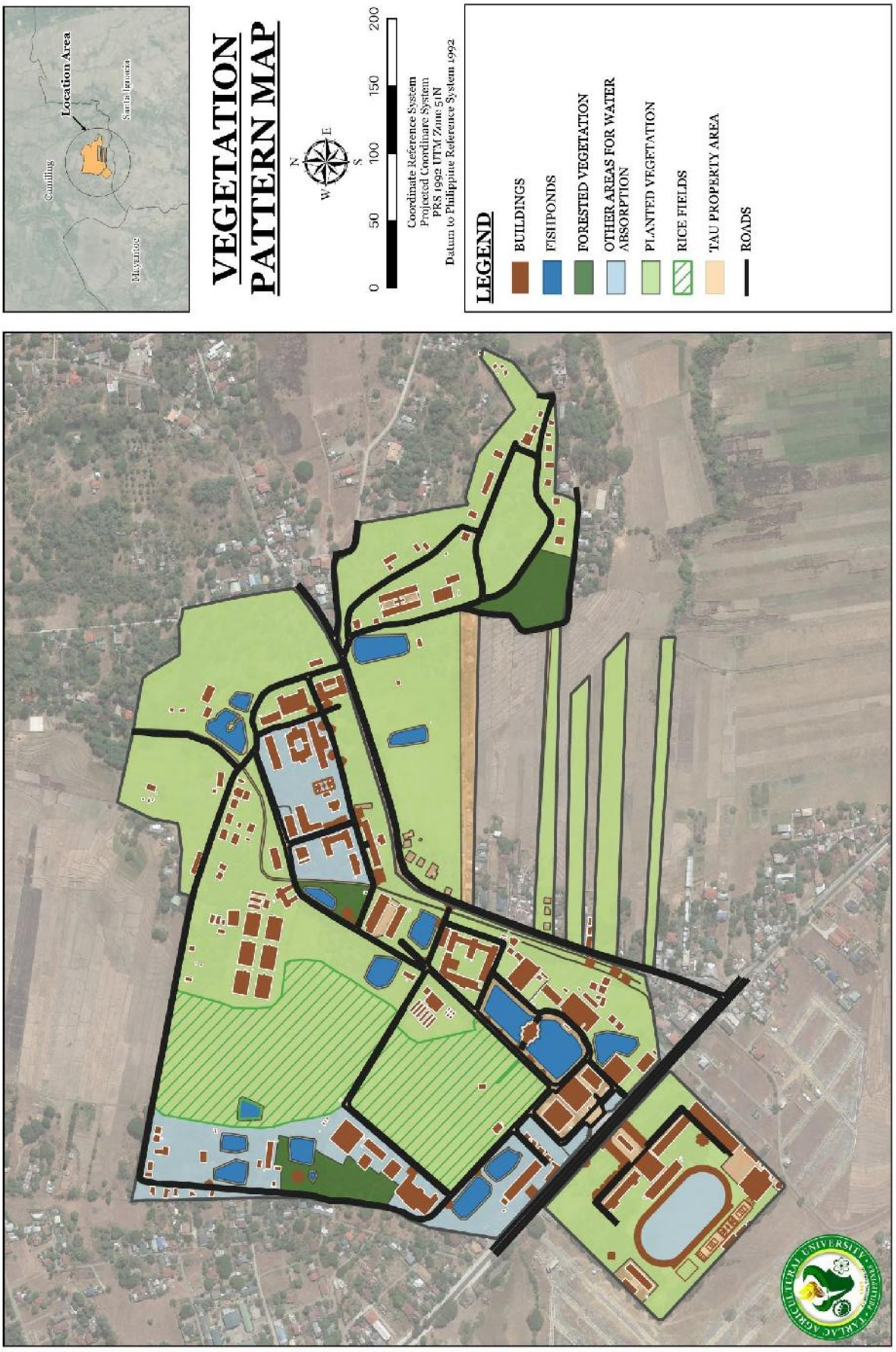


Figure 1-22: Vegetation Pattern Map of TAU

The table below shows the total area of the built area, forested vegetation, planted vegetation, other areas for water absorption, and open space area per zone.

Table 1-14:Total Area and Percentage Share per district and vegetation pattern

Zone	Total Area (sqm)	Percentage Share (%)
Academic District		
Built-up Area	23,774.271	3.42%
Forested Vegetation	3,378.818	0.49%
Planted Vegetation	48,436.018	6.97%
Other Areas for Water Absorption	19,741.644	2.84%
Open Space Area	9,939.199	1.43%
University Services		
Built-up Area	3486.0175	0.50%
Forested Vegetation	0	0.00%
Planted Vegetation	0	0.00%
Other Areas for Water Absorption	1589.026	0.23%
Open Space Area	11129.1065	1.60%
Agro-Ecotourism		
Built-up Area	15,546.3475	2.24%
Forested Vegetation	9,406.7	1.35%
Planted Vegetation	0	0.00%
Other Areas for Water Absorption	39,983.634	5.75%
Open Space Area	12,045.7985	1.73%
Sports and Athletic District		
Built-up Area	16,273.14	2.34%
Forested Vegetation	0	0.00%
Planted Vegetation	33,954.37	4.89%
Other Areas for Water Absorption	10,344.36	1.49%
Open Space Area	7,570.13	1.09%

Agri-technology Park		
Built-up Area	4,006.03	0.58%
Forested Vegetation	0	0.00%
Planted Vegetation	37,089.95	5.34%
Other Areas for Water Absorption	0	0.00%
Open Space Area	2,481.93	0.36%
Research and Production District		
Built-up Area	21,475.18	3.09%
Forested Vegetation	0	0.00%
Planted Vegetation	133,858.29	19.26%
Other Areas for Water Absorption	0	0.00%
Open Space Area	15,072.00	2.17%
University Housing District		
Built-up Area	5,695.65	0.82%
Forested Vegetation	9,970.65	1.43%
Planted Vegetation	58,567.33	8.43%
Other Areas for Water Absorption	0	0.00%
Open Space Area	2,512.72	0.36%
Bamboo Park		
Built-up Area	2,916.82	0.42%
Forested Vegetation	0	0.00%
Planted Vegetation	39,828.69	5.73%
Other Areas for Water Absorption	0	0.00%
Open Space Area	2,230.41	0.32%
Road Network	**58,132.38**	**8.37%**
Land Allocated Outside the Campus	**34,417.00**	**4.95%**
TOTAL	**694,853.60**	**100**

As of 2022, a total of 5,573 tree points have been recorded and taken inventory. The tree varieties observed are as follows:

1. Bangkal (Nauclea orientalis)
2. Neem Tree (Azadirachta indica)
3. Bignay (Antidesma bunius)
4. Mahogany (Swietenia macrophylla)
5. Bagras (Eucalyptus deglupta)
6. Yemane (Gmelina arborea)
7. Rain Tree (Samanea saman)
8. Narra (Pterocarpus indicus)
9. Kamagong (Diospyrus blancoi)
10. Santol (Sandoricum koetjape) Mangga (Mangifera indica)
11. Himbabao (Broussonetia luzonica)
12. Dita (Alstonia scholaris) o Aratiles (Muntingia calabura)
13. Talisay (Terminalia catappa) o Duhat (Syzygium cumini)

The distribution of these tree varieties within the TAU campus is illustrated in Figure 1-21**.**

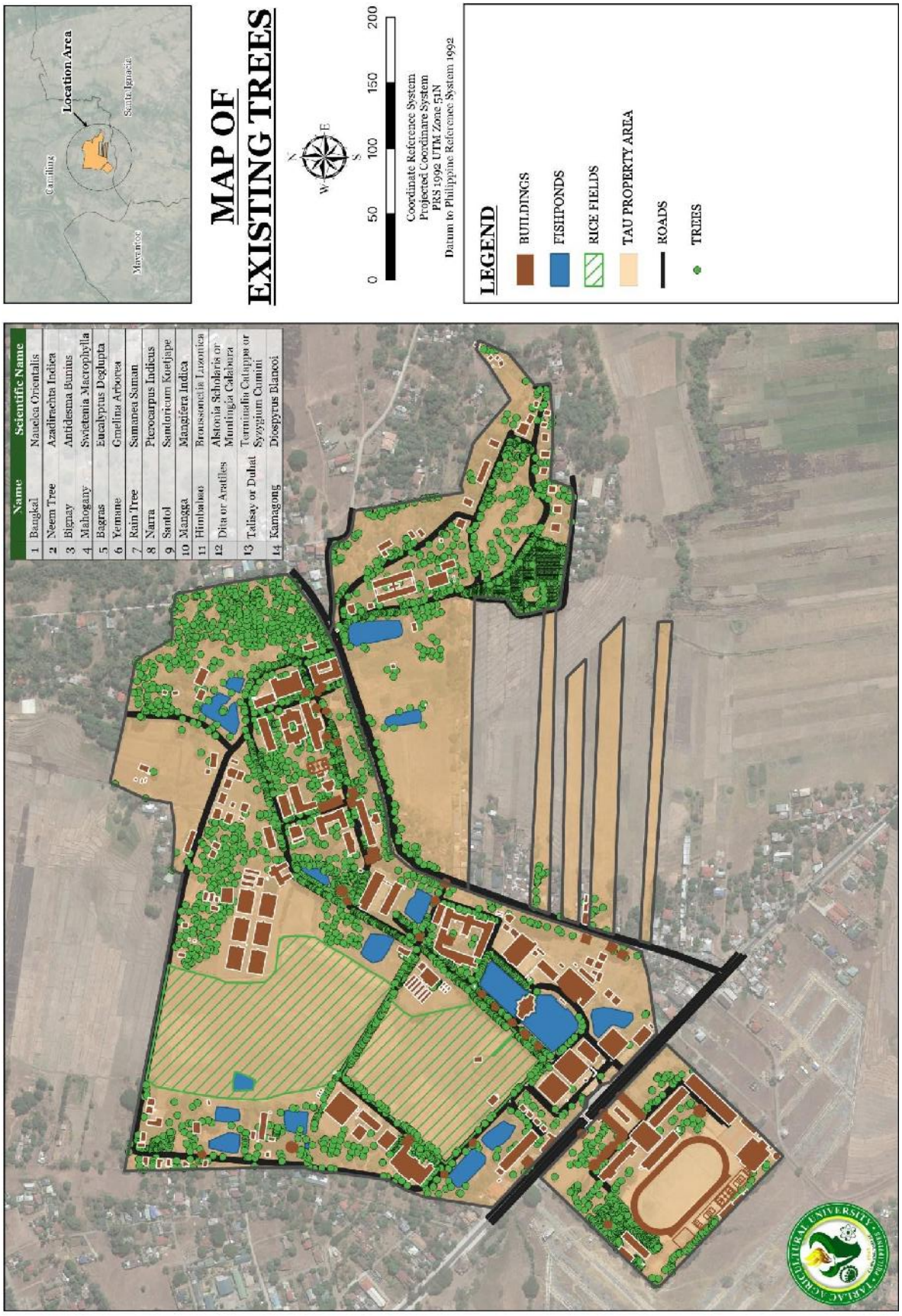


Figure 1-23: Map of Existing Trees in TAU

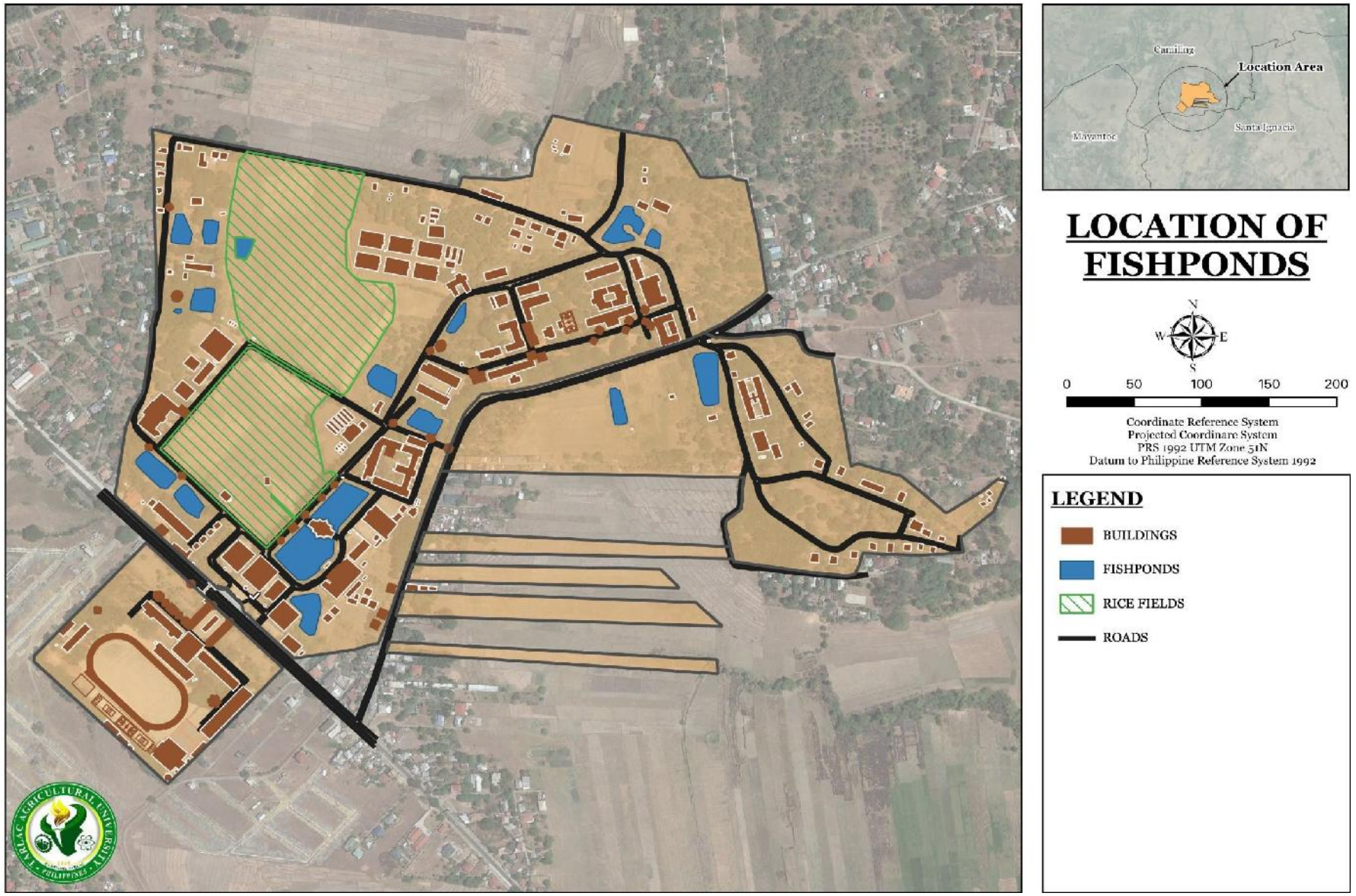


Figure 1-24: Location of Fishponds in TAU

Meteorology and Air Quality

Climate

TAU campus located in the town of Camiling experiences two distinct seasons like the rest of Central Luzon: dry from December to April, and wet from May to November. It falls under Type 1 of the modified Coronas Classification of Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA). The climate in the specified area plays an important role in the economic activity, since during the rainy seasons the Tarlac River floods its surrounding areas and causes widespread damage to crops and properties.

Sun Path and Wind Direction

The Prevailing winds in the country are heavy, very wet and destructive Southwest monsoon winds (Habagat) which blow from March through September. Cool, pleasant and equally strong northeast monsoon winds (Amihan) blow from November through mid-February. During the month of October the winds usually transition.

Depending on the building use, the placement of the buildings should be oriented in a way that natural light and ventilation would penetrate while minimizing heat accumulating inside the building. The buildings are recommended to be oriented to make the most out of the prevailing winds.

Figure 1-25: Wind Path within the Campus

Depending on the building use, the placement of the buildings should be oriented in a way that natural light and ventilation would penetrate while minimizing heat accumulating inside the building. The buildings are recommended to be oriented to make the most out of the prevailing winds.

Table 1-15: Sun Path Information of Tarlac Agricultural University

Sun Position	Elevation	Azimuth	Latitude	Longitude
13/01/2023 14:35 | GMT8	38.05°	225.37°	15.6374969° N	120.4191397° E
twilight	Sunrise	Sunset	Azimuth Sunrise	Azimuth Sunset
twilight -0.833°	06:28:22	17:45:20	112.19°	247.89°
Civil twilight -6°	06:05:18	18:08:22	110.76°	249.33°
Nautical twilight -12°	05:38:46	18:34:53	109.32°	250.77°
Astronomical twilight -18°	05:12:27	19:01:11	108.09°	252.01°
daylight	hh:mm:ss	diff. dd+1	diff. dd-1	Noon
13/01/2023	11:16:58	00:00:26	-00:00:25	12:06:51

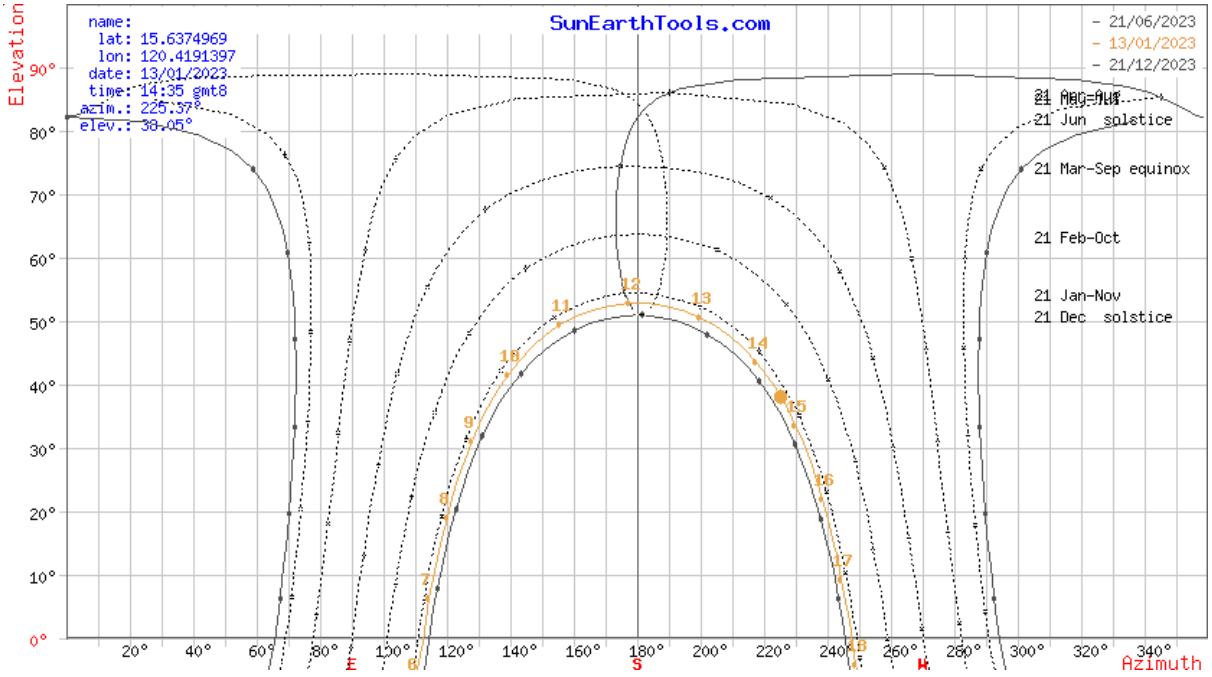


Figure 1-26: Cartesian Chart of Sun

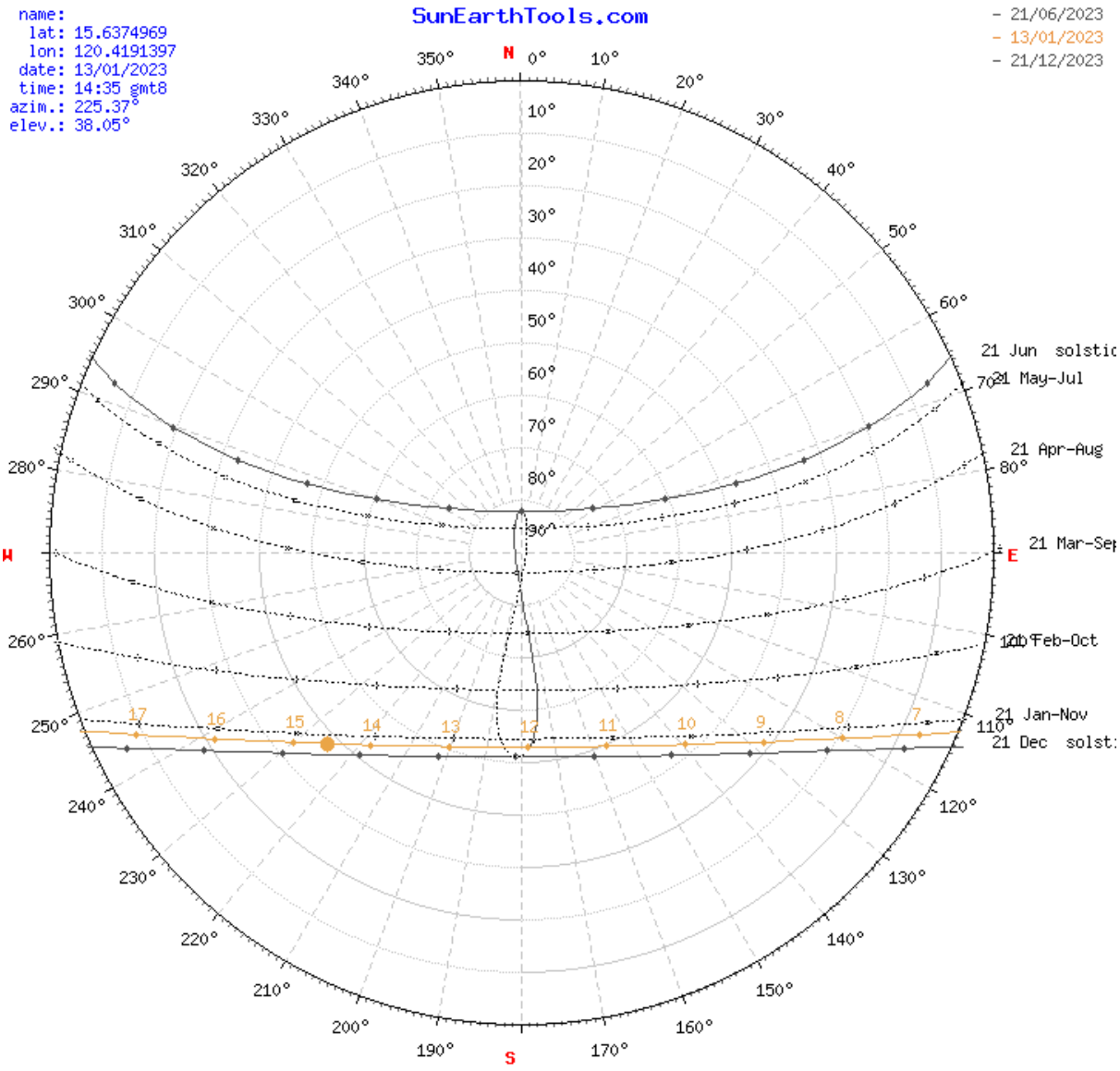


Figure 1-27: Polar Chart of Sun Path

OTHER SITES OCCUPIED BY THE SUC

By virtue of Presidential Decree No. 1506, TAU was awarded the Calao Forest Reserve located in Sitio Titi Calao, Barangay San Jose, Mayantoc, Tarlac. With approximately 665 hectares, Calao Campus has three (3) structures erected therein, Ecovilla 1, Ecovilla 2 and Bamboo Processing Plant.

The reserve serves as laboratory for field practice and for the establishment of projects which will promote forest conservation and development supportive of agriculture in restorations of watersheds, prevention of floods and drought and maintenance of ecological balance within the natural environment.

Calao Forest Reserve is basically a secondary forest dominated with planted exotics like *Sweitenia macrophylla*, *Tectona grandis*, *Gmelina arborea* and *Bauhinia monandra* and natives like *Piliostigma malabarica*, *Syzygium cumini*, *Pittosporum pentandrum*, *Pterospermum diversifolium*, *Antidesma ghaesambilia*, *Mallotus* cf *philippensis* and *Vitex negundo*. Also, planted species of Bamboo, i.e. *Bambusa blumeana* and *Bambusa merilliana* as one of the banner commodities of the university.

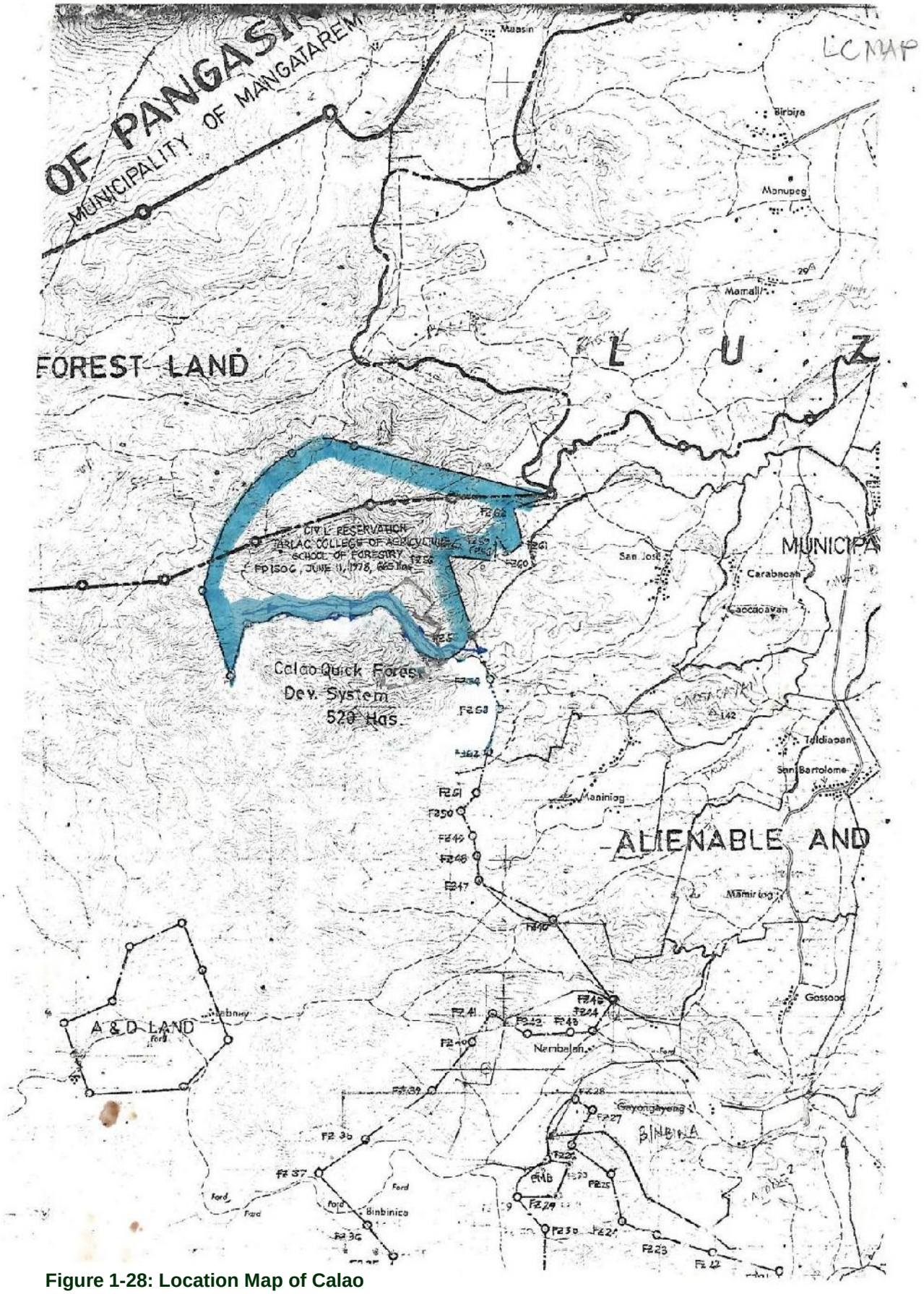


Figure 1-28: Location Map of Calao

Table 1-16: Technical Description of Lots in Calao acquired through PD1506

LINES	BEARING AND DISTANCE	COR.	DESCRIPTION OF CORNERS
1-2	N 790W 400 METERS	1	MBM No. 20 or Cor I A & D Blk I, Proj. 13
2-3	S SE 600 meters	**2**	Kaldios 10 cms. Cor. 62″ Blk I, Proj. 13
3-4	S SE 150 meters	3	Binayoyo 15 cms. Cor 61″ Blk I, Proj. 13
4-5	N 40W 375 meters	**4**	Binayoyo 20 cms. Cor. 60″ Blk I, Proj. 13
5-6	S 9W 487 meters	**5**	Himbabao 20 cms. Cor. 59″ Blk I, Proj. 13
6-7	S 89W 150 meters	**6**	Binayoyo 10 cms. Cor. 58″ Blk I, Proj. 13
7-8	S 89W 358 meters	**7**	Misc. Sp. 10 cms. Cor. 57″ Blk I, Proj. 13
8-9	S 24E 750 meters	8	Misc. Sp. 10 cms. Cor. 56″ Blk I, Proj. 13
9-10	S 44W 410 meters	9	Banaba 15 cms. Cor. 55″ Blk I, Proj. 13
10-11	S 22W 140 meters	10	Alibangbang 25 cms. at N. Bank Titi creek
11-12	Foll. Titi Creek in the Gen direction of NW with a distance of 416 M 11	Alibangbang 20 cms. N. Bank of Creek	
12-13	Foll. Titi Creek in a NW direction at a distance of 12	Alibangbang 20 cms. N. Bank of Creek of 496 m.	
13-14	Foll. Titi Creek in a SE direction at a distance of 218 M. 13	Alibangbang 25 cms. N. Bank of Creek.	
14-15	Foll. Titi Creek in a westerly direction 260 m. distance14	Alibangbang 20 cms. N. Bank of Creek.	
15-16	Foll. Titi Creek in a westerly direction 255 m. distance15	Alibangbang 30 cms. N. Bank of Creek.	
16-17	Foll. Titi Creek in a westerly direction 440 m. distance16	Alibangbang 25 cms. N. Bank of Creek.	
17-18	Foll. Titi Creek in a westerly direction 405 m. distance 16	Alibangbang 25 cms. N. Bank of Creek.	
18-19	Foll. Titi Creek in a westerly direction at a distance of 441 m. 18	Alibangbang 30 cms. N. Bank of Creek.	

19-20	Foll. Titi Creek in a SW direction at a distance of 170 m. 19	Alibangbang 30 cms. N. Bank of Creek.	
20-21	Foll. Titi Creek in a SW direction 438 m. distance 20 Stake at N	Bank of Titi Creek	
21-22	170 W 80 Meters 21 Stake		
22-23	19 W 200 Meters 22 Stake		
23-24	19 W 200 Meters 23 Stake		
24-25	19 W 160 Meters 24 Lamong, 114 cms.		
25-26	19 W 200 Meters 25 Stake		
26-27	19 W 180 Meters 26 Stake		
27-28	19 W 180 Meters 27 Stake		
28-29	61 E 180 Meters 28 Bingas, 100 cms.		
29-30	61 E 180 Meters 29 Stake		
30-31	Foll. Tugui Creek downstream 220 M	30	Stake at a source of Tugui Creek
31-32	Foll. Tugui Creek downstream 340 M.	31	Stake
32-33	Foll. Palis E. Downstream 400 m.	32	Junction of Tugui Creek & Palis River
33-34	Foll. Palis R. Meters stream 280 M	33	Stake
34-35	Foll. Palis R. downstream 510 M.	34	Stake
35-36	Foll. Palis R. Downstream 400 M.	35	Stake
36-37	Foll. Palis R. Downstream 540 M.	36	Stake
37-38	S 73 E. 220 Meters	37	Junction of Palis R. and Pias Creek
38-39	S 73 180 Meters	38	Stake

39-40	S 73 240 Meters	39	Stake
40-41	200	40	Akleng Parang, 40 cms.
41-42	180	41	Stake
42-43	250	42	Stake
43-44	220	43	Stake
44-45	200	44	Stake
45-46	240	45	Alibangbang, 25, cms.
46-47	180	46	Duhat, 30 cms.
47-48	160	47	Binayoyo, 25, cms
48-49	142	48	Stake
49-1	150	49	Stake

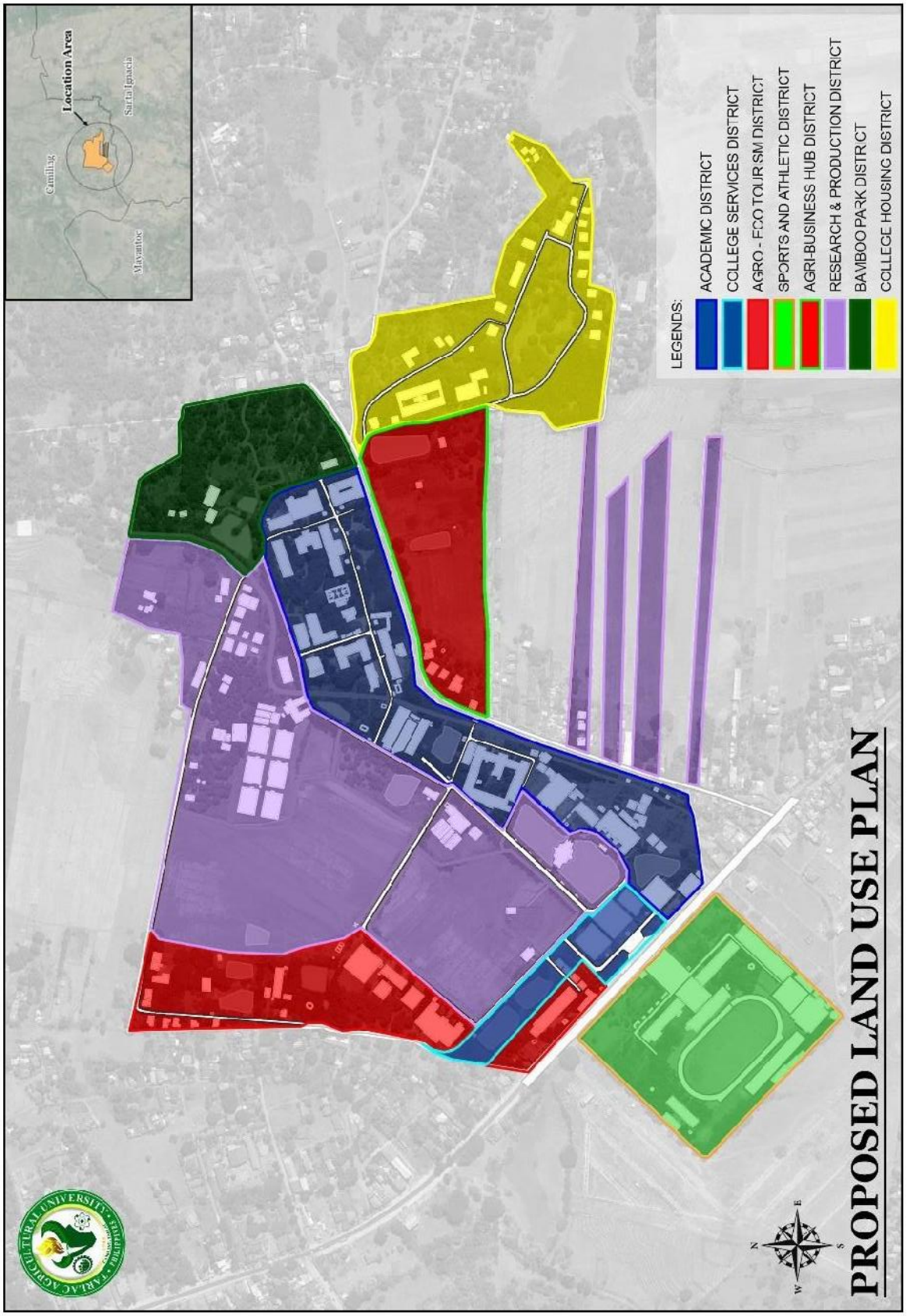


Figure 1-29: Proposed Land Use Plan

ZONING PROJECTION

The Tarlac Agricultural University's proposed land use plan is shown in the graphic above. Even though the eight (8) districts remained, certain areas have been moved to another zone. The strips of land in the southeastern part of the university development located in the Agricultural Technology Park District (now Agri-Business Hub District) are transferred to the Research and Production District, which is now converted into an Agri-Industrial Zone. The College Services district has an additional area taken from the Agro-Ecotourism District to cater to the other university services needed, such as the Emergency Center, Catharsis, and the new University Health Services building. The new area sizes are shown in the table below. Values on the written data given and SHP files do not match. Further validation on-site must be done.

Table 1-17: Proposed Land Use Plan Zones and their corresponding area

Zone	Existing Area (in sq m)	Proposed Area (in sq m)
Academic District	105,269.95	105,269.95
College Services District	16,204.15	20,751.21
Agro-Ecotourism District	76,982.48	72,435.42
Sports and Athletic District	68,142.00	68,142.00
Agri-Business Hub District *(before Agricultural Technology Park District)*	98,292.25	51,392.75
Research and Production District	209,988.50	256,888.00
Bamboo Park District	44,975.91	44,975.91
College Housing District	76,746.36	76,746.36

***Values need further validation on-site; some discrepancies are found between the written data and SHP file*

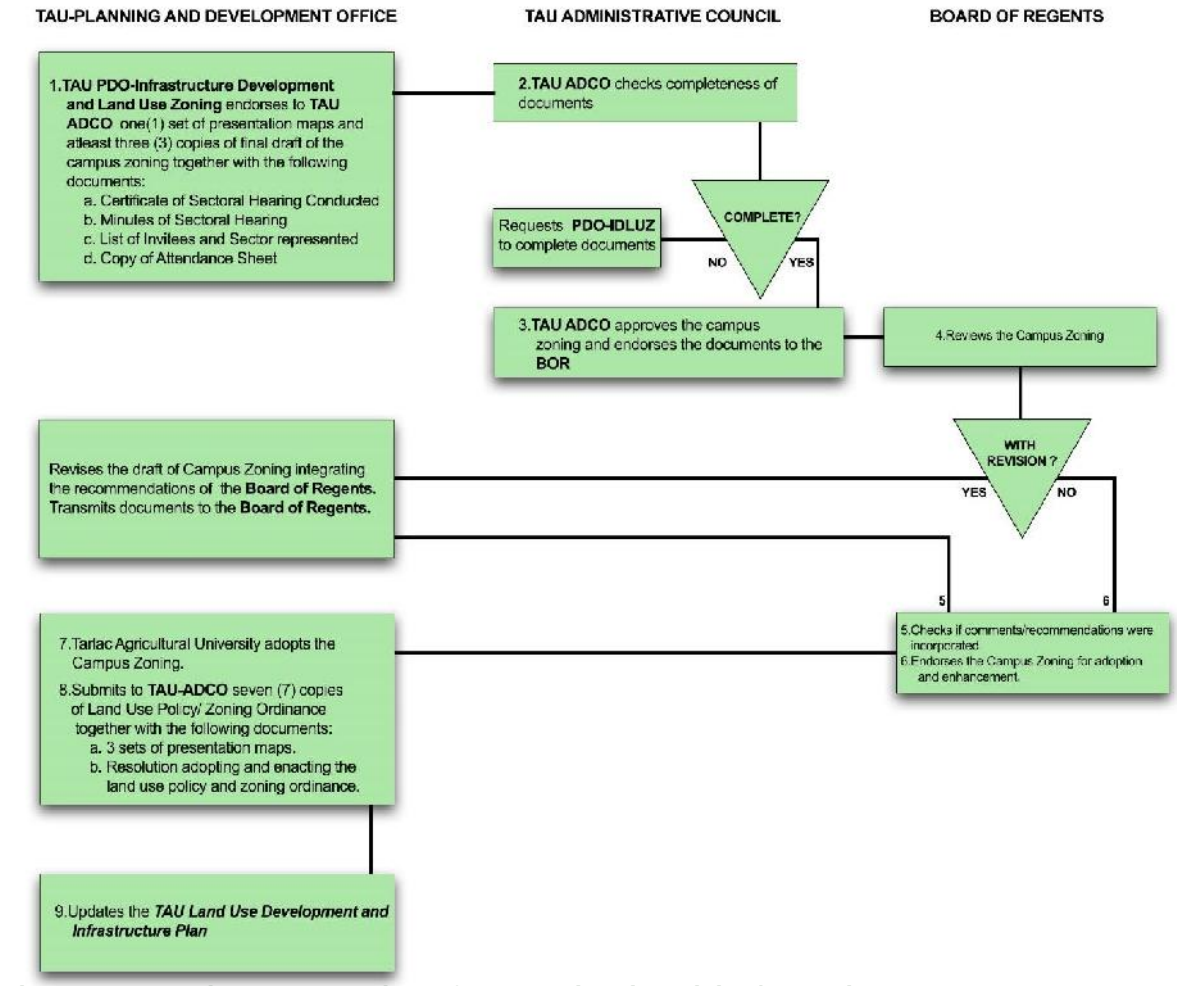


Figure 1-30: Zoning Process Flow of Approval and Revision/Amendments

TENURIAL CONDITIONS

The university is composed of 32 lots with a total area of 708,684 square meters. Of these 32 lots, 27 lots were titled with the following distributions: Republic of the Philippines with 198,047 square meters, Republic of the Philippines as represented by its University Presidents with 127,315 square meters, and Tarlac College of Agriculture (Now TAU) with 252,729 square meters. The remaining five (5) lots which are untitled with 130,593 square meters are basically owned and occupied by the university through Tax Declaration.

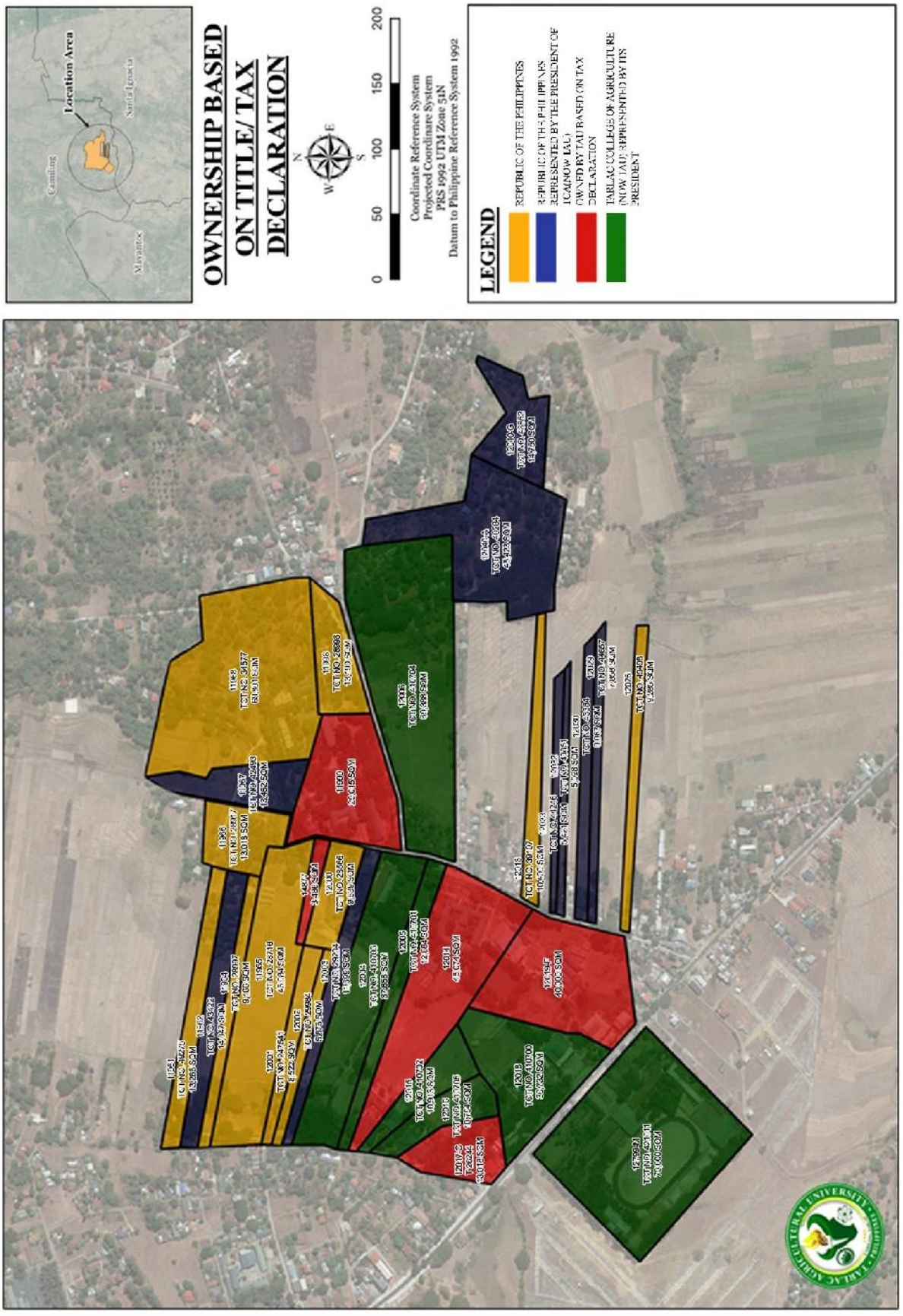


Figure 1-31: Ownership Based on Title/Tax Declaration

2 DETAILED DESCRIPTION OF TARLAC AGRICULTURAL UNIVERSITY

2.1 Description of Land Cover and Topography

Slope

About 95% or a total of 66 hectares of the campus has a slope of less than 8%. This indicates that majority of the land area of the campus is suitable for agricultural and pasture use. Meanwhile, about 1% of the campus has a slope of 8-18%. Finally, 4% or more or about 3 hectares of the total area has a slope of over 18%. These lands are located in the northwest area of the campus. Refer to figure 2-1

Table 2-1:Total Area and Percentage Share by Slope Category

Slope Category	Description	Total Area (ha)	Percentage Share (%)
0-8%	Level to undulating	66	95
8-18%	Moderately sloping to rolling	0.49	1
18-30%	Rolling to moderately steep	3	4
TOTAL		69.49	100

Slope Orientation

North and west trending slopes comprise 31% and 33% of the total area, respectively. East slopes cover 17%, while south slopes total about 9%. Horizontal surface receiving direct radiation covers about 10% of the land area.

Elevation/ Slope Profile

The suitability of the soil at TAU Campus to certain crops is largely determined by the soil type. The soil on the western boundary and a portion across the highway is of the Tarlac Clay Loam type. The rest of the area is covered by Tarlac Sandy Clay Loam. Sandy clay loam is suitable for vegetable and cereal crops. Since the soil is also moderately impervious, its water holding capacity is suitable for ponding for inland fishery uses.

Soil Characteristics

The site exhibits a maximum 25-meter elevation difference from the northeastern tip to the rice fields near the southern boundary. The elevation of the northeastern site is about 10 meters higher than the western site.

Sewerage System

All sewage disposal and treatment system used in Tarlac Agricultural University is by means of septic tank. However, Sewage Treatment Plants were proposed by the planning office in the following years. **Refer to Annex B.**

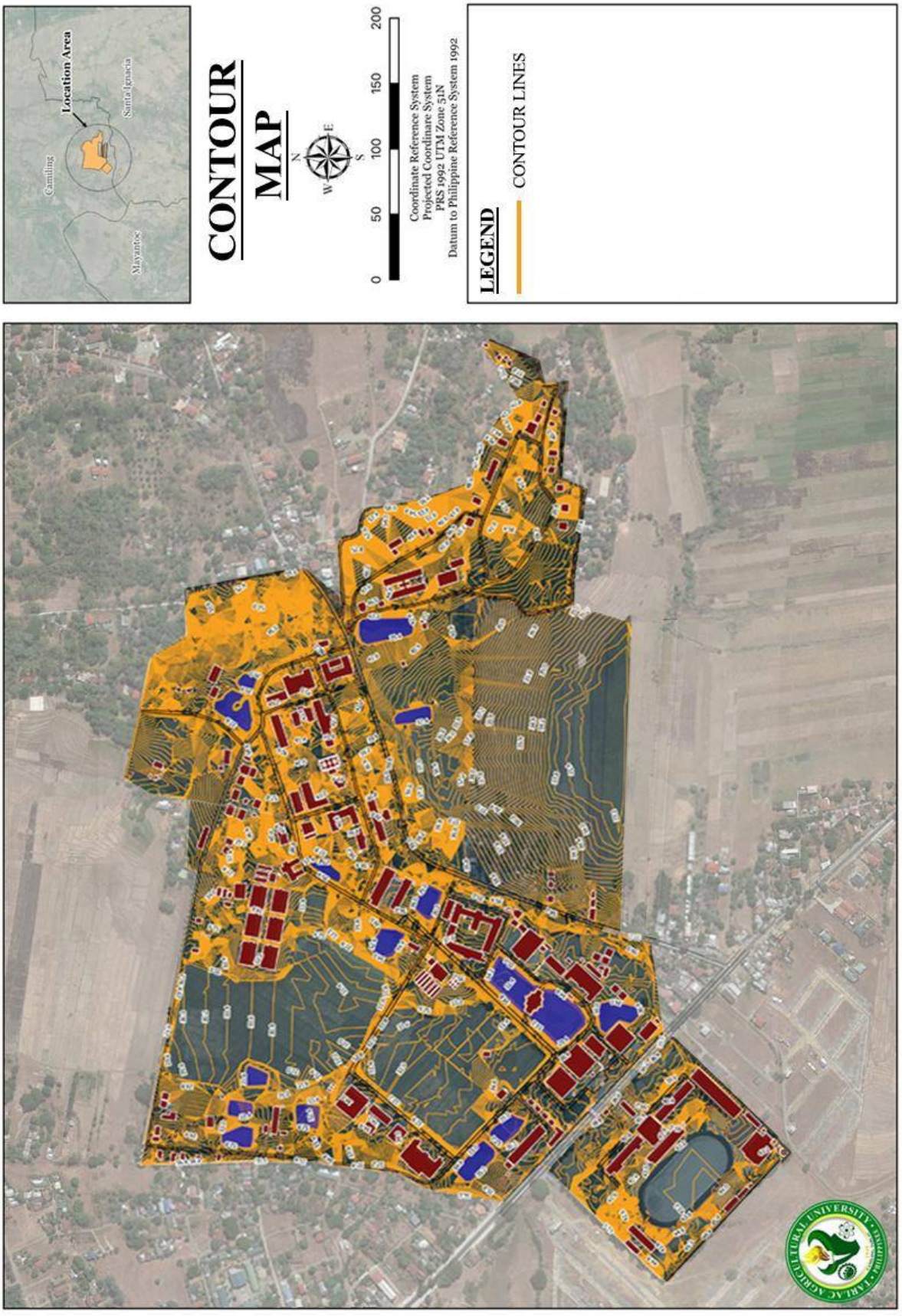


Figure 2-1: Contour Map of TAU

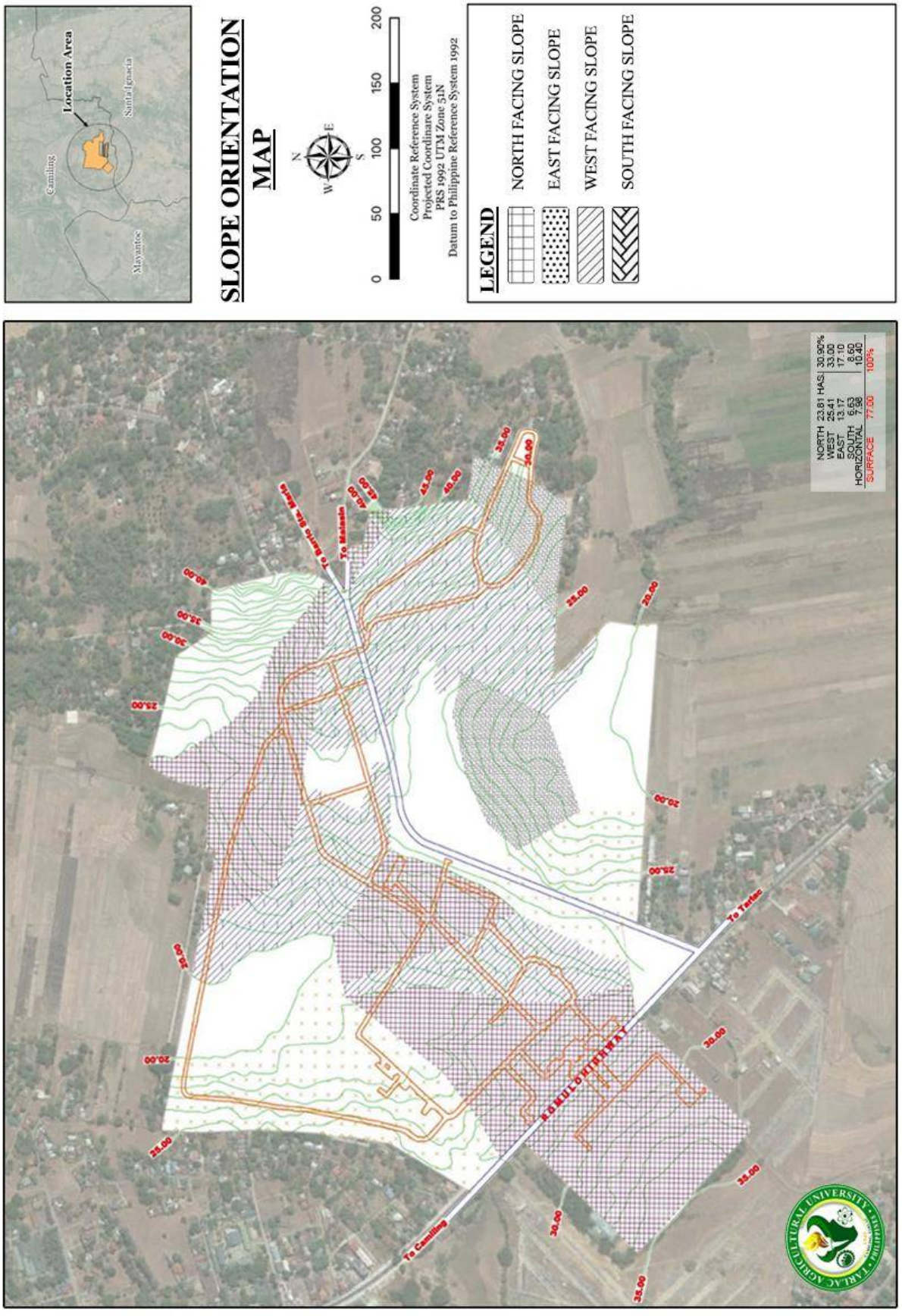


Figure 2-2: Slope Orientation Map of TAU

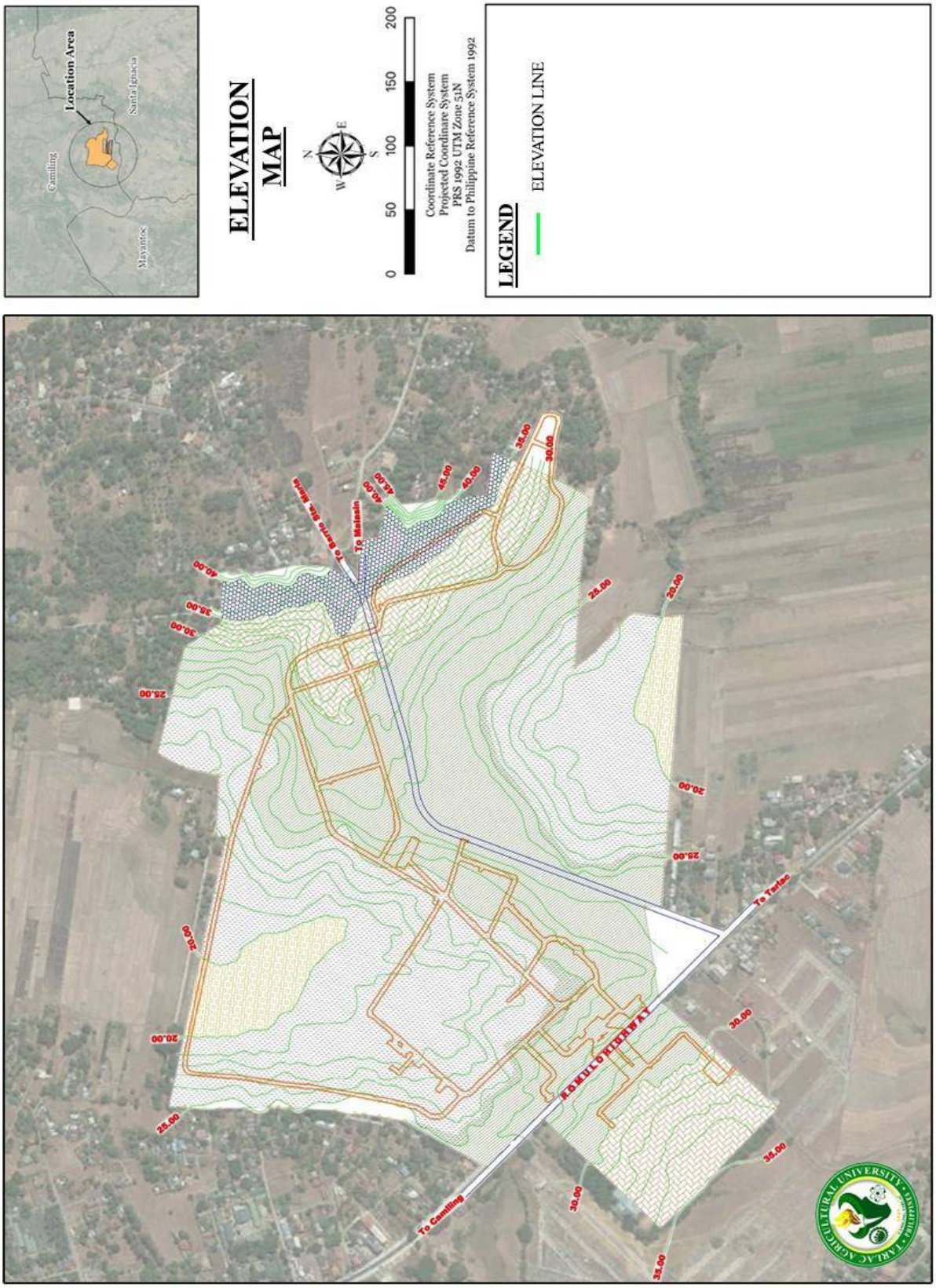


Figure 2-3: Elevation Map of TAU

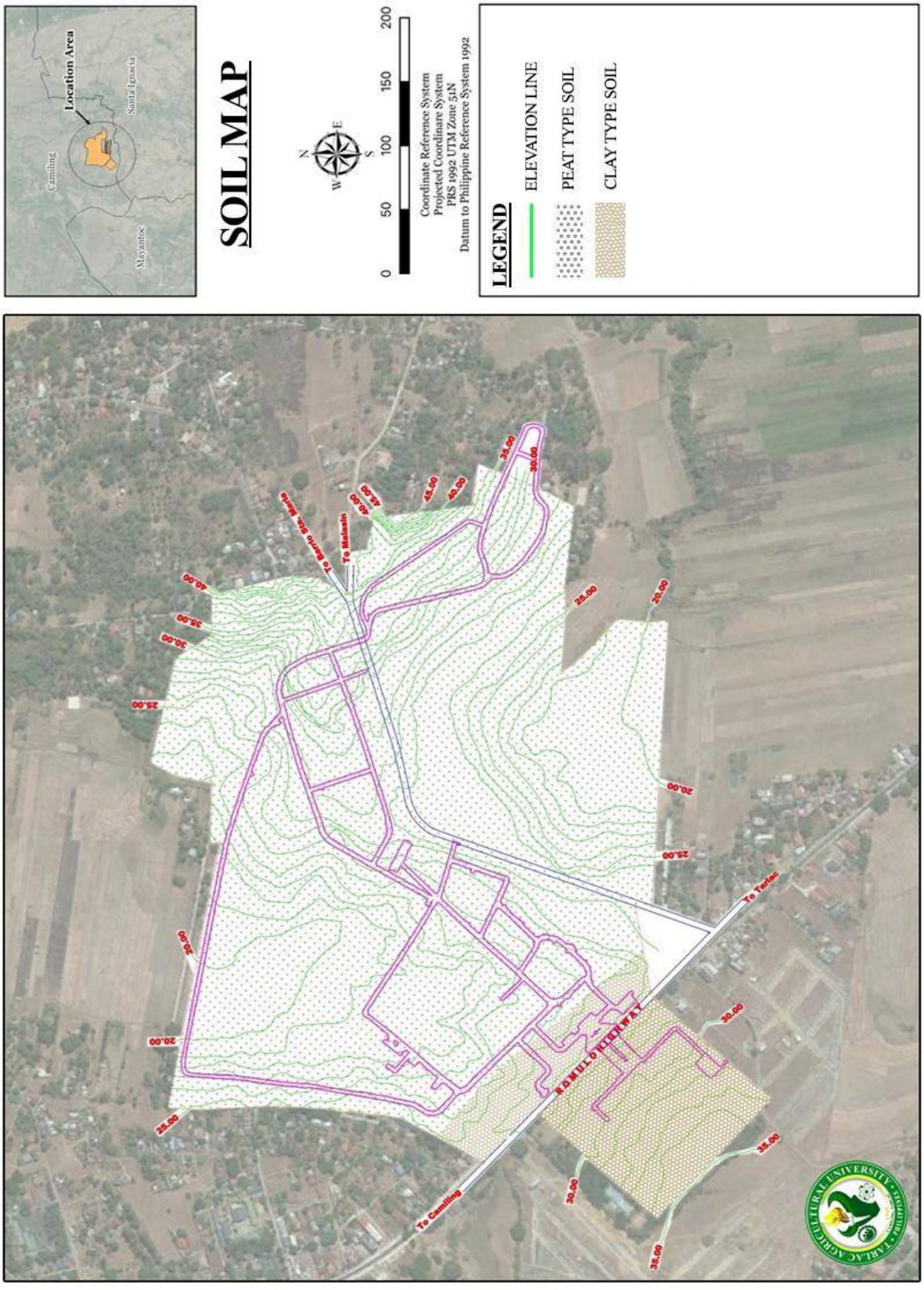


Figure 2-4: Soil Map of TAU

Watershed or Sub-Watershed Coverage and Locations

The school is located within the Agno River Basin, the fifth largest river basin in the Philippines. The Agno River Basin is located along Western Luzon, draining into Lingayen Bay, covering nine provinces, including Tarlac.

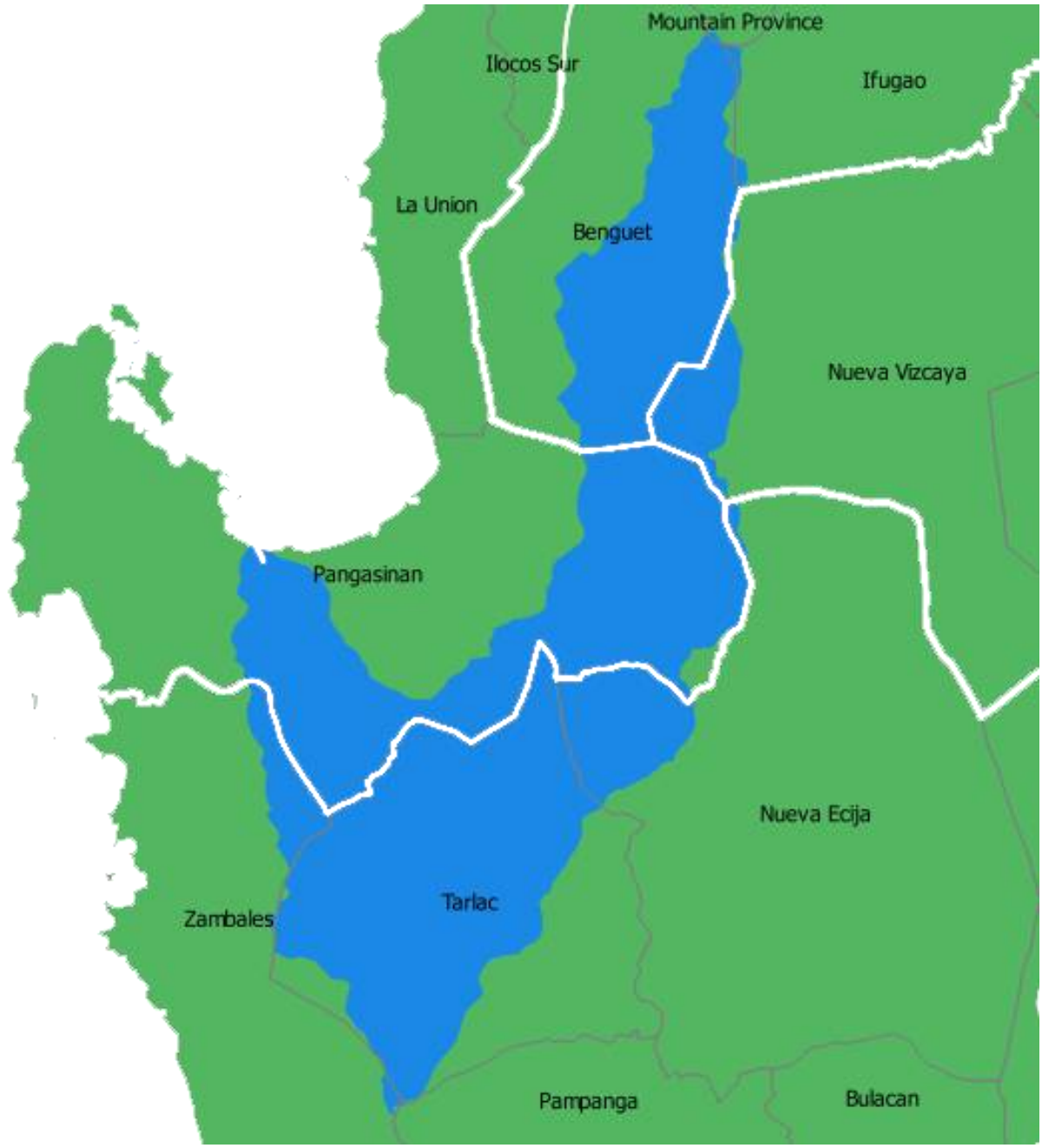


Figure 2-5: Map of Agno River Basin

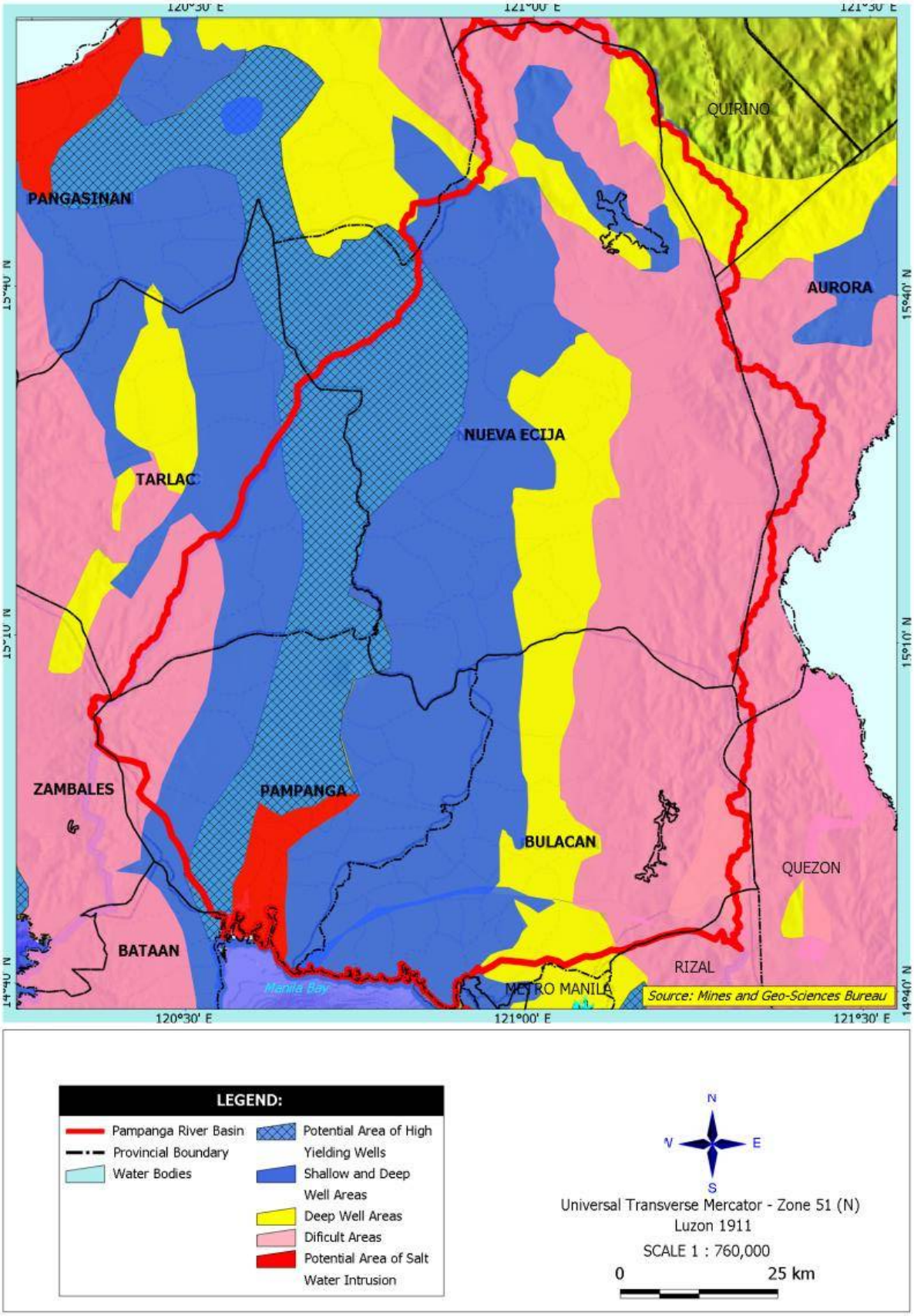


Figure 2-6: Groundwater Availability Map

Data Source: Mines and Geo-Sciences Bureau, Upgrading of Master Plan on Water Resources Management

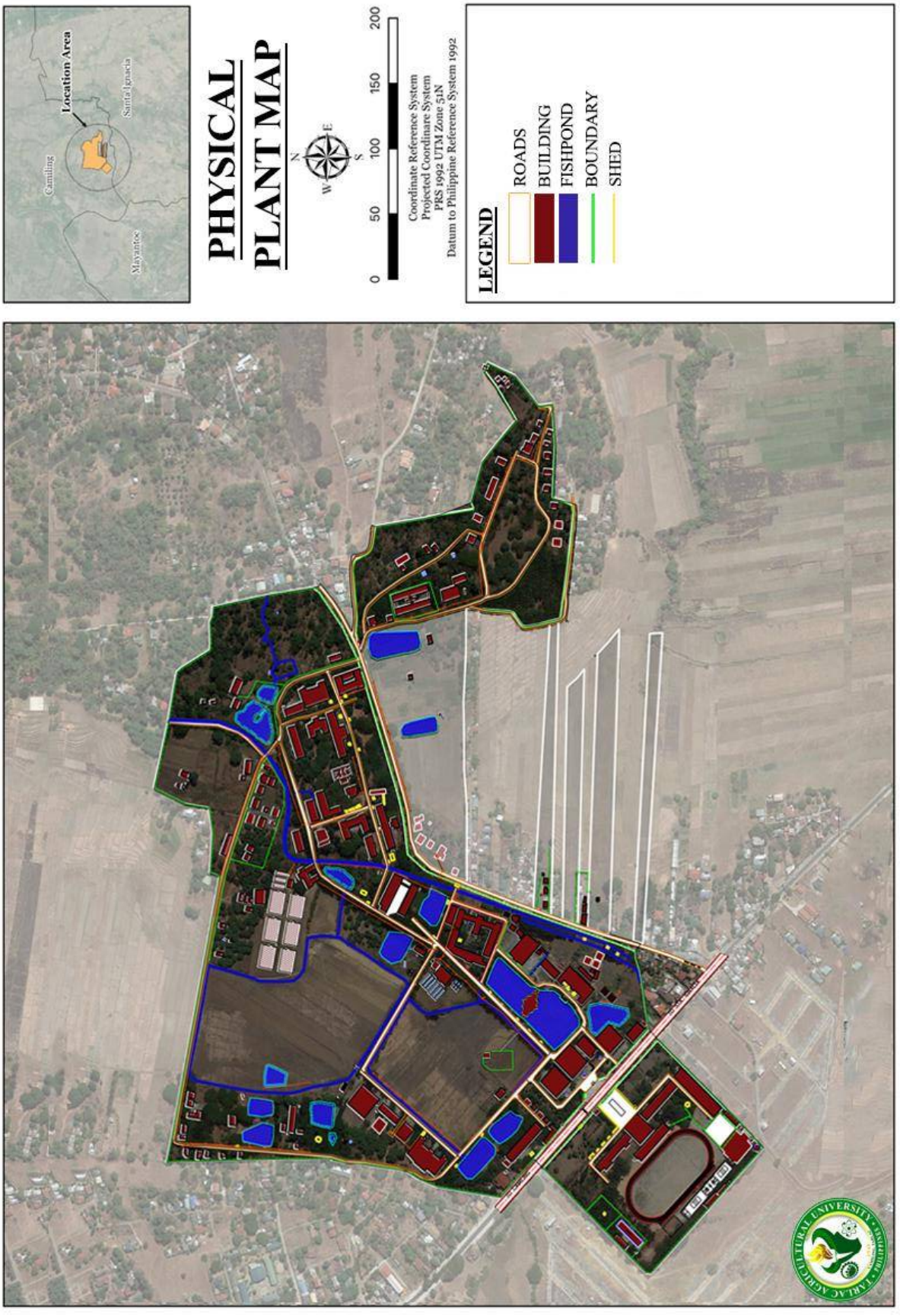


Figure 2-7: Physical Plant Map of TAU

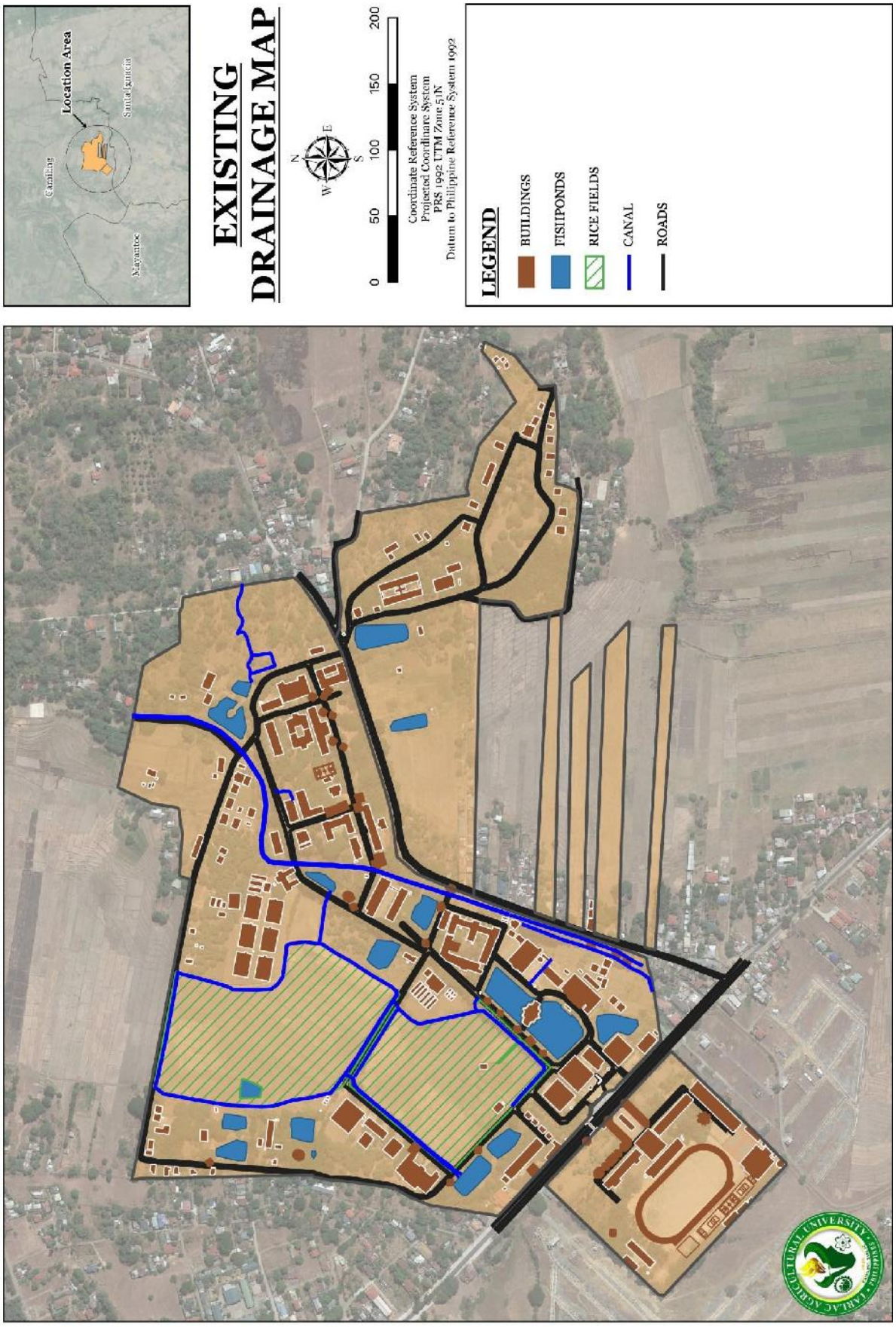


Figure 2-8: Existing Drainage Map of TAU

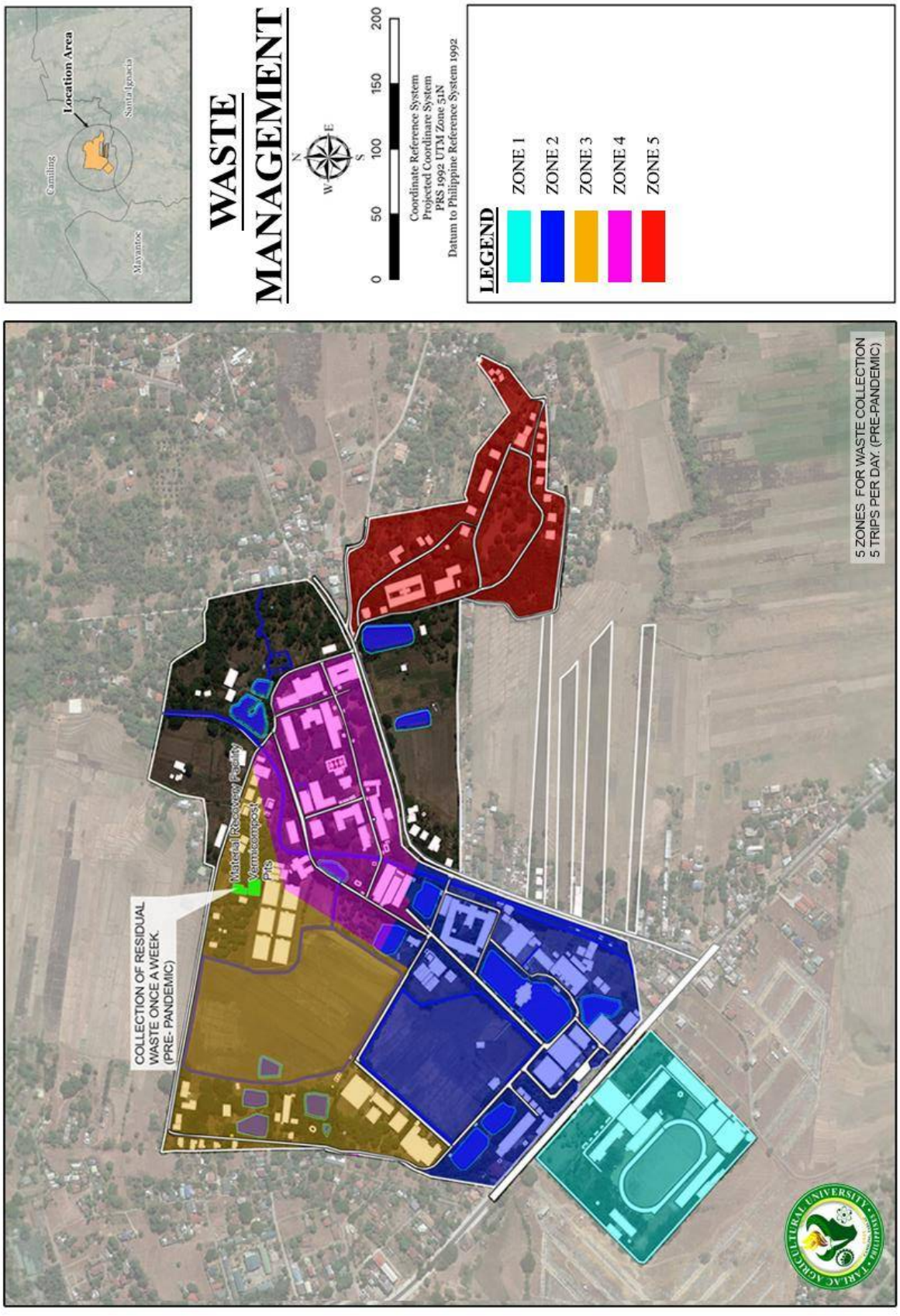


Figure 2-9: Waste Management Map of TAU

Figure 2-10: Underground Fiber Optics Layout Zone 1

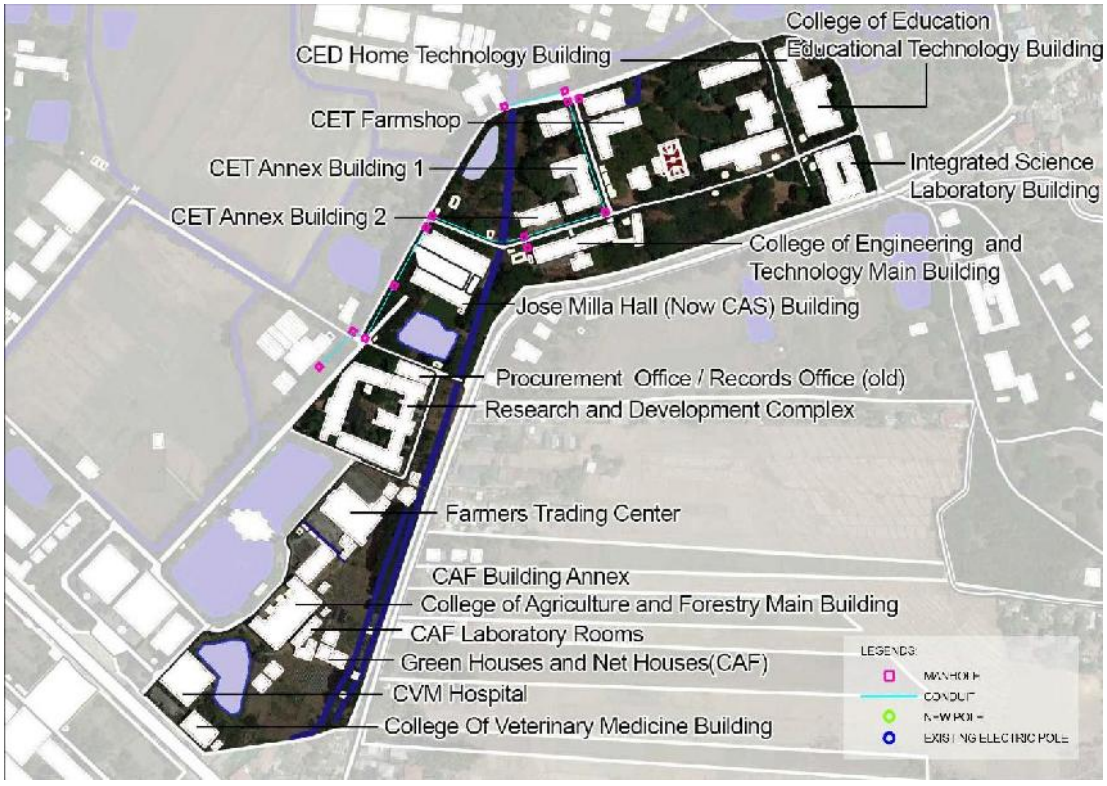


Figure 2-11: Underground Fiber Optics Layout Zone 2

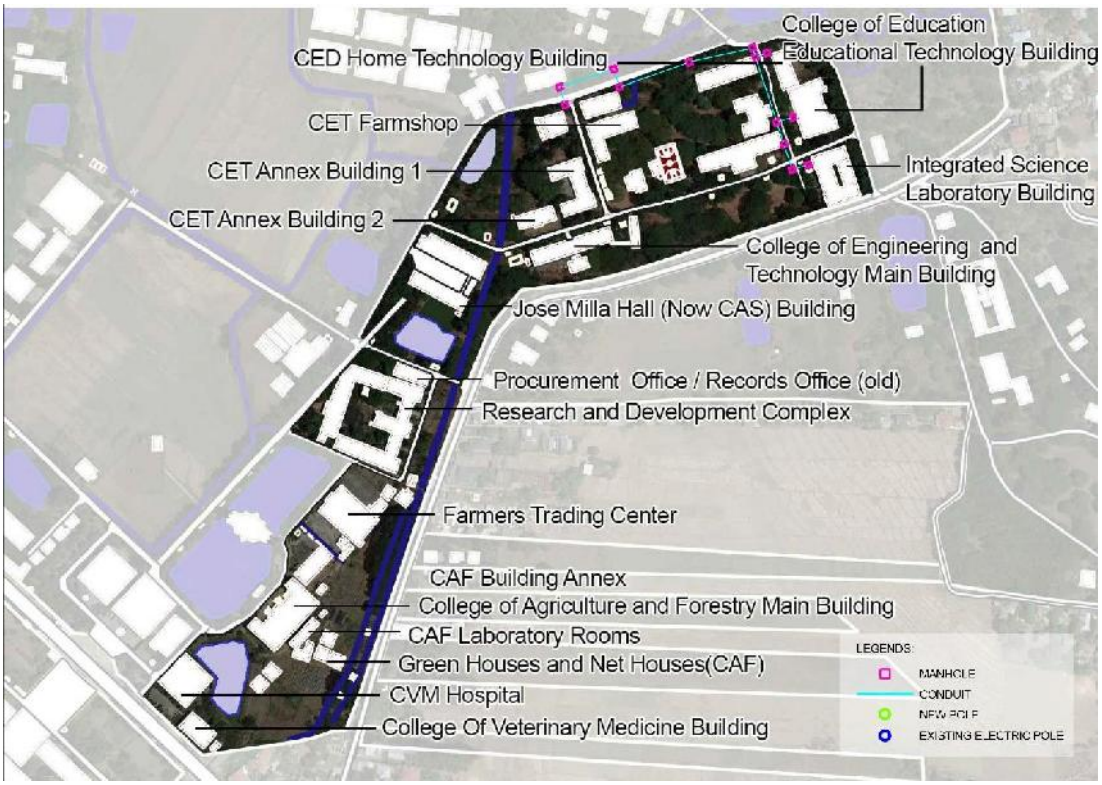


Figure 2-12: Underground Fiber Optics Layout Zone 3

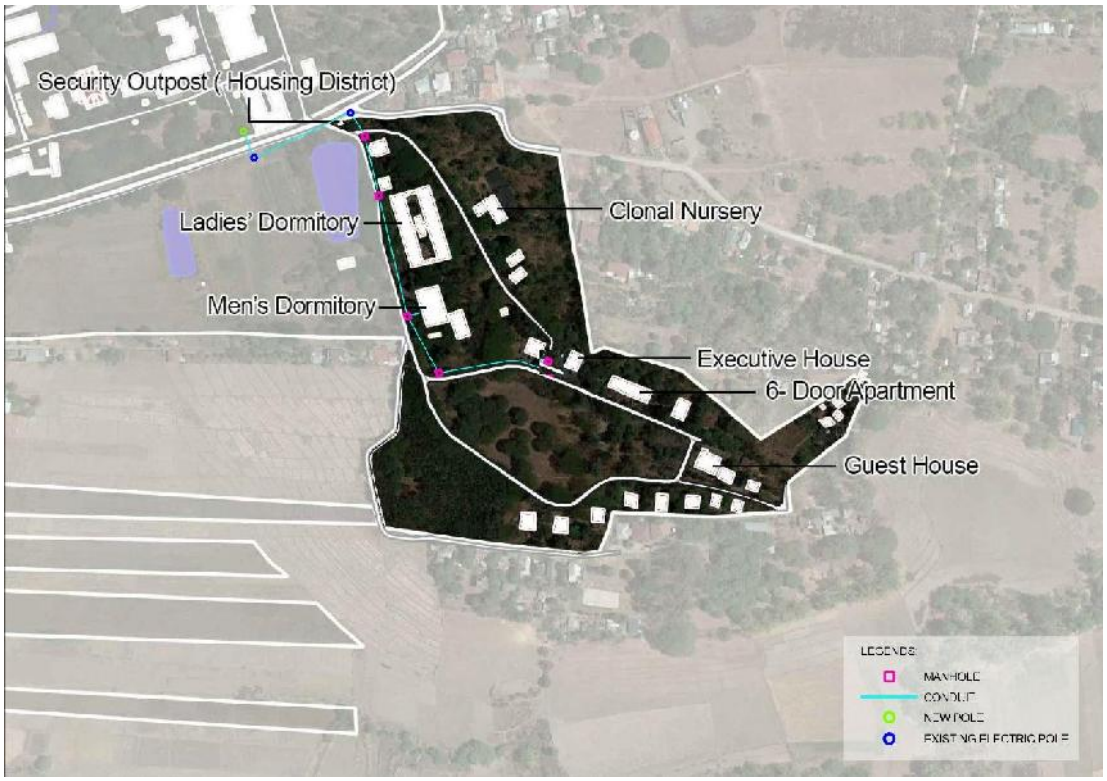


Figure 2-13: Underground Fiber Optics Layout Zone 4

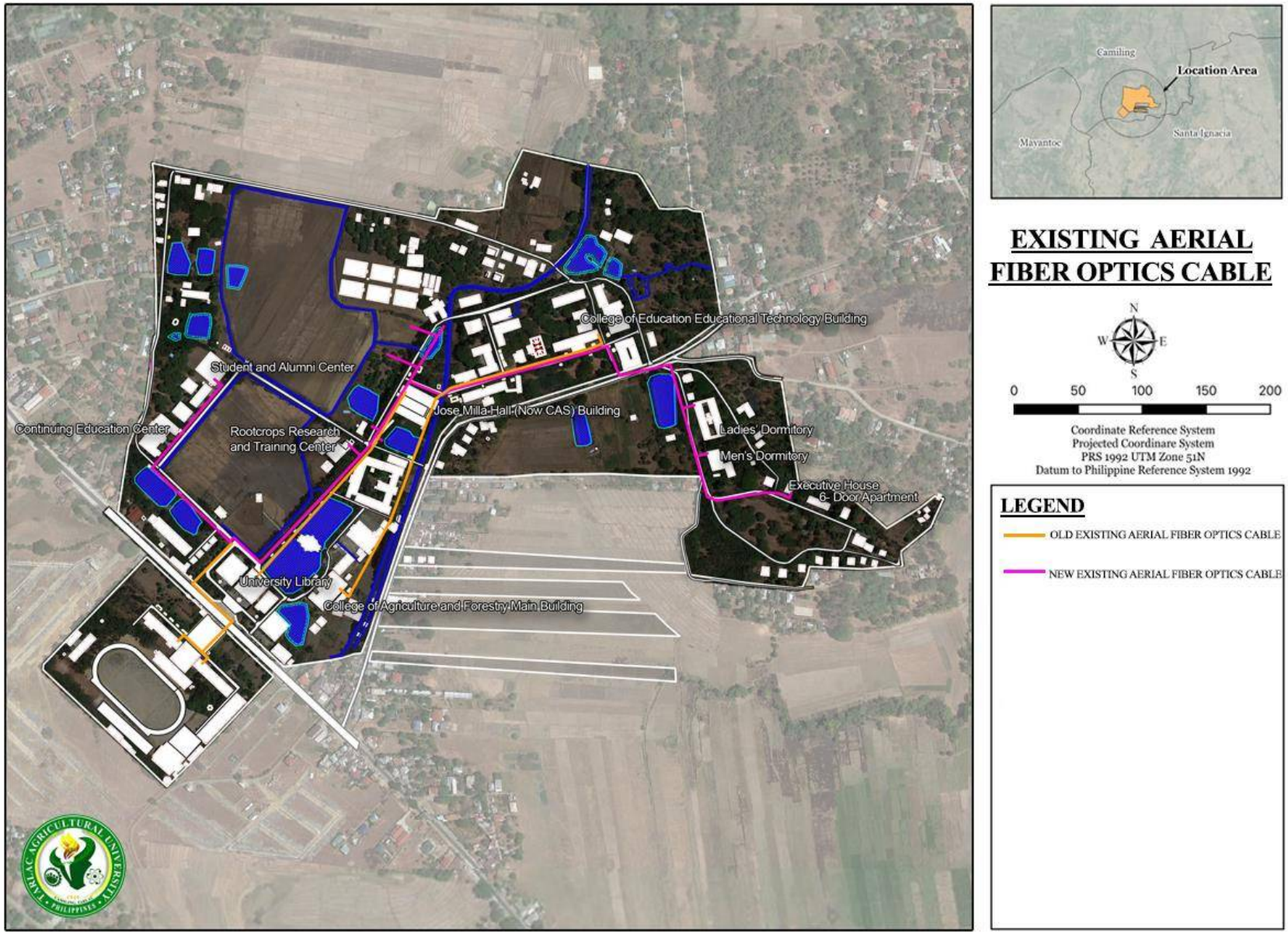


Figure 2-14: Aerial Fiber Optics Cable Map

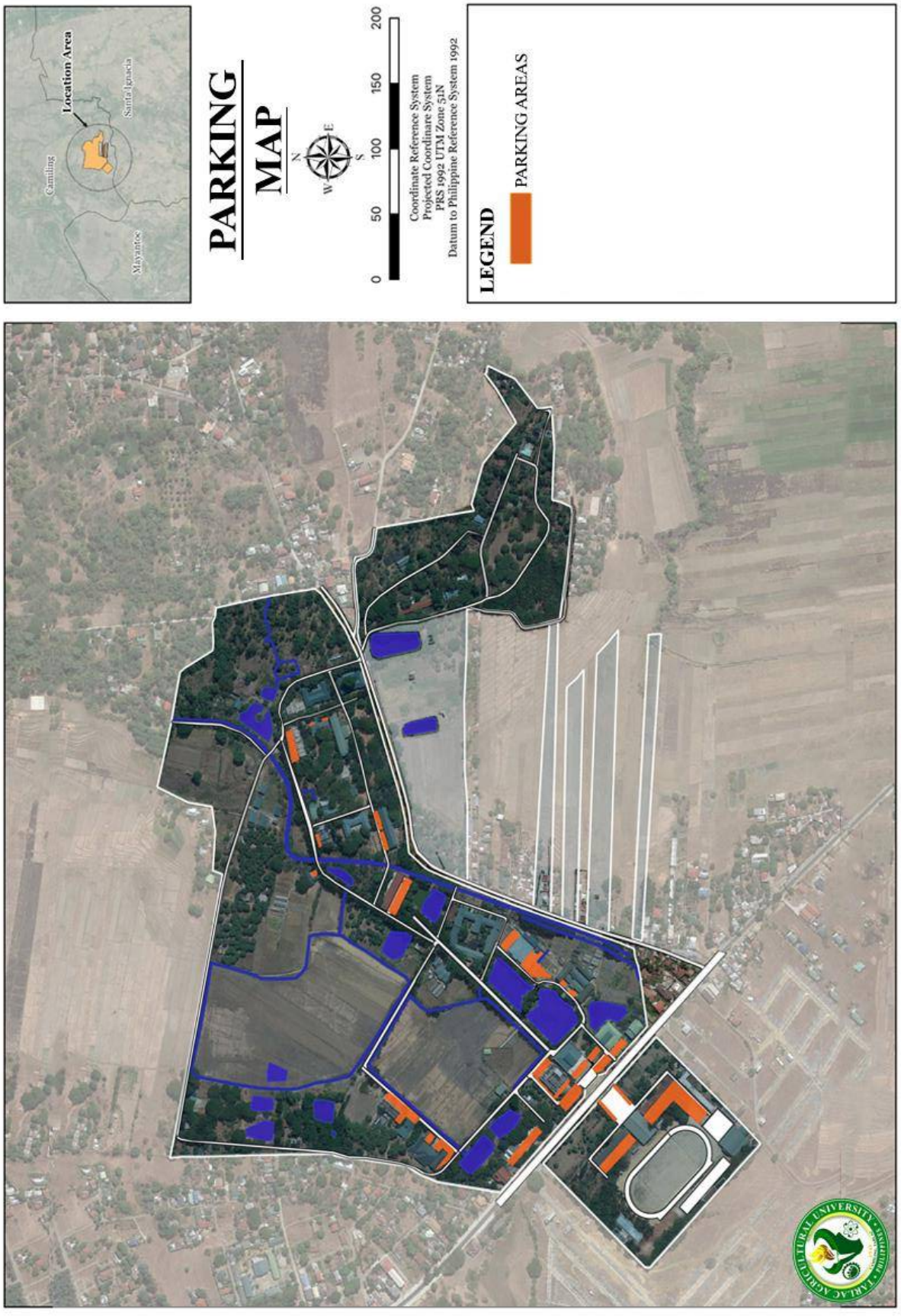


Figure 2-15: Parking Plan of TAU

Figure 2-16: Population Density Map of TAU

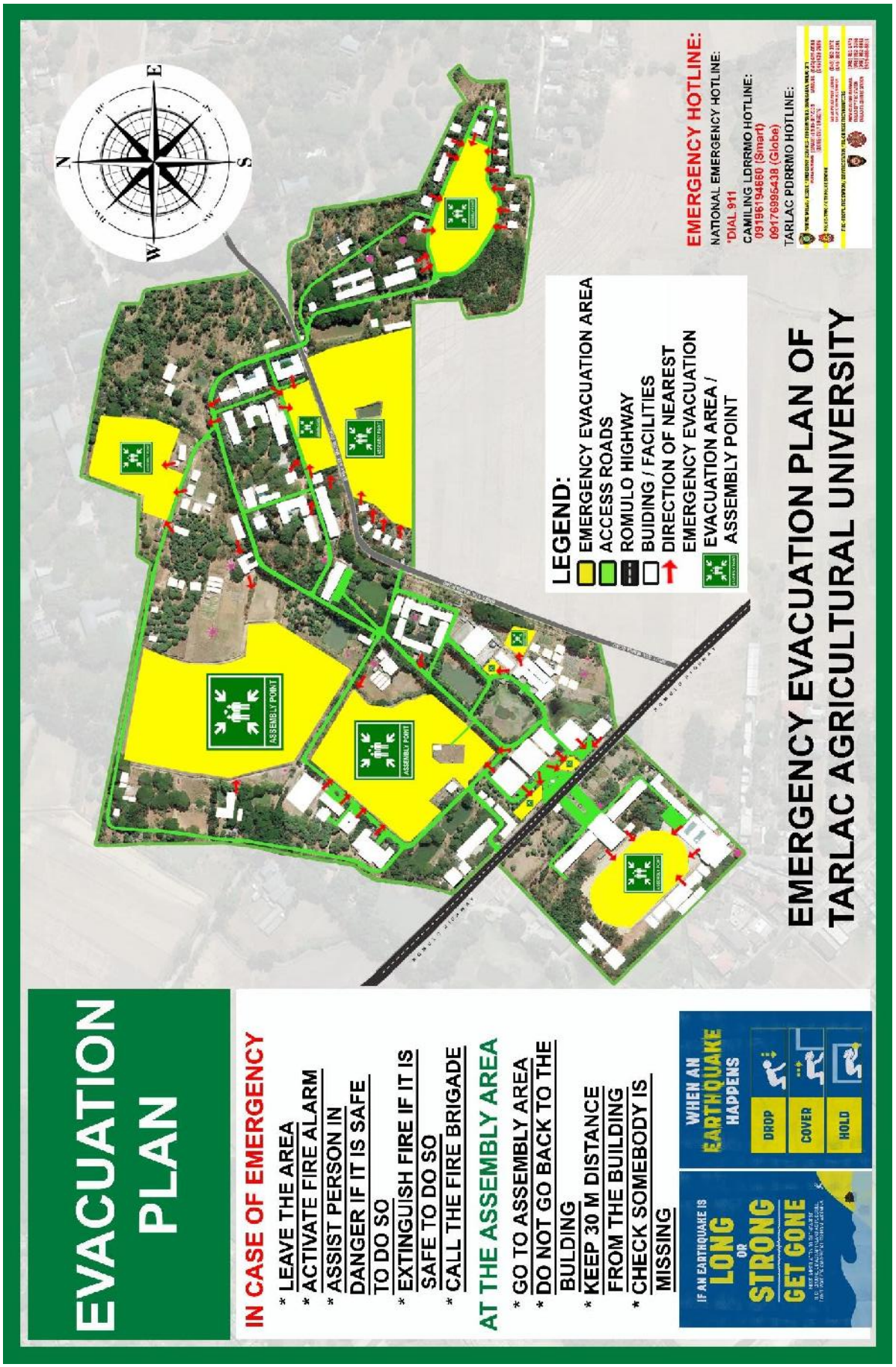


Figure 2-17: Evacuation Plan of TAU

HAZARD, VULNERABILITIES, AND RISK PROFILE

The campus is vulnerable to different hydro-meteorological and geologic hazards due to its geographical location and soil characteristics. Camiling is one of the places in Tarlac identified by the National Disaster Risk Reduction and Management Council as a flood-prone area. This is because the surrounding areas of the Province of Tarlac are gently sloping to rolling terrain which makes Tarlac a catchment basin. Moreover, the location of TAU is built on peat soil which will loosen once it absorbs water. The location of TAU is susceptible to two (2) hazards; flooding and liquefaction.

Flooding

Flooding in the campus is caused by the run-off from the existing ponds which will then be stored and collected in low-lying areas in the campus. The most affected areas in the campus are within the Housing and the Research and Production District. **Refer to Figure 2-18**

Liquefaction

The university is built on clay and peat soil. These types of soil are prone to liquefaction due to its capability to absorb water. Some areas of the university are more prone to liquefaction because these were reclaimed areas. These areas are found in the Agro-Eco Tourism District, Research and Production District, and the Agri- Techno Park. **Refer to Figure 2-19**

Ground Shaking

The **Refer to Figure 2-25** below shows that TAU's location is prone to high-intensity of ground shaking during earthquakes. Along with its neighboring provinces in the north such as Pangasinan and Nueva Ecija, Tarlac's location has the highest probability to experience intensity VIII or higher which is deemed very destructive and devastating to all structures and resources in the area. With this alarming fact, TAU intends to strengthen its Disaster Risk Reduction and Management Services and institutional mitigation policies to ensure safety and protection among all TAU's stakeholders.

Earthquake-Triggered Landslide

Despite the high probability of intensity VIII or higher intensity of ground shaking in the province, the main campus is not prone to any earthquake-triggered landslide. This is probably due to the lower terrain and concretized areas within and around the institution's premises. There are also no mountainous ranges or higher terrain surrounding the main campus. **Refer to Figure 2-24**

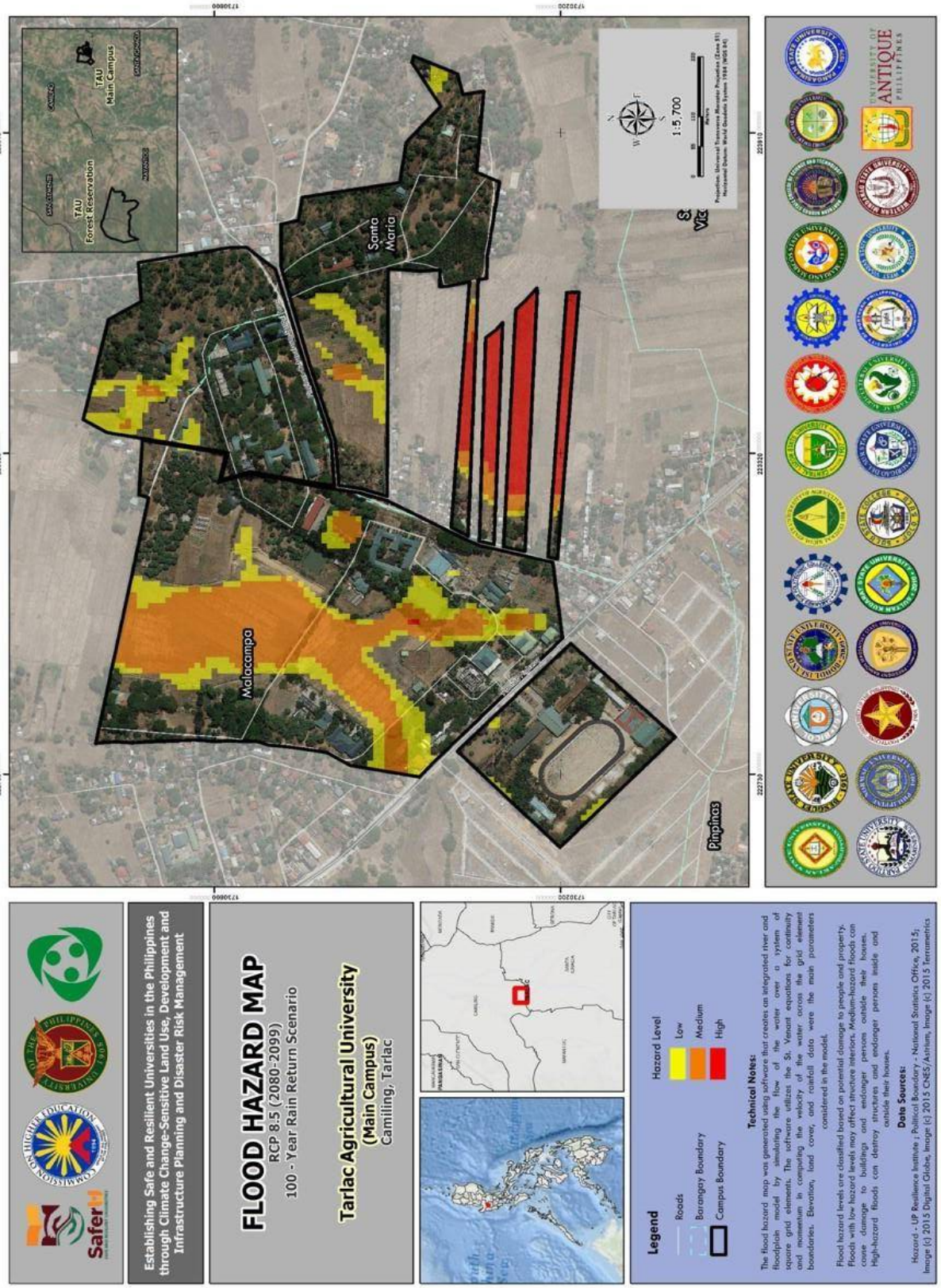


Figure 2-18: Flood Hazard Map of TAU
Data Source: SAFER-U Project of University of the Philippines Resilient Institute

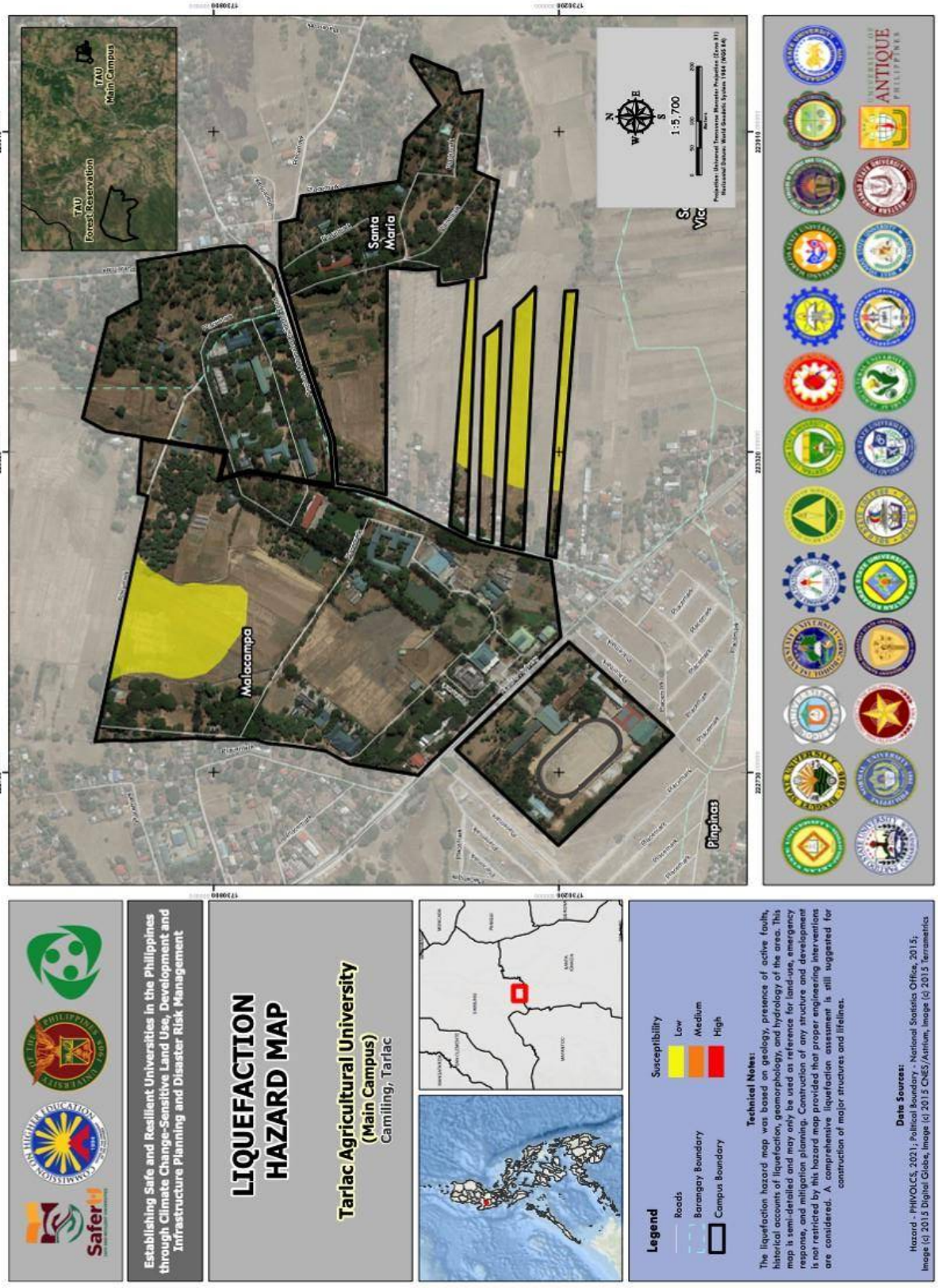


Figure 2-19: Liquefaction Hazard Map of TAU
Data Source: SAFER-U Project of University of the Philippines Resilient Institute

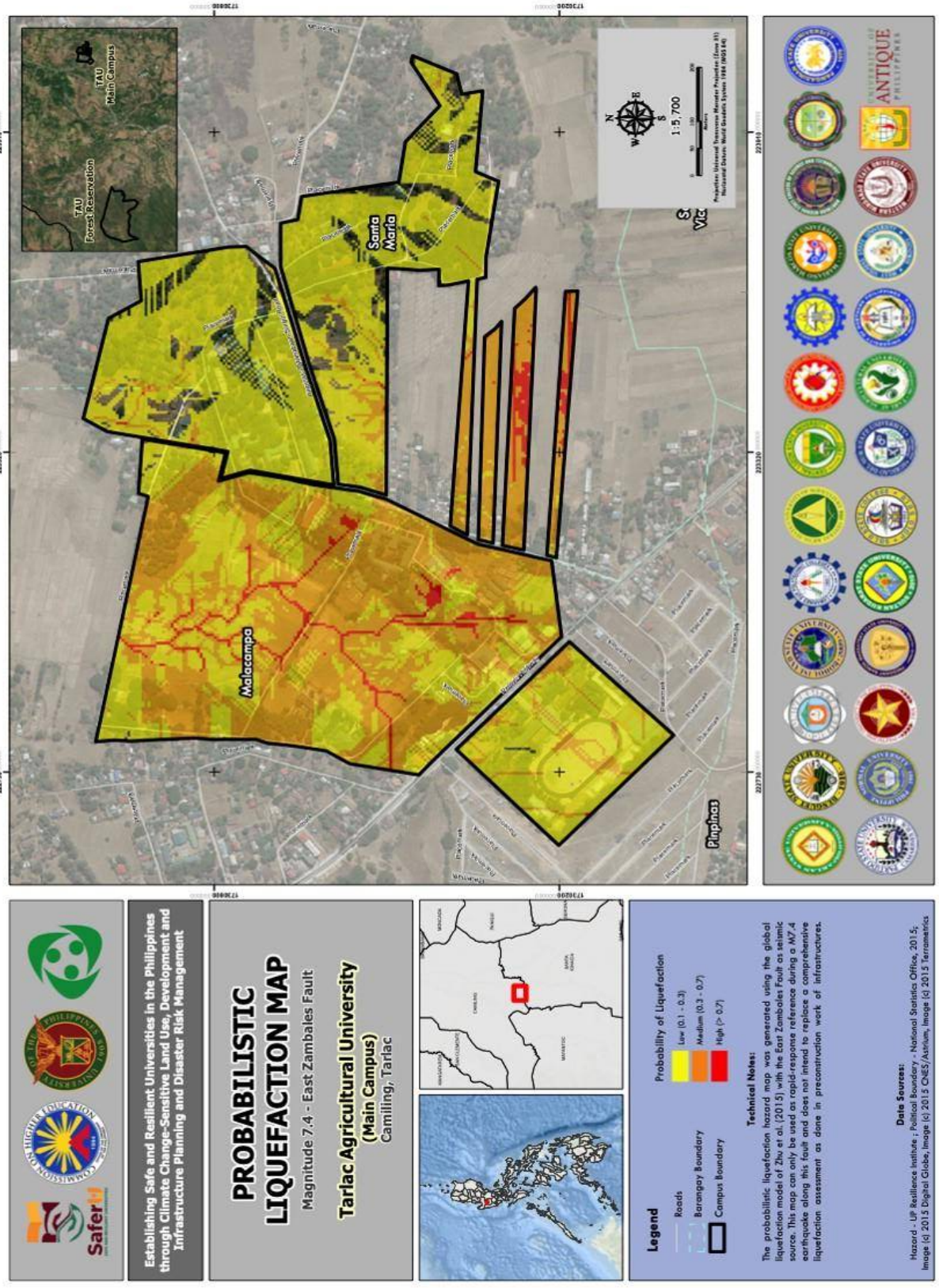


Figure 2-20: Probabilistic Liquefaction Map of TAU
Data Source: SAFER-U Project of University of the Philippines Resilient Institute

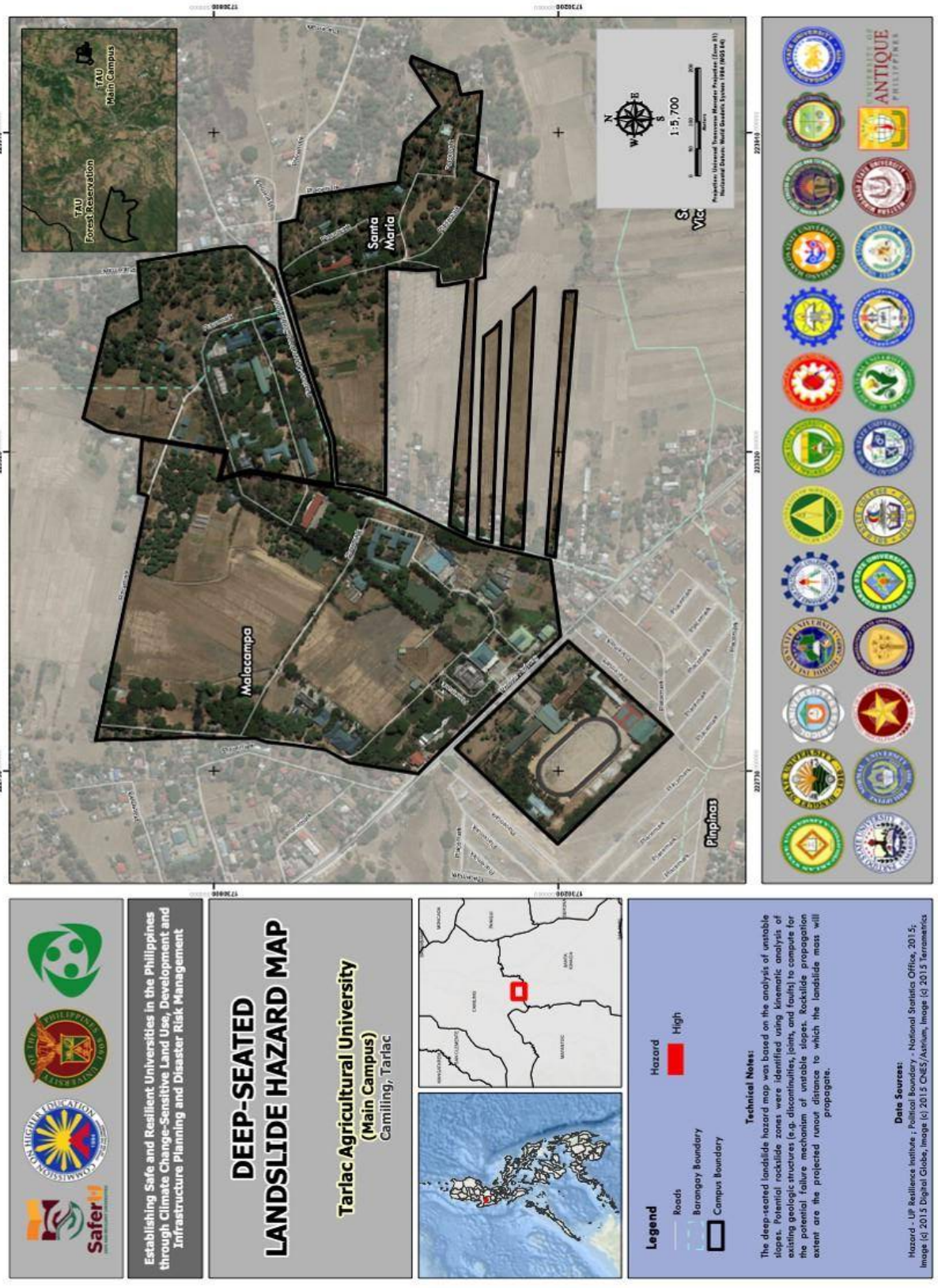


Figure 2-21: Deep Seated Landslide Hazard Map TAU
Data Source: SAFER-U Project of University of the Philippines Resilient Institute

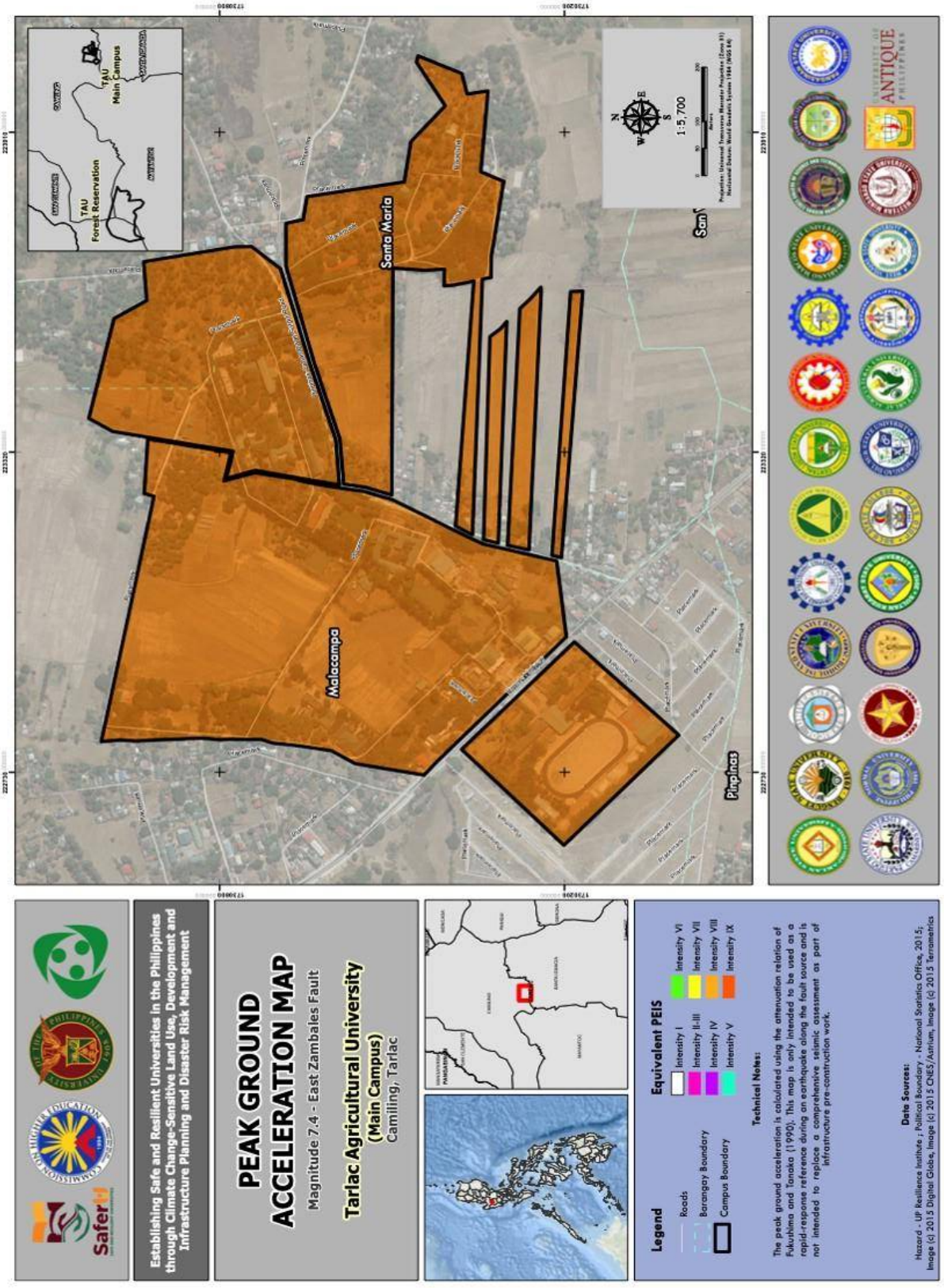


Figure 2-22: Peak Ground Acceleration Map TAU
Data Source: SAFER-U Project of University of the Philippines Resilient Institute

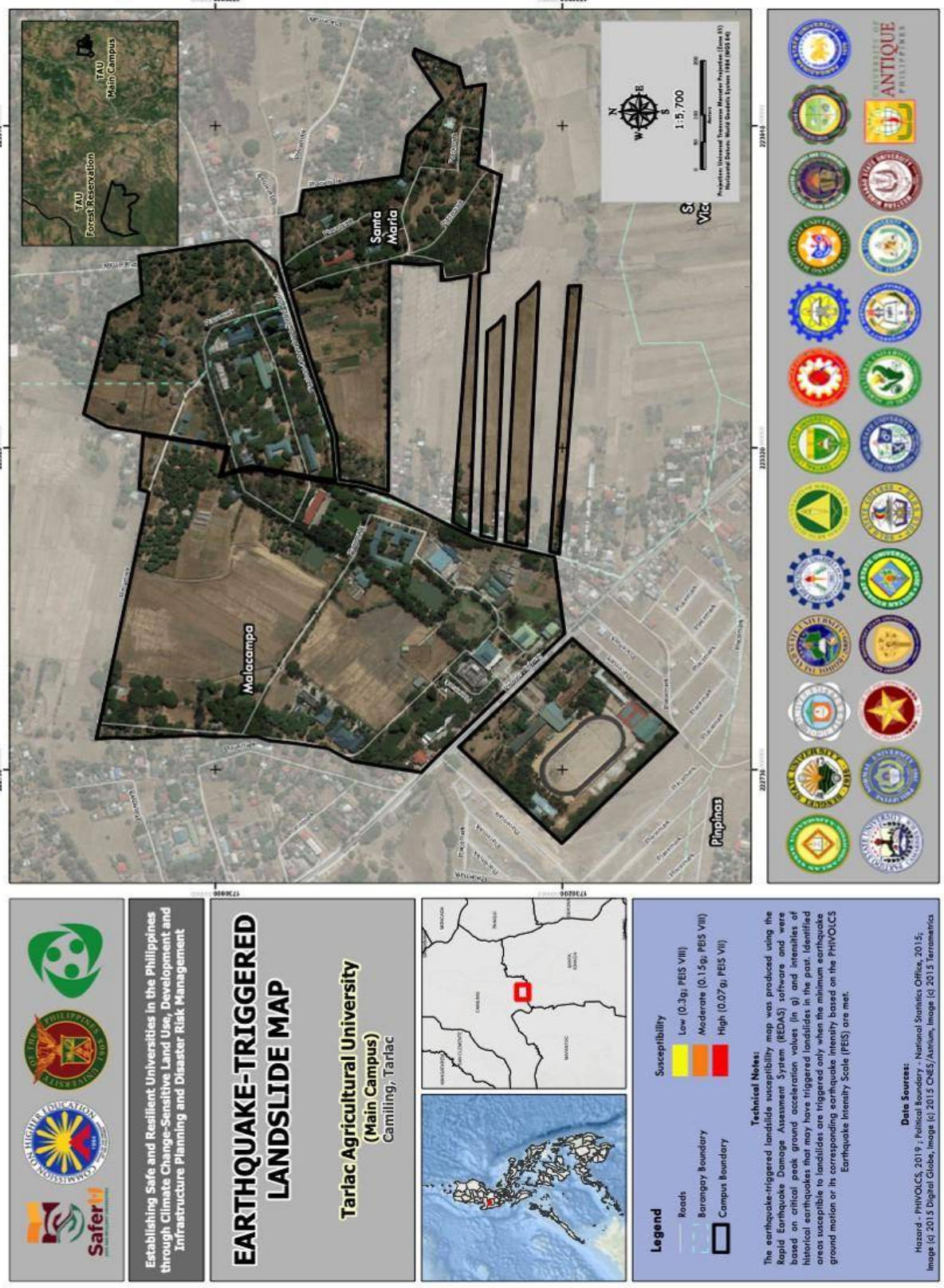


Figure 2-23: Earthquake-Triggered Landslide Map TAU
Data Source: SAFER-U Project of University of the Philippines Resilient Institute

Earthquake/ Ground Shaking

The map below shows that TAU's location is prone to high-intensity of ground shaking during earthquakes. Along with its neighboring provinces in the north such as Pangasinan and Nueva Ecija, Tarlac's location has the highest probability to experience intensity VIII or higher which is deemed very destructive and devastating to all structures and resources in the area. With this alarming fact, TAU intends to strengthen its Disaster Risk Reduction and Management Services and institutional mitigation policies to ensure safety and protection among all TAU's stakeholders.

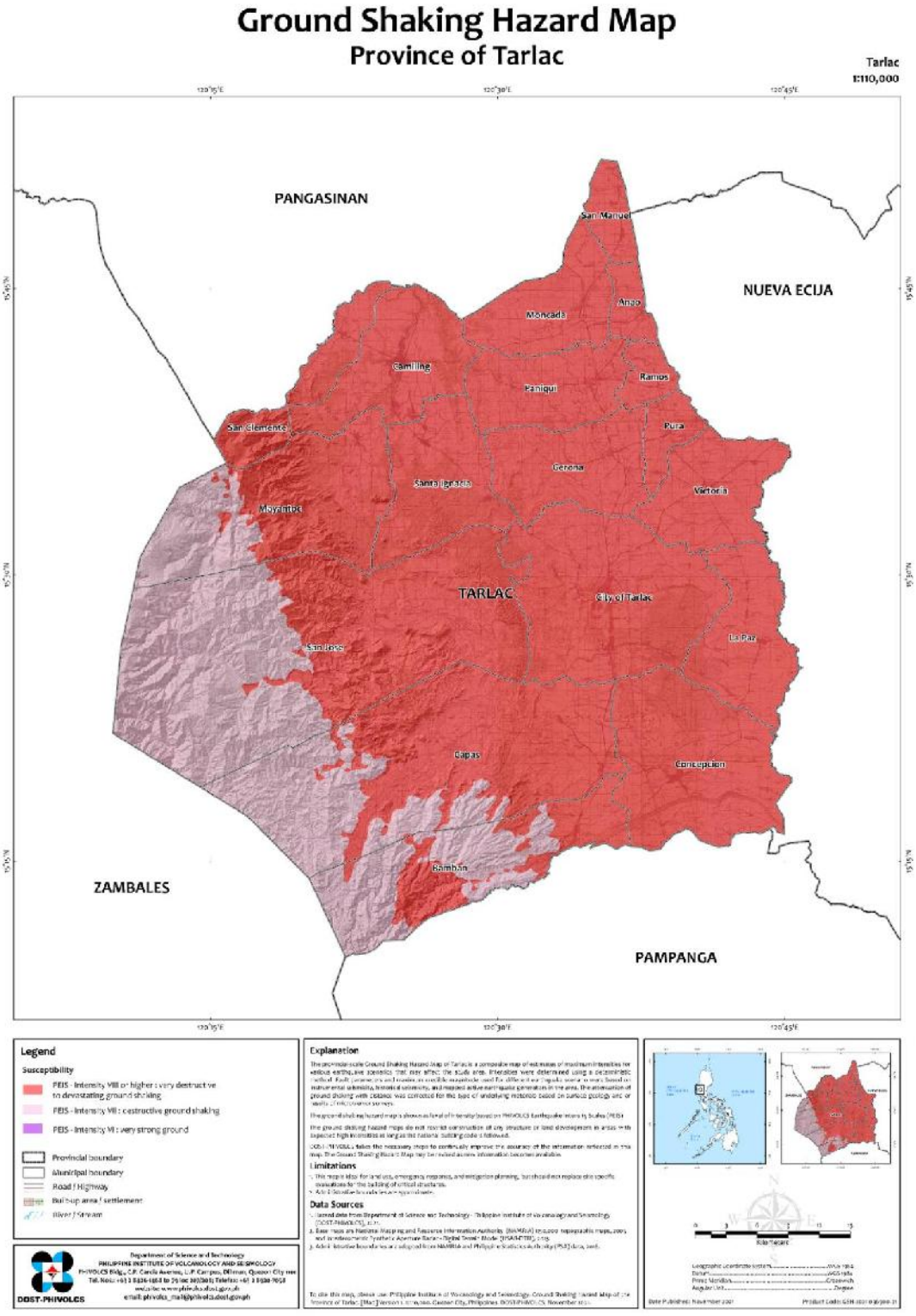


Figure 2-24: Ground Shaking Hazard Map, Province of Tarlac

RISK AND VULNERABILITIES WHERE SUC IS LOCATED

Hazard and Risk Identification			Risk Analysis					
Threat	Risk		Likelihood		Impact		Risk Score	
Pandemic/Epidemic	People (employees and students)	- People may get infected and become sickthat can result to death	4	Likely	4	Major	16	High
	Facility							
	Public	- can cause panic to the public resulting to unrest and chaos	4	Likely	3	Moderate	12	Moderate
	Process	- limited/restricted operations due to health safety issues	4	Likely	3	Moderate	12	Moderate
	Supply Chain	- limited supplies due to stricter border controls and movement of people and products	4	Likely	3	Moderate	12	Moderate
	ICT							
Agriculture Disease	People (employees and students)	- disease may be transmitted to human cause health problems	4	Likely	3	Moderate	12	Moderate
	Facility							
	Public							
	Process							
	Supply Chain	- shortage of supplies due to the effect of disease	4	Likely	3	Moderate	12	Moderate
	ICT							

Table 2-2: Biological Risks

Data Source: TAU General Services Office Micro-study on CDRA

Hazard and Risk Identification			Risk Analysis					
Threat	Risk		Likelihood		Impact		Risk Score	
Extreme Temperature	People (employees and students)	- People may suffer from heat stroke and other illnesses related to heat	2	Unlikely	3	Moderate	6	Low
	Facility							
	Public							
	Process							
	Supply Chain							
	ICT							
Drought/El Nino	People (employees and students)							
	Facility							
	Public							
	Process							
	Supply Chain	- damaged on crops due to insufficient water supplies	3	Possible	3	Moderate	9	Low
	ICT							

Table 2-3: Climate Risks

Data Source: TAU General Services Office Micro-study on CDRA

Hazard and Risk Identification			Risk Analysis					
Threat	Risk		Likelihood		Impact		Risk Score	
Land Transportation Accidents	People (employees and students)	- can cause death or injuries to people involved in vehicular accident in the premises of the school	3	Possible	3	Moderate	9	Low
	Facility							
	Public							
	Process							
	Supply Chain							
	ICT							

Table 2-4: Land Transportation Risks

Data Source: TAU General Services Office Micro-study on CDRA

Hazard and Risk Identification			Risk Analysis					
Threat	Risk		Likelihood		Impact		Risk Score	
Earthquake (Ground Shaking)	People (employees and students)	- Fatalities and/or injuries might be experience in the occurence of high intensity earthquake - Affects mental health and emotional health	4	Likely	4	Major	16	High
	Facility	- Structural damage to facility infrastructure/equipment - Restricted access to facilities due to debris and damage to roads, impassable	4	Likely	4	Major	16	High
	Public	- can cause panic to the public resulting to unrest and chaos	4	Likely	4	Major	16	High
	Process	- operations may paralyze due to blackout occurrences after a strong earthquake event	4	Likely	3	Moderate	12	Moderate
	Supply Chain	- Shortage of material requirement use for delivery of services	4	Likely	3	Moderate	12	Moderate
	ICT	- Internet and telecommunication lines may affected	4	Likely	3	Moderate	12	Moderate
Volcanic Eruption	People (employees and students)	- Ashfall related disease may be experienced by the students and employees - Affects mental and emotional health	2	Unlikely	4	Major	8	Low
	Facility	- collapse of structures due to heavy ashfall in the roofs	2	Unlikely	4	Major	8	Low
	Public							
	Process							
	Supply Chain	- Shortage/delay of delivery materials sourced from near or within the danger zone/radius.	2	Unlikely	2	Minor	4	Very Low
	ICT							
EC Induced Landslide	People (employees and students)	- Fatalities and/or injuries might be experience in the event of landslide	1	Rare	4	Major	4	Very Low
	Facility	- collapse of structures along the path of the landslide	1	Rare	4	Major	4	Very Low
	Public							
	Process							
	Supply Chain							
	ICT							

Table 2-5: Geological Risks

Data Source: TAU General Services Office Micro-study on CDRA

Hazard and Risk Identification			Risk Analysis					
Threat	Risk		Likelihood		Impact		Risk Score	
Network/ Telecommunications Failure (connectivity, software and hardware)	Public	Loss of confidence in the organization	3	Possible	3	Moderate	9	Low
	Process	interruption of critical operations	3	Possible	3	Moderate	9	Low
	Supply Chain	Delays in the delivery of supplies due to no means of communication present between the university and the suppliers	3	Possible	2	Minor	6	Low
	ICT	Loss of data/information, Loss of privacy	3	Possible	5	Extreme	15	Moderate
Cyber Attack and other similar incidence	Public	Loss of confidence in the organization	3	Possible	3	Moderate	9	Low
	Process	interruption of critical operations	3	Possible	3	Moderate	9	Low
	Supply Chain	Delays in the delivery of supplies due to no means of communication present between the university and the suppliers	3	Possible	2	Minor	6	Low
	ICT	Loss of data/information, Loss of privacy	2	Unlikely	5	Extreme	10	Low

Table 2-6: Technology Risks

Data Source: TAU General Services Office Micro-study on CDRA

Hazard and Risk Identification			Risk Analysis					
Threat	Risk		Likelihood		Impact		Risk Score	
Severe Wind (typhoon)	People (employees and students)	- Fatalities and/or injuries might be experience in the occurence of severe wind - Affects mental health and emotional health	4	Likely	3	Moderate	12	Moderate
	Facility	- damage to facility infrastructure/equipment. - Restricted access to facilities due to debris and damage to roads, impassable	4	Likely	3	Moderate	12	Moderate
	Public		4	Likely				
	Process	- operations may paralyze due to the damaged power transmission lines caused by severe wind	4	Likely	2	Minor	8	Low
	Supply Chain	- delays in the delivery of supplies needed for the operational functions	4	Likely	2	Minor	8	Low
	ICT							
Heavy Rainfall	People (employees and students)	- employees and student may not be able to come to the university	4	Likely	1	Incidental	4	Very Low
	Facility							
	Public							
	Process	- operations may paralyze due to blackout during heavy rainfall	4	Likely	2	Minor	8	Low
	Supply Chain							
	ICT	- Internet and telecommunication lines may be affected during the onslaught of heavy rainfall	4	Likely	2	Minor	8	Low
Flood due to typhoon	People (employees and students)	- Employees and critical function holders will not be able to report for work	2	Unlikely	1	Incidental	2	Very Low
	Facility	Offices will be inaccessible	2	Unlikely	2	Minor	4	Very Low
	Public	Mobilization and the usual routines are limitted or controlled (e.g. classes suspension, etc.)	2	Unlikely	2	Minor	4	Very Low
	Process	- operations may paralyze due to blackout caused by flooding due to typhoon	2	Unlikely	2	Minor	4	Very Low
	Supply Chain	- delays in the delivery of supplies needed for the operational functions	2	Unlikely	2	Minor	4	Very Low
	ICT	- Internet and telecommunication lines may be affected by flood	2	Unlikely	2	Minor	4	Very Low

Table 2-7: Hydrological Risks

Data Source: TAU General Services Office Micro-study on CDRA

Hazard and Risk Identification			Risk Analysis					
Threat	Risk		Likelihood		Impact		Risk Score	
Chemical spill	People	- can cause desease or sickness to people exposed with chemical	3	Possible	3	Moderate	9	Low
	Facility							
	Public							
	Process							
	Supply Chain							
	ICT							
Gas / Fuel Leak	People	- can cause desease or sickness to people exposed withchemical	2	Unlikely	3	Moderate	6	Low
	Facility	- can cause explosion and destroy nearby facilities	2	Unlikely	4	Major	8	Low
	Public							
	Process							
	Supply Chain							
	ICT							

Mass Poisoning	People (employees and students)	- may result to hospitalization of people	2	Unlikely	3	Moderate	6	Low
	Facility							
	Public							
	Process							
	Supply Chain							
	ICT							
Structural collapse (poor design)	People (employees and students)	- may result to death or injuries to people	2	Unlikely	3	Moderate	6	Low
	Facility	- damaged to structures						
	Public							
	Process							
	Supply Chain							
	ICT							

Table 2-8: Industry Risks

Data Source: TAU General Services Office Micro-study on CDRA

Hazard and Risk Identification			Risk Analysis					
Threat	Risk		Likelihood		Impact		Risk Score	
Fire	People (employees and students)	- Fatalities and/or injuries might be experience in the occurence of fire - Affects mental health and emotional health	3	Possible	4	Major	12	Moderate
	Facility	- damage in facilities due to fire occurrence	3	Possible	5	Extreme	15	Moderate
	Public							
	Process							
	Supply Chain							
	ICT							
Terrorism	People (employees and students)	- Will result fatalities and/or injuries - Affects mental health and emotional health	1	Rare	5	Extreme	5	Very Low
	Facility	- damage in facilities	1	Rare	5	Extreme	5	Very Low
	Public							
	Process							
	Supply Chain							
	ICT							
Human Trafficking/Kidnapping	People (employees and students)	- Students and employees can be a victim of human trafficking	2	Unlikely	3	Moderate	6	Low
	Facility							
	Public							
	Process							
	Supply Chain							
	ICT							

Table 2-9: Man-Made Risks

Data Source: TAU General Services Office Micro-study on CDRA

2.2 Existing Land Use and Land Use Trends

The Tarlac Agricultural University campus has an area of 69.49 hectares which is divided into nine districts: the Academic District, College Services, Agro Eco-Tourism, Sports and Athletic District, Agricultural Technological Park, Research and Production District, Bamboo Park, College Housing, and Road Network, and a land allocated outside the campus area.

Table 2-10: Total Area and Percentage Share by Zone

Zone	Total Area (sqm)	Percentage Share (%)
Academic District	105,269.95	15.15
College Services	16,204.15	2.33
Agro Eco-Tourism	76,982.48	11.08
Sports and Athletic District	68,142.00	9.81
Agricultural Technological Park	43,577.91	6.27
Research and Production District	170,405.47	24.52
Bamboo Park	44,975.91	6.47
College Housing	76,746.36	11.04
Road Network	58,132.38	8.37
Land Allocated Outside the Campus	34,417.00	4.95
Total	**694,853.60**	**100**

Table 2-11: Inventory of Built Up Area Carrying Capacity

Zone	Existing Built Up Area	Capacity/ Land Budget	Current Status
Academic District	23,774.271	52,634.98	45% of the capacity
College Services (University Services Now)	3486.0175	10,375.61	34% of the capacity
Agro Eco-Tourism	15,546.3475	57,948.34	27% of the capacity
Sports and Athletic District	16,273.14	34,071.00	48% of the capacity
Agricultural Technological Park (Agri-Business Hub Now)	4,006.03	41,114.20	10% of the capacity
Research and Production District	21,475.18	51,377.60	42% of the capacity
Bamboo Park	2,916.82	8,995.18	32% of the capacity
College Housing District (University Housing District Now)	5695.65	42,210.50	13% of the

			capacity

Within the 9 districts, the Research and Production District has the largest scope with a total of 17.04 ha. while the College Services District has the least area coverage with a total of 1.62 ha. which is approximately 2.33% of the total land area.

These districts were aligned according to the capability and the topography of the land. Relatively, the slope of the campus is 0-18% which means it is relatively flat to rolling. 80% of the land area of the campus has a slope of less than 6% or flat. The soil type of the area is sand clay loam soil and is suitable for vegetable and cereal crops. The following factors affected the decision to use a large portion of the land for research and production.

ACADEMIC DISTRICT

The Academic District is the second largest area in the TAU campus, with a total area of 105,269.95 sq.m or 10.53 hectares. About 76% (79,650.45 sq.m or 7.97 hectares) of the academic district is subcategorized as a non-developable area. The remaining 24% (25,619.51 sq.m or 2.56 hectares) is subcategorized as a developable area. The academic district consists mainly of buildings and facilities that are designated for teaching, learning, and supporting various programs and endeavors that are aligned with the academic mission of TAU.

The main and annex buildings of five out of the six colleges of TAU are located in the academic district. These are the College of Veterinary Medicine (CVM), College of Agriculture and Forestry (CAF), College of Arts and Sciences (CAS), College of Engineering and Technology (CET), and College of Education. Further, the academic buildings of the senior and junior high school programs of TAU are also part of this district.

Some of the research extension and training buildings of TAU are also located in the academic district. This includes the Research and Development Complex, Rootcrops Research and Training Center, Farmers Training Center, Green Houses and Net Houses, Mushroom Library, and Bamboo Nursery.

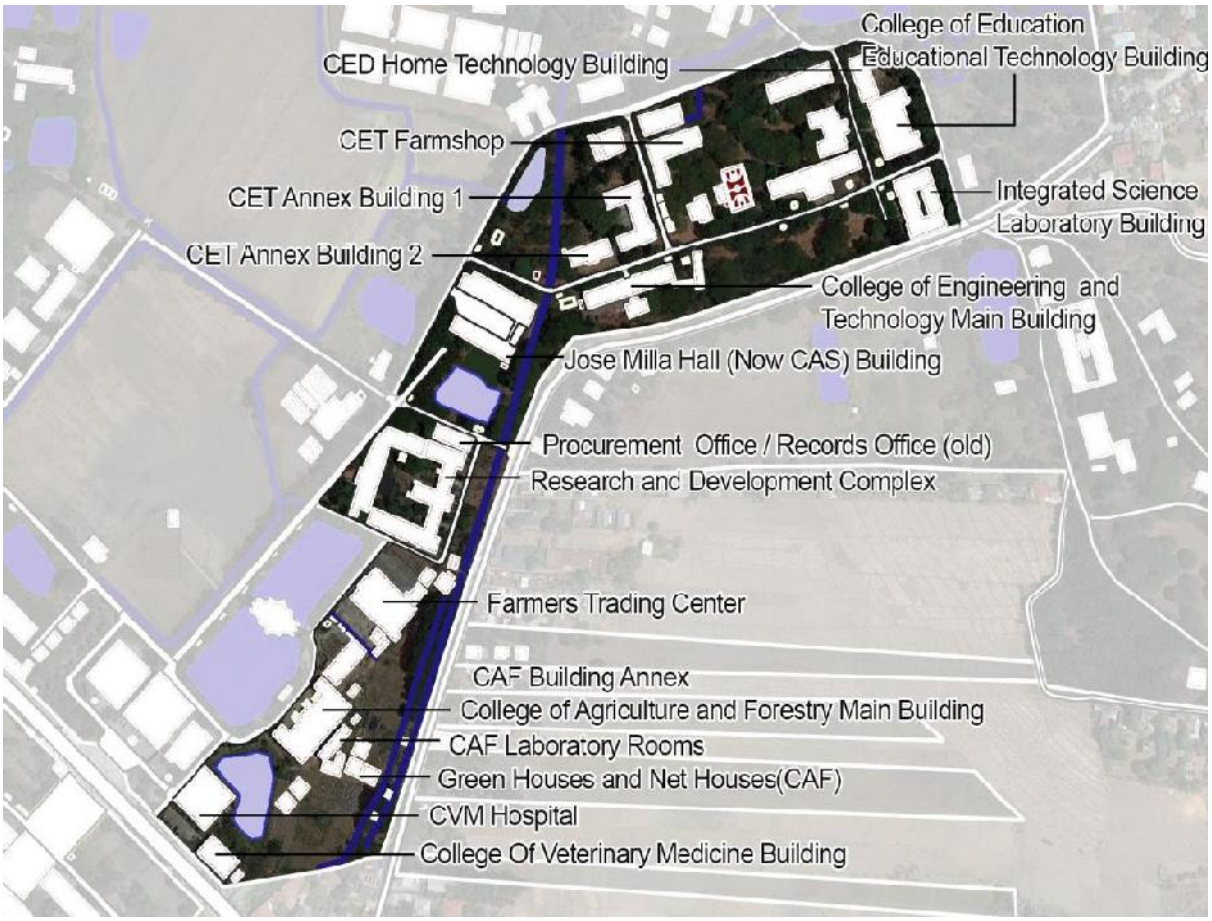


Figure 2-25: Map of Academic District

UNIVERSITY SERVICES

With an area of 16,204.15 sq.m. or 1.62 hectares, the University Services District is the smallest district within TAU. It consists of the Administration Building, the University Library, the IT data center, and a security post. About 16% (2,645.32 sq.m or 0.26 hectares) of this district is subcategorized as a Developable Area while 84% (13,558.83 sq.m or 1.36 hectares) are subcategorized as a Non-Developable Area.

The Administration Building houses the various executive offices responsible for campus operations and management. The succeeding table provides the list of executive offices located within the Administration Building, and their administrative functions.

Built in 2016, the University Library contains four major reading rooms (Filipiniana, Circulation, Manuscript, and Periodicals sections) and a conference room. It provides academic support to students and faculties alike.

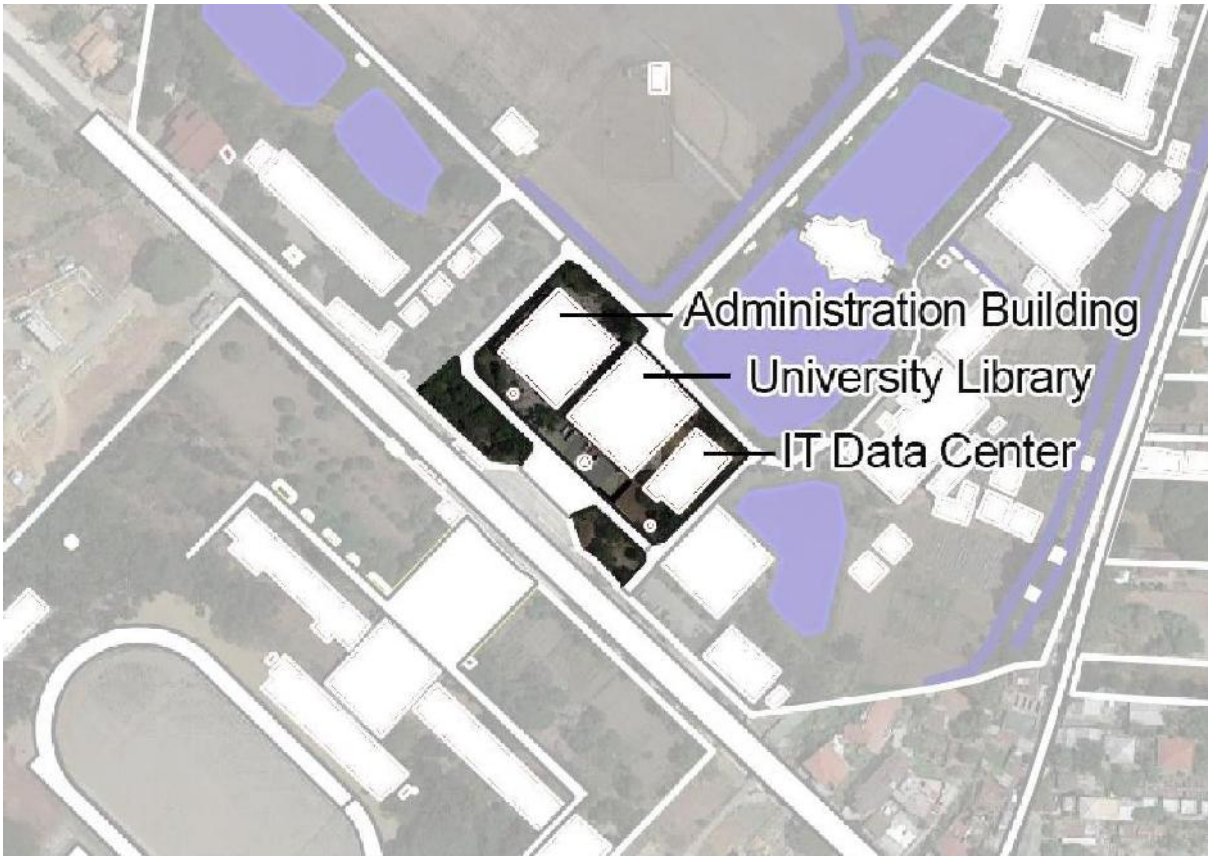


Figure 2-26: Map of University Services District

AGRO ECO-TOURISM DISTRICT

The Agro Eco-Tourism District is located at the most Western portion of the campus. It comprises about 11% of the entire campus (76,982.48sq.m or 7.70 hectares). About 24% (18,432.58 sq.m or 1.84 hectares) are subclassified as Developable Area while 76% (58,549.89 sq.m or 5.86 hectares) are Non-Developable Area.

The Agro Eco-Tourism District consists of auxiliary buildings that are used to accommodate guests and visitors (e.g. Agritourism Hostel and Function Hall) and hosts local and international events (e.g. Continuing Education Center and Bamboo Training Center). The aforementioned buildings are income-generating as various groups and organizations can rent these for a fee. Meanwhile, the Northern portion of this district includes a few production facilities (e.g. Feedmill Building, Ricemill Building).

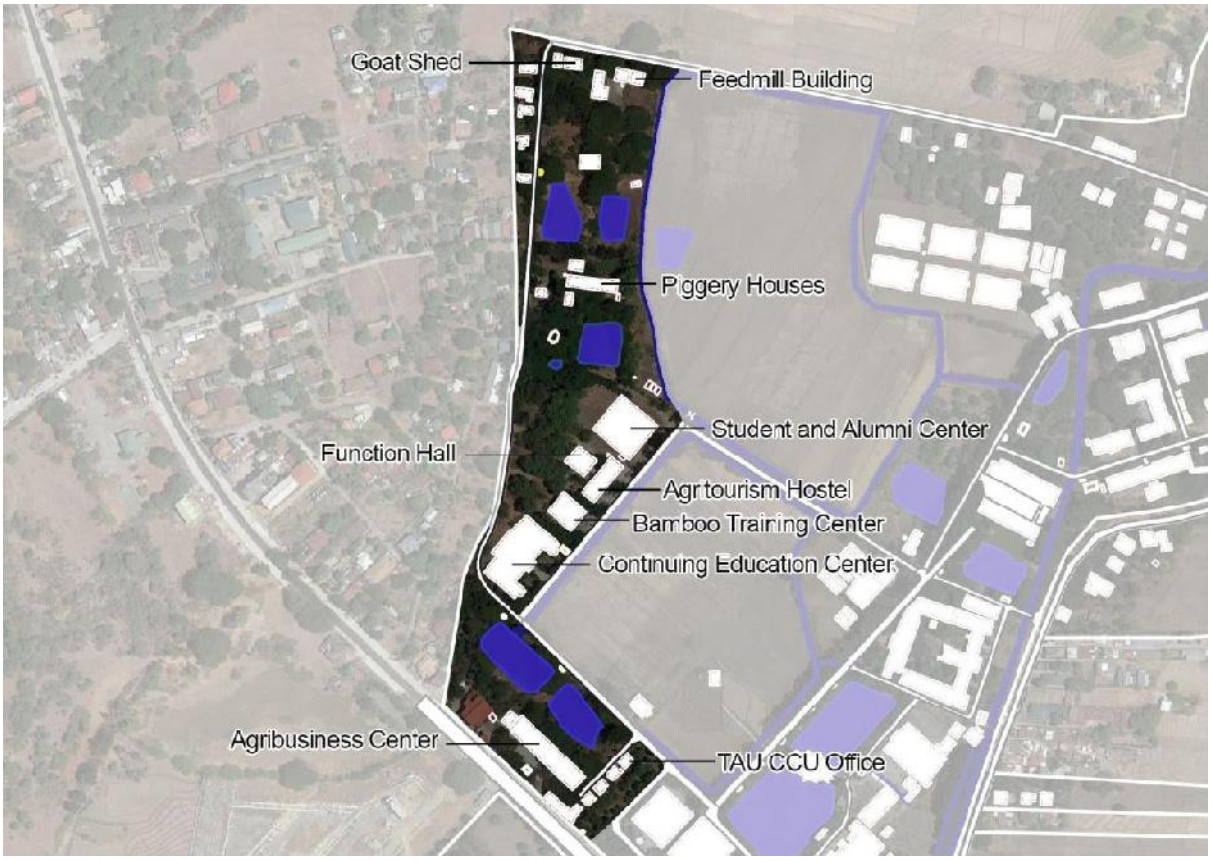


Figure 2-27: Map of Agro Eco-Tourism District

SPORTS AND ATHLETIC DISTRICT

Composing of 68,142.00 sq.m (6.81 hectares) or almost 10% of the entire campus, the Sports and Athletic District supports TAU's goal of developing the health and well-being of individuals through the various sports and other extra-curricular activities held within its premise. About 47% of the district (31,770.00 sq.m or 3.18 hectares) are subclassified as a Developable Area while 53% (36,372 sq.m or 3.64 hectares) are Non-Developable Area.

The Sports and Athletic District is located at the Southwestern portion of the campus and is separated from other districts by the Romulo Highway. Aside from the sports facilities, it also includes the main and annex buildings of the College of Business and Management, TAU's Alumni Center, the University Canteen, and the Reserve Officer Training Corps (ROTC) Headquarter.

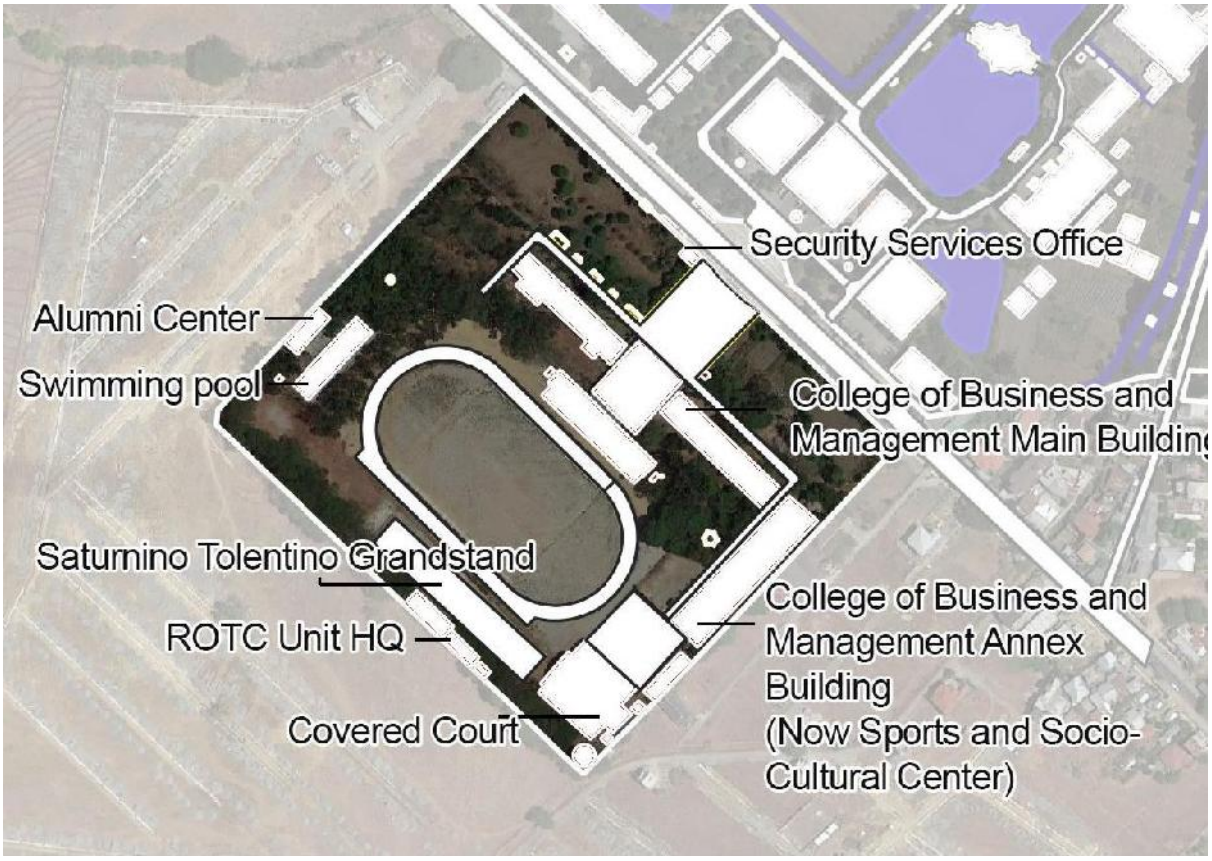


Figure 2-28: Map of Sports and Athletic District

RESEARCH AND PRODUCTION DISTRICT

The Research and Production District is the largest area in the TAU campus, with a total area of 170,405.47 sq.m (17.04 hectares), or 25% of total area. The district consists of agricultural (mainly animal) production facilities such as goat, native chicken, and native pig sheds. Aside from production facilities, the research and production district also houses an academic building of the College of Veterinary Medicine.

Figure 2-29: Map of Research and Production District

AGRICULTURAL TECHNOLOGICAL PARK

As an agricultural university, TAU aspires to spur innovation and develop advanced technology that could address agricultural productivity issues and benefit relevant stakeholders such as farmers. The Agricultural Technological Park serves as an avenue for such endeavor. With an area of 43,577.91 or 4.36 hectares, the Agricultural Technological Park is used by TAU to assess and facilitate the development of agricultural research and newly developed technologies. It is separated by a Barangay road from the campus proper.

Figure 2-30: Map of Agricultural Technological Park

BAMBOO PARK

TAU has developed a bamboo park with an area of 44,975.91 sq.m or 4.50 hectares, which is about 6.5% of the total land area of the University. This area comprises Bamboo Nursery and the Duck and Cattle sheds, among others.

TAU developed the Bamboo Park as it recognizes the wide array of uses and benefits of this non-timber forest product.

Figure 2-31: Map of Bamboo Park

UNIVERSITY HOUSING DISTRICT

The University Housing District consists of dormitories, executive houses, and staff houses, which provide accommodation to students, faculty, staff, and visitors. With an area of 76,746.36 sq.m or 7.67 hectares, this district comprises about 11% of the total land area of the campus. The district is separated from the campus proper by a Barangay road.

Noticeably, all houses and dormitories are low-rise building, with single- or double-storey. Aside from accommodating, the University Housing District serves as an avenue to foster social relations and community engagement among the various individuals living within it.

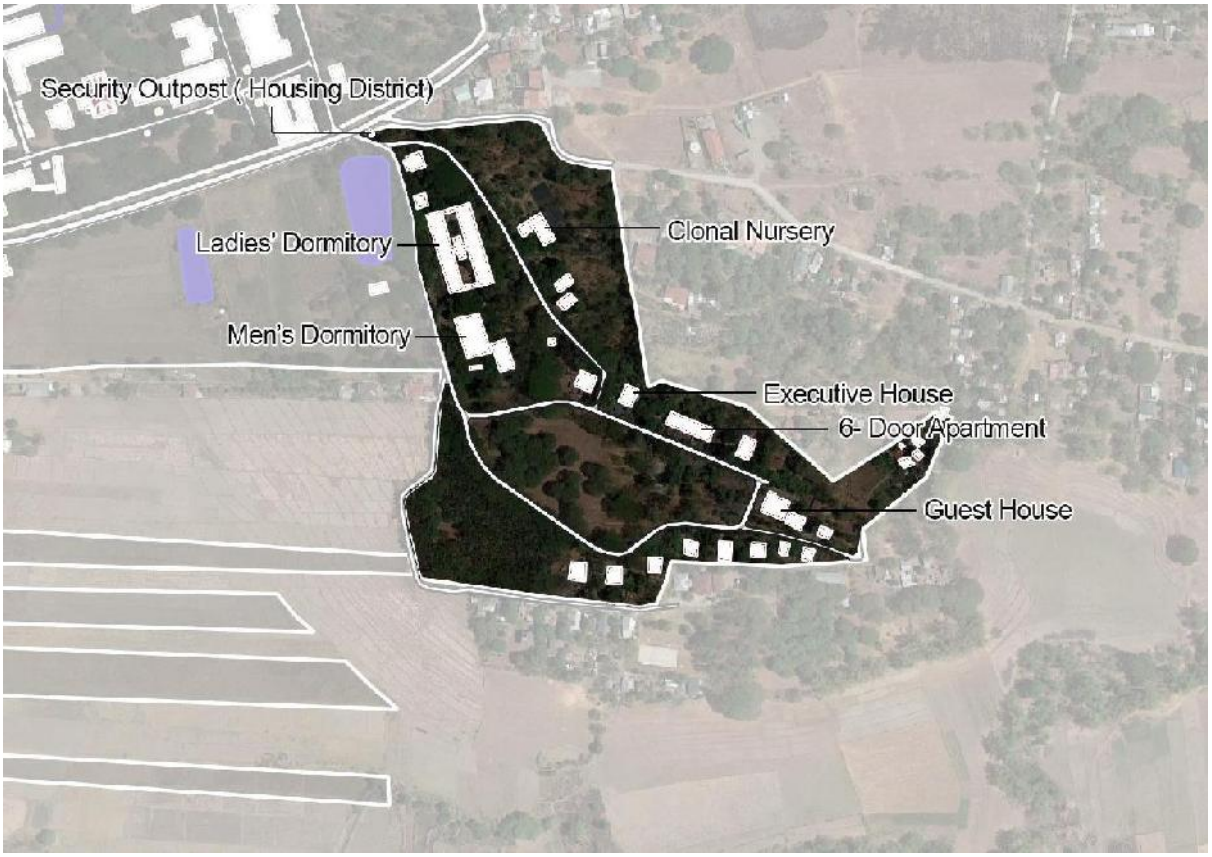


Figure 2-32: Map of University Housing District

2.3 Economic and Financial Performance

The review of the historical financial performance of TAU utilized the university's audited financial statement for the period of 2012 to 2022. In analyzing the financial performance, data on the university's revenues and expenses were collected.

SERVICE AND BUSINESS INCOME

Service income pertains to revenues collected from payment of school fees such as permit fees, registration fees, and clearance and certification fees. On the other hand, business income was generated by the university's business programs or commercial establishments. This includes income from hostels/dormitories and rent/lease income. Historical financial data shows a fluctuating level of service and business income.

The service and business income of the university barely shows improvement over the years. From Php 32.60 million in 2013, service and business income grew to Php 34.29 million in 2021, indicating a measly compound annual growth rate of 0.56%. On the other hand, the average annual growth rate of service and business income over the 10-year period 2012 to 2021 was 7.75%, indicating that the income level had fluctuated. The figure below shows the value of the service and business income of TAU and the annual growth rate over the 10-year period (2012-2021).

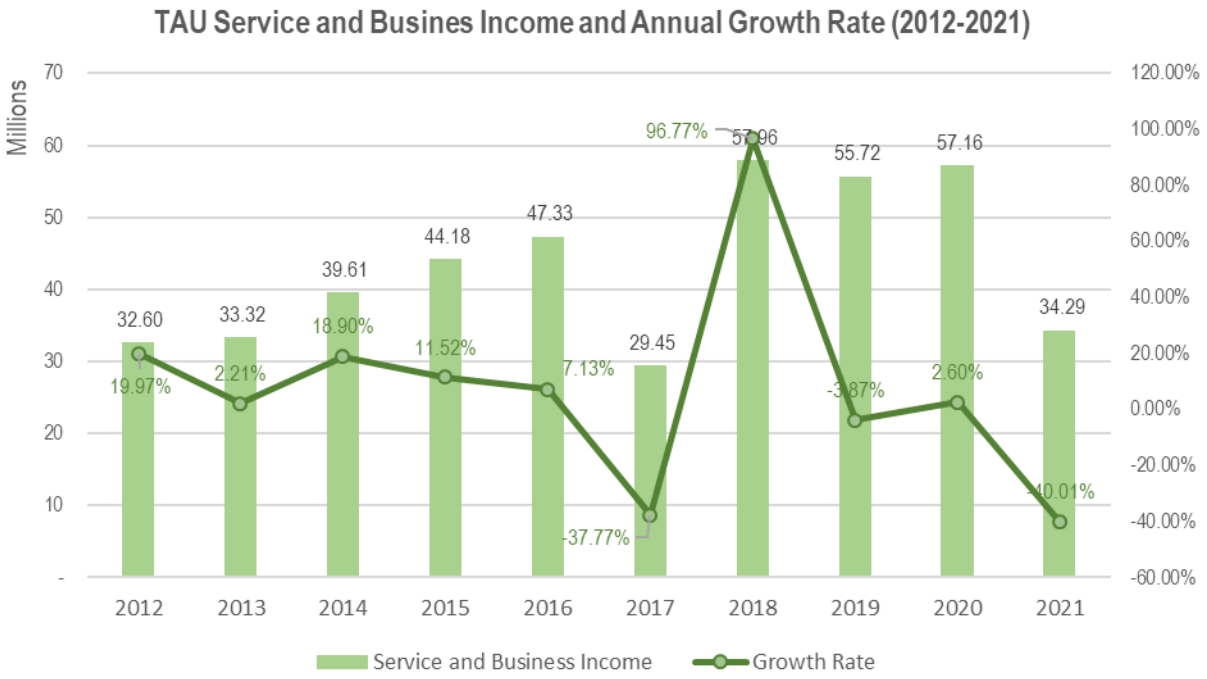


Figure 2-33: Service and Business Income 10Y (2012-2021)

Further, out of the total service and business income per year, the average share of income-generating projects is only 7.75%, as provided in the figure below.

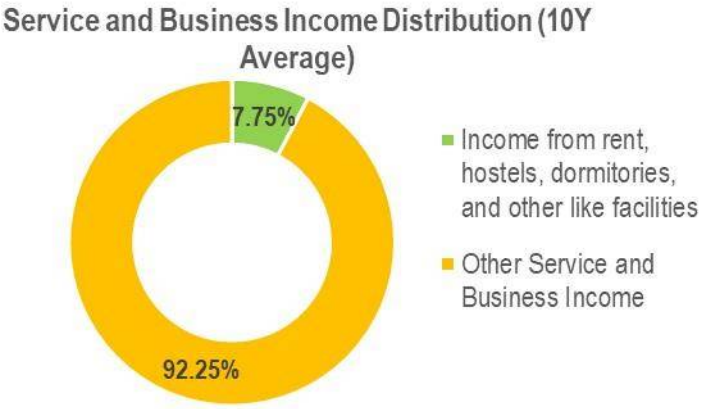


Figure 2-34: Service and Business Income Distribution

Income-generating projects include income from rent, hostels, dormitories, and other like facilities. The table below shows the list of income-generating facilities of TAU.

Table 2-12: List of Income-Generating Facilities

No.	Facility	Operator/s
1	University Gazebo	TAU Starmaxx
2	Agribusiness Center	TAU UBP Office
3	Continuing Education Center	TAU IGP's In-Charge
4	Agritourism Hostel	TAU IGP's In-Charge
5	Farmers Training Center	TAU IGP's In-Charge
6	Bamboo Training Center	TAU IGP's In-Charge
7	Gymnasium	TAU IGP's In-Charge
8	Covered Court	TAU IGP's In-Charge

No.	Facility	Operator/s
9	Basketball Court	TAU IGP's In-Charge
10	R & D Hall	TAU IGP's In-Charge

Table 2-13: Historical Data of Income from IGPs

Year	Net Income	Percentage Increase (from the Previous Year)
2019	6,457,205.17	-
2020	2,503,786.99	-61.22%
2021	419,801.67	-83.23%
2022	7,486,591.67	1683.36%

Data Sources: TAU Department of Business and Auxiliary Services

ASSISTANCE AND SUBSIDY

Assistance and subsidy pertains to the allocated subsidy of the national government to TAU. Over the 10-year period 2012 to 2021, assistance and subsidy of the national government has grown steadily. From Php 120.33 million in 2012, assistance and subsidy grew to Php 406.50 million in 2021, which is equivalent to a high compound annual growth rate of 14.48%. The average annual growth rate of assistance and subsidy for the period 2012 to 2021 was also high at 13.38%. The figure below shows the value of the assistance and subsidy of TAU and the annual growth rate over the 10-year period (2012-2021).

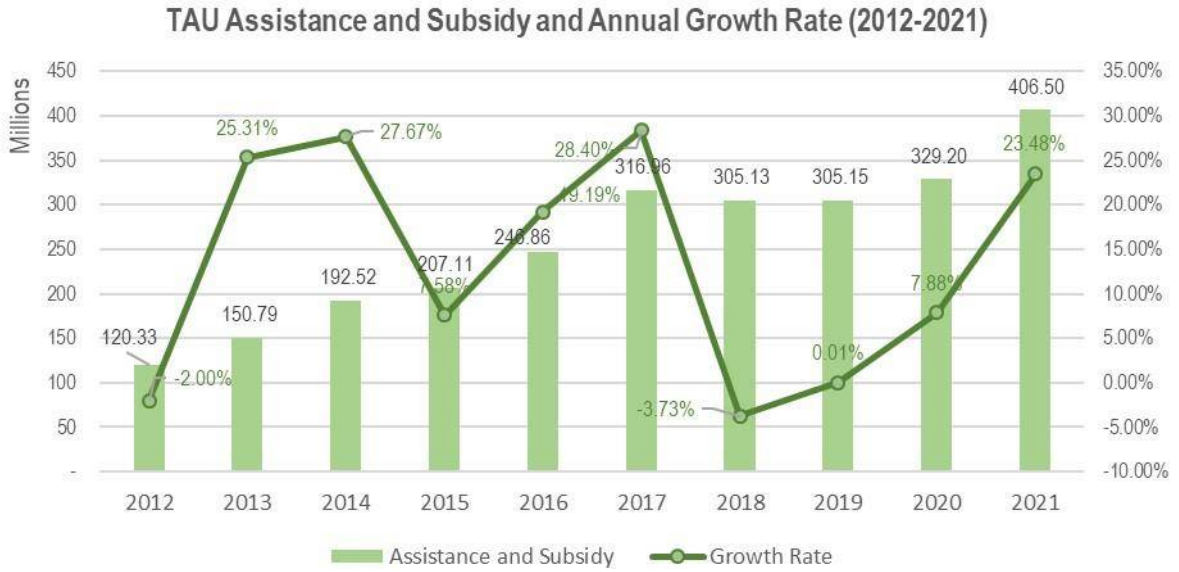


Figure 2-35: Assistance and Subsidy 10Y (2012-2021)

TOTAL REVENUE

Overall, historical financial performance indicated a steady level of total revenue. The revenue generation of TAU shows modest improvements over the years. From Php 152.93 million in 2012, total revenue grew to Php 440.78 million in 2021, indicating a compound annual growth rate of 12.48%. The average annual growth rate of total revenue for the period 2012 to 2021 was 11.69%. The figure below shows the value of total revenue of TAU and the annual growth rate over the 10-year period (2012-2021).

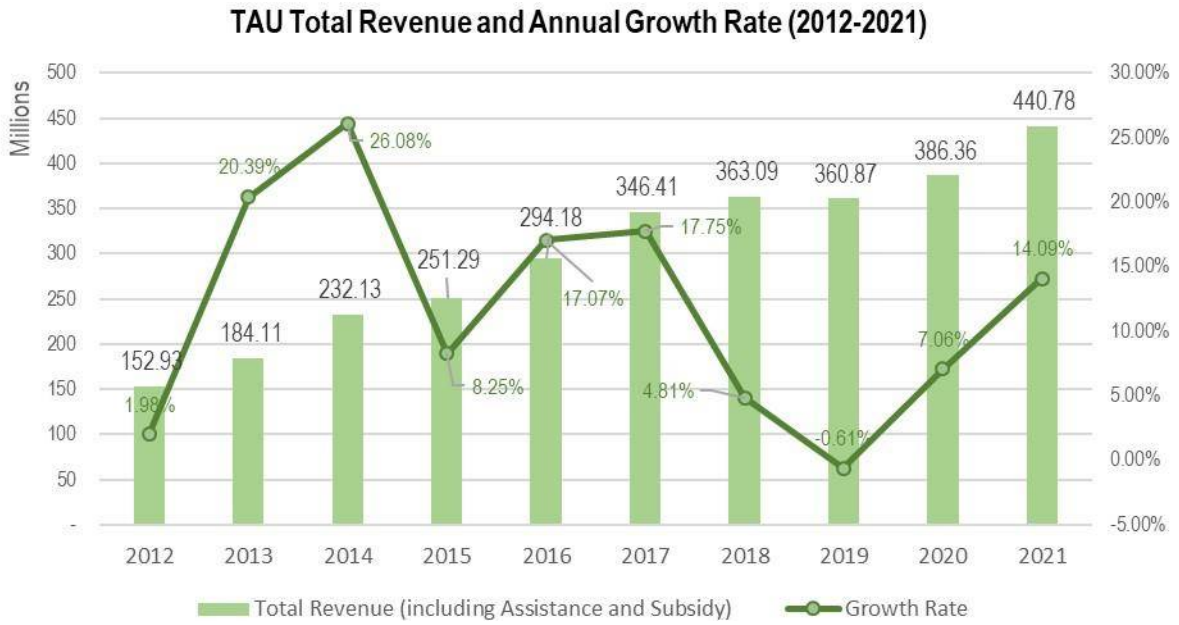


Figure 2-36: Total Revenue 10Y (2012-2021)

In terms of distribution of total revenue, a bulk of TAU's revenue came from assistance and subsidy, indicating that the university is still highly dependent on national government subsidies. On average, assistance and subsidy accounted for about 85.41% of TAU's total revenue over the 10-year period 2012 to 2021. The figure below shows the distribution of TAU's total revenue from 2012 to 2021.

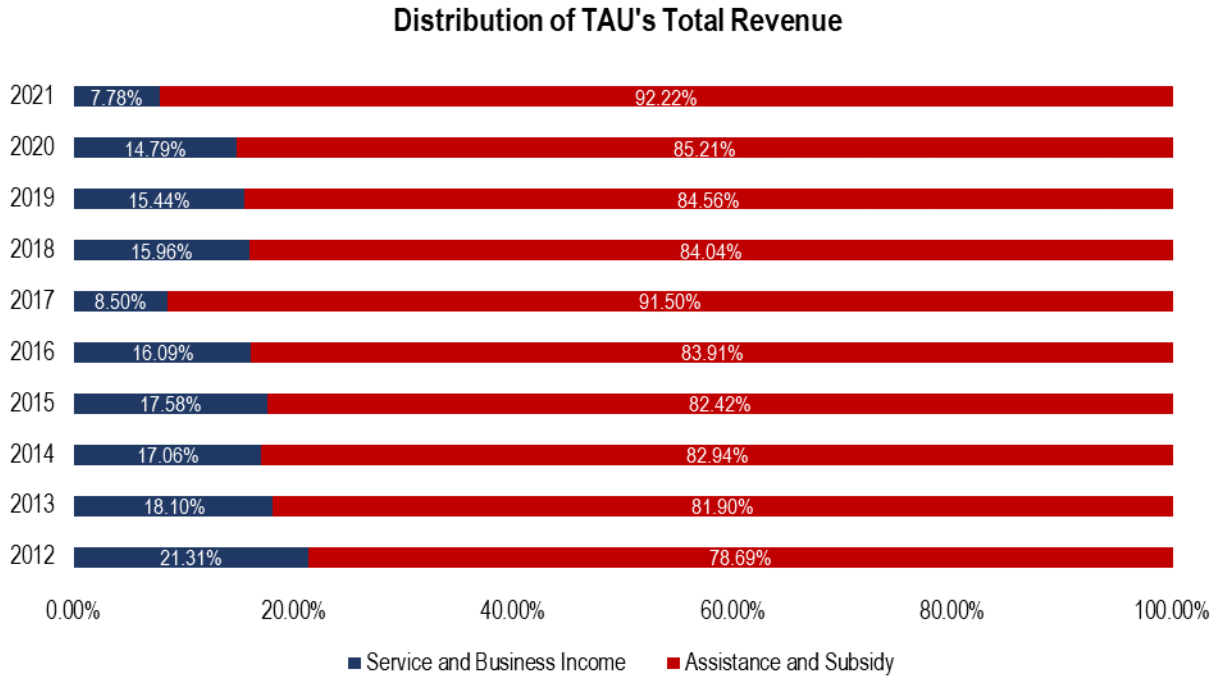


Figure 2-37: Distribution of Total Revenue 10Y (2012-2021)

Table 2-14: Economic Constraints and Potentials/ Opportunities

Issues and Constraints	Mitigation Initiatives	Effect of Mitigation Initiatives to the Performance
• Stoppage of project operations due to lockdown caused by the COVID-19 Pandemic.	• Scheduled reporting of support staff to continue the operations of the project.	• From -83.23% decrease in 2021, the net income from IGPs of the University increase to 1683.36% in 2022. Please see above table.
• For stall rentals in Agribusiness, online classes depleted the demand for food stalls of the University leading to temporary cessation of their respective operations.	• Provided discounts for stall lessee to encourage them continue their operations while on the limited face-to-face classes.	
• Limited customers of the TAU Catering services due to flexible online learning.	• Catered internal clients and events of the University to generate income.	
• For accommodation services, additional health and safety requirements for clients and strict rules in the mobility affected the number interested clients of the University.	• Complied with the additional health and safety requirements in the implementation of services such as wearing of face-masks, disinfection, social distancing among others.	
• Tedious process in purchasing supplies and equipment's for the project.	• Crafted policy in the management and utilization of revolving fund.	

Table 2-15: Projection of Revenues from 2023-2027

Year	Net Income	Percentage Increase (from the Previous Year)
2023	8,235,250.84	10%
2024	9,223,480.94	12%
2025	10,514,768.27	14%
2026	12,197,131.19	16%
2027	14,392,614.81	18%

PERSONNEL SERVICES EXPENSE

Personnel services expense represent the total amount spent by TAU for salaries and wages of regular employees. Overall, historical financial performance indicated a steady level of increase in personnel services expense except in 2021. From Php 117 million in 2012, personnel services expense grew to Php 228.91 in 2021, indicating a compound annual growth rate of 7.74%. The average annual growth rate of personnel services expense for the period 2012 to 2021 was about the same at 7.59%. The figure below shows the value of personnel services expense and the annual growth rate over the 10-year period (2012- 2021).

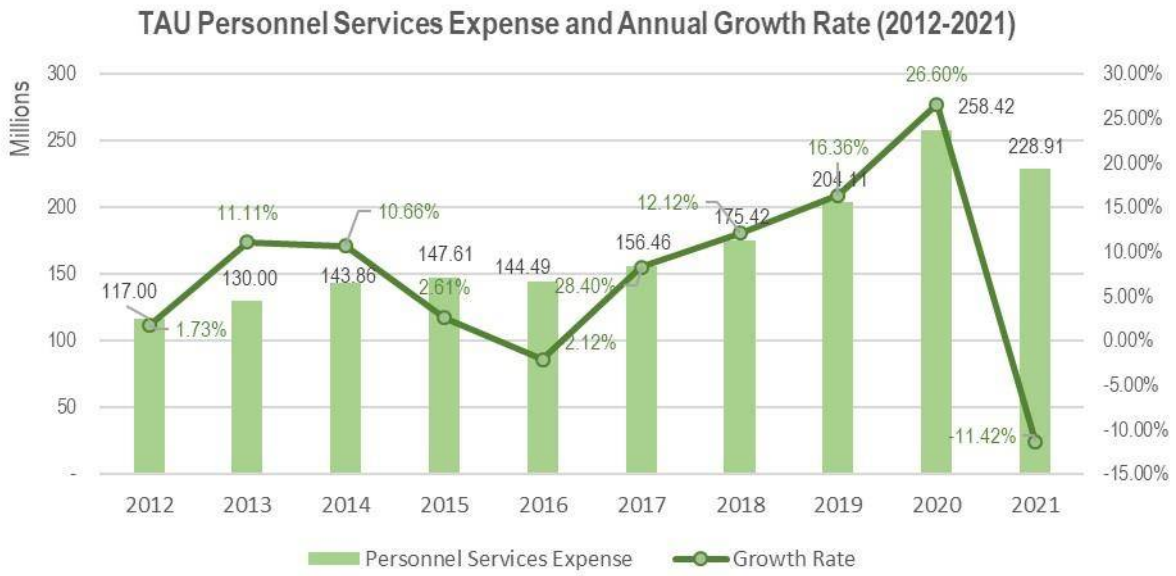


Figure 2-38: Personnel Services Expense 10Y (2012-2021)

MAINTENANCE AND OTHER OPERATING EXPENSE

Maintenance and other operating expense includes expenses necessary for the regular operation of TAU. This includes traveling expenses, supplies and materials expenses, utility expenses, and communication expenses. It also includes the salary and wages of contractual employees of the university. Based on the historical financial data of TAU, maintenance and other operating expense fluctuated over the past 10 years. From Php 51.32 million in 2012, maintenance and other operating expense grew modestly to Php 65.96 million in 2021, with a compound annual growth rate of 2.83%. Its annual average growth rate for the same 10-year period was relatively high at 8.00%. In fact, TAU's maintenance and other operating expense went up to as high as Php 88.25 million in 2017. The figure below shows the value of maintenance and other operating expense of TAU and the annual growth rate over the 10-year period (2012-2021).

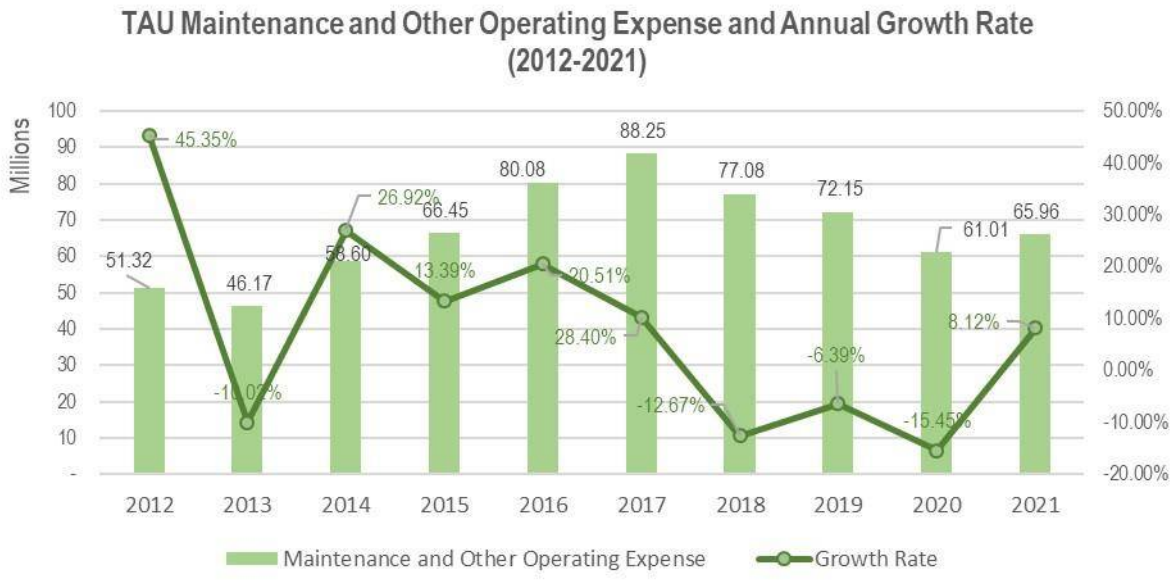


Figure 2-39: Maintenance and Other Operating Expense 10Y (2012-2021)

Overall, historical financial performance indicated a steady level of total revenue. The revenue generation of TAU shows modest improvements over the years. From Php 152.93 million in 2012, total revenue grew to Php 440.78 million in 2021, indicating a compound annual growth rate of 12.48%. The average annual growth rate of total revenue for the period 2012 to 2021 was 11.69%. The figure below shows the value of total revenue of TAU and the annual growth rate over the 10-year period (2012-2021).

TOTAL EXPENSE

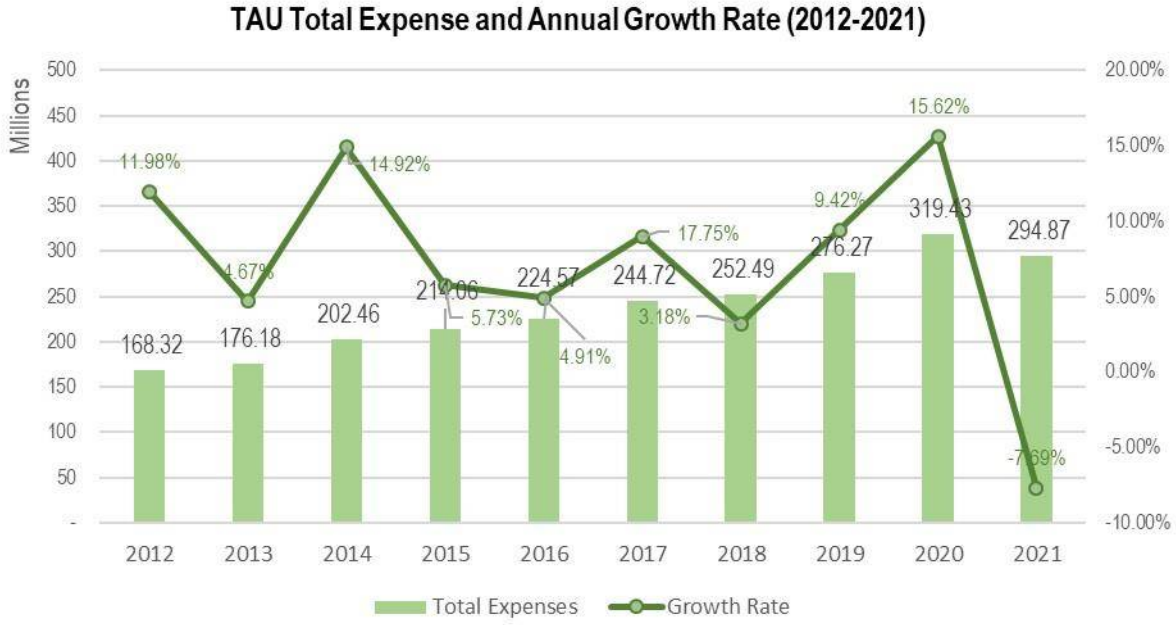


Figure 2-40: Total Expense 10Y (2012-2021)

Despite the fluctuation in maintenance and other operating expense, historical financial performance indicated that TAU's total expense was steadily grew for the 10-year period 2012 to 2021. From Php 168.31 million in 2012, TAU's total expense grew to Php 294.87 million in 2021, indicating a compound annual growth rate of 6.43%. The average annual growth rate of total expense for the period 2012 to 2021

was 7.17%. The figure above shows the value of total expense of TAU and the annual growth rate over the 10-year period (2012-2021).

On average, personnel services represented about 71.35% of the total expense of TAU, while maintenance and other operating expense only accounted for about 28.65%. The figure below shows the distribution of TAU's total expense from 2012 to 2021.

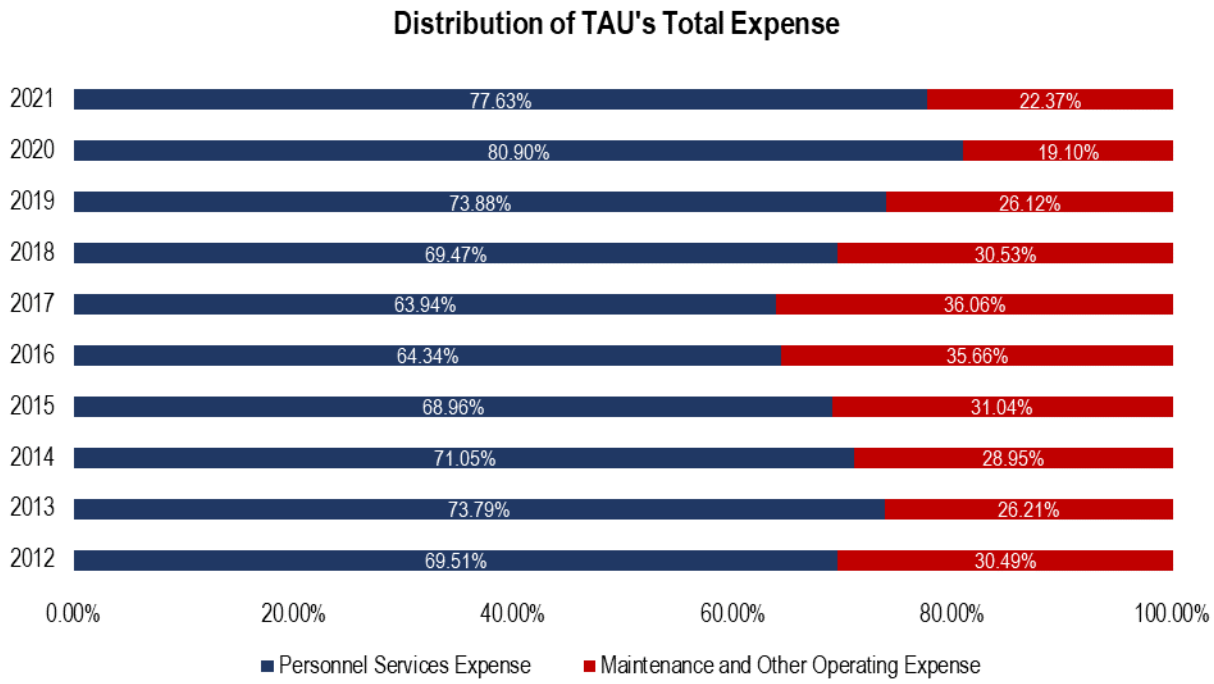


Figure 2-41: Distribution of Total Expense 10Y (2012-2021)

On the overall, over the 10-year period 2012 to 2021, the operations of TAU resulted into a fiscal surplus except in 2012. However, the fiscal surpluses over the past few years was a result of the high assistance and subsidy from the national government. Without these subsidies, TAU would have been on a fiscal deficit. This highlights the fact that given its current operations, TAU is still highly dependent on assistance and subsidies from the national government. The figure below shows the fiscal surplus (deficit) of TAU total from 2012 to 2021.

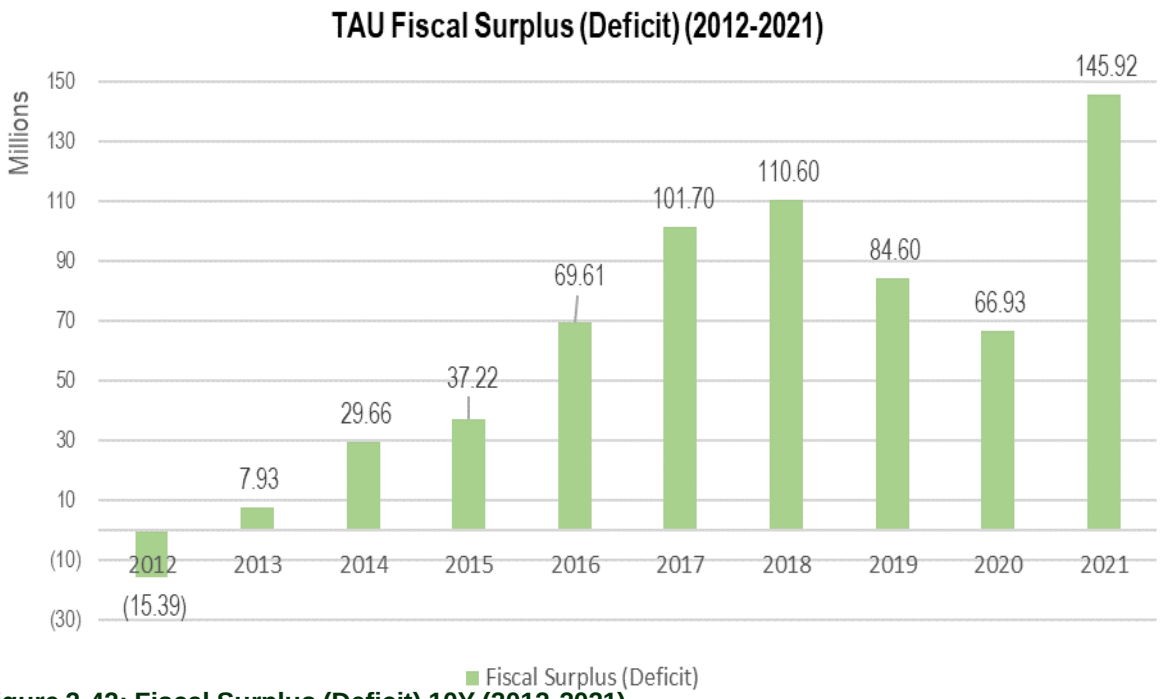


Figure 2-42: Fiscal Surplus (Deficit) 10Y (2012-2021)

2.4 Projected Demand for Buildings, Facilities, and Other Infrastructure

APPROACH

To establish what buildings and other infrastructure are needed by the University to fulfill its functions as a higher educational institution, the extent to which these facilities are needed must be determined. To establish the planning horizon for the facilities, the demand projections align with the 10-year planning period established for the TAU Land Use Development and Infrastructure Plan set from 2023 to 2032. The facilities covered by the demand projections include classrooms, laboratories, student dormitories, and personnel housing. The student population projections will serve as the basis for determining the projected demand and facility requirements for Tarlac Agricultural University.

Establish Planning Horizon	Project Student Population	Define Coverage of the Demand Projections	Determine Assumptions for Demand Projections
A ten-year planning horizon from 2023 to 2032 is used for the projections of student population and demand for facilities	Estimate projected student population across planning horizon based on available information and appropriate methodology	Specify which facilities are included in the demand projections based on availability of historical data: • Classrooms • Laboratories • Student Dormitories • Personnel Housing	Define the targets and standards to be adhered to define the level of demand intended to be served

Figure 2-43: Approach for Demand Projections for Buildings, Facilities, & Other Infrastructure

PROJECTED STUDENT POPULATION

Available enrollment data from previous school years were utilized in determining the student population growth rate. For data from 2010 to 2016, the data used were from the document consolidated by the TAU Planning and Development Office. On the other hand, the data from 2017 to 2022 were taken from enrollment statistics of the TAU Admission and Registration Services.

To ensure consistency of data, First Semester Enrolment Statistics were utilized for all historical student population data. Moreover, data from the following courses have also been excluded as they are currently not being offered and were only included as programs for a brief period:

- MA Teaching (SY 2012-2013),
- BA Entrepreneurship (SY 2016-2017),
- BS Nursing (2012-2013),
- Certificate in Computer Hardware Technology (SY 2018-2019),
- Certificate in Office Management (SY 2018-2019),
- Certificate in Forest Ranger (SY 2014-2015),
- Certificate in Home Technology (SY 2012-2013), and
- Associate in Animal Technology (SY 2012-2013).

Based on the initial analysis of the student population, an overall positive growth rate was observed at the university level, despite variables such as the K-12 shift and the changes in modalities of learning instruction in recent years.

Taking these into consideration, three different methodologies were considered in projecting the student population. A brief description on the process of each, the total projected values at the start and end of the planning horizon, and the respective level of projection is summarized in the next table and figure.

Given the resulting projections, Method 1 at a moderate projection has been adopted for the TAU Land Use Development and Infrastructure Plan. A more detailed discussion on the methodology is detailed in the succeeding section.

Table 2-16: Summary of Student Population Projection Methodologies

Method	Process	2023	2032	Remark
Method 1: 10-Year College-level CAGR disaggregated by Program Share	• 10-year CAGR from 2013 to 2022 for each of the six colleges and one laboratory school was derived • Total number of students for each school and college was projected using the 10-Year College-level CAGR • Resulting total projected number of students was disaggregated by program using the 3-year average share of each program within the college	7,738	18,931	Moderate
Method 2: 10-Year University-level CAGR disaggregated by Program Share	• TAU total student population 10-year CAGR of 6.89% was used to project the number of students per college and school • Resulting total projected number of students was disaggregated by program using the 3-year average	7,598	18,139	Low

Method	Process	2023	2032	Remark
	share of each program within the college			
Method 3: 3-Year Program-level CAGR	• 3-year CAGR from 2020 to 2022 for each program was derived • Number of students per program was used to project the number of students	8,011	133,139	High

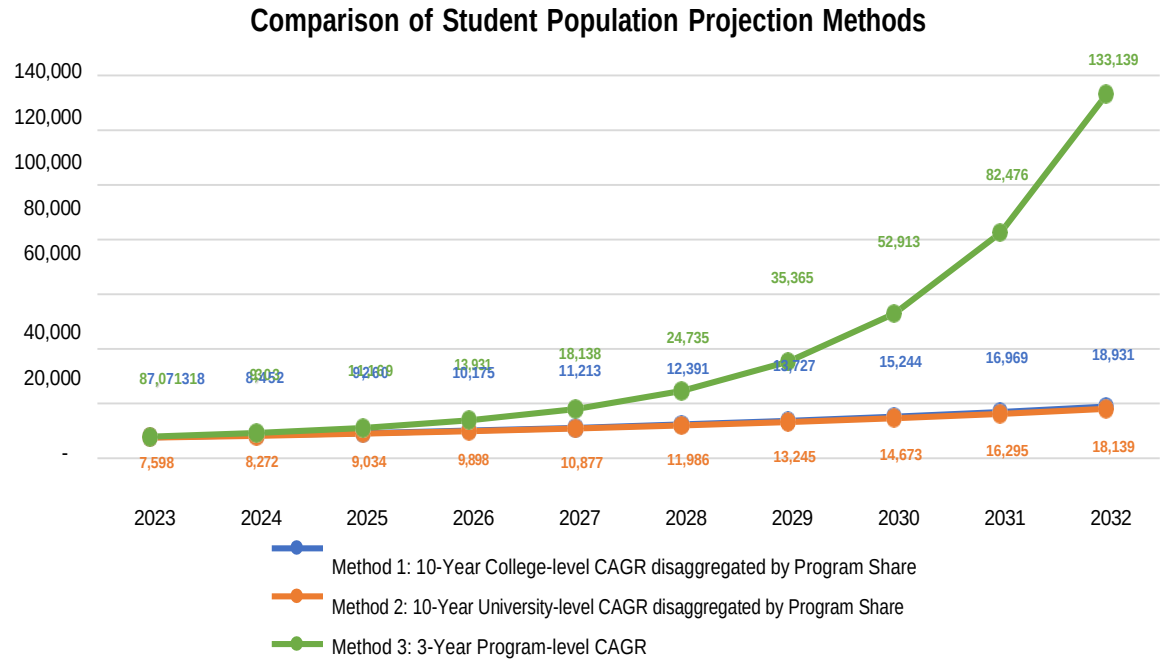


Figure 2-44: Comparison of Student Population Projection Methods

Methodology

Adopting Method 1, a two step-process was conducted in estimating the future student population of the university:

1. Use of Compound Annual Growth Rate for each college and school

   The historical data on the total student population per college was used in determining the trends in changes in enrollment per college and the university as a whole. Using the geometric formula of the Compound Annual Growth Rate (CAGR) in **Equation 2-1**, the respective growth rates of each college over a ten-year period was calculated.

   Given that resulting growth rates are not uniform, which pertains to the observation that not all growth rates indicated a positive growth, and college-level data is available, a separate CAGR was calculated for each college. This also allows for the results to be more specific to the enrollment trends of the respective colleges.

Equation 2-1: Population Compound Annual Growth Rate

$$CAGR = [(\frac{Pop_2}{Pop_1})^{\frac{1}{t}} - 1\ ] \times 100$$

Where $CAGR$ = *Compound Annual Growth Rate over multiple years*

$\boldsymbol{Pop_2}$ = *Historical population at the end of the reference historical population data*

$\boldsymbol{Pop_1}$ = *Historical population at the start of the reference historical population data*

$\boldsymbol{t}$ = *Number of years between the start and end of the reference historical population data*

2. Ratio Method for Program Disaggregation

To disaggregate the projected student population by degree or program, the ratio of the corresponding degree or program to the college population was calculated. Three reference years were considered in determining the ratio to be used. The number of years considered for the trend was determined based on how many years the most recent existing degree or program has been offered in the university.

Using the resulting CAGR per college and the historical data, the projected population was determined utilizing **Equation 2-2**.

Equation 2-2: Student Population Projection Formula

$$Pop_P = Pop_2 + (Pop_2 \times CAGR\ )$$

Where $CAGR$ = *Compound Annual Growth Rate over multiple years*

$\boldsymbol{Pop_P}$ = *Projected Population*

$\boldsymbol{Pop_2}$ = *Historical population at the end of the reference historical population data*

The resulting student population projection by college for Tarlac Agricultural University is presented in **Table 2-10** and **Figure 2-31**.

Equation 2-3: Student Projection Formula for Disaggregation by Degree or Program

$$Pop_P = \frac{\frac{Pop_1}{Pop_{Col}} + \frac{Pop_2}{Pop_{Col}} + \frac{Pop_3}{Pop_{Col}}}{t} \times Pop_{Col}$$

Where $\boldsymbol{Pop_P}$ = *Projected Population per degree or program*

$\boldsymbol{Pop_{Col}}$ = *Projected Population for entire college it belongs to*

$\boldsymbol{Pop_1}$ = *Projected Population in Year 2020*

$\boldsymbol{Pop_2}$ = *Projected Population in Year 2021*

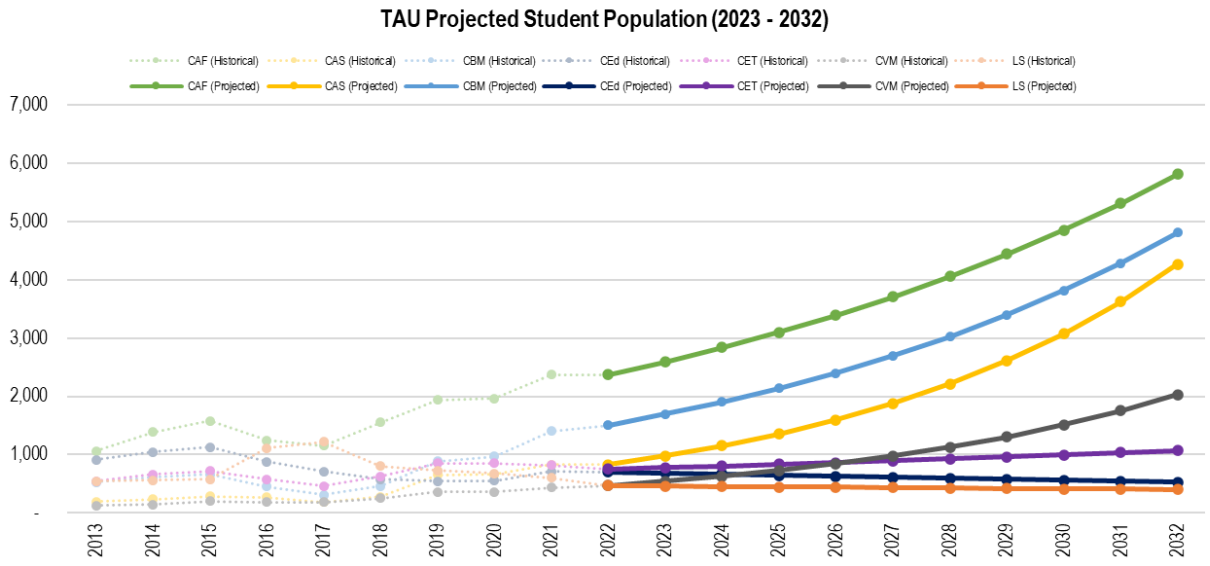
$\boldsymbol{Pop_3}$ = *Projected Population in Year 2022*

$\boldsymbol{t}$ = *Number of Reference Year (in this case = 3)*

Based on the resulting 3-year average percentage share (2020-2022), the projected student population by college was then distributed by degree program.

The projected student population by degree program and college is presented in **Table 2-10**.

Figure 2-45: TAU Historical and Projected Student Population (2023 - 2032)



Data Sources: TAU Planning and Development Office, and TAU Admission and Registration Service

Table 2-17: Historical Data and 10-Year CAGR of Student Population by College and College (2010 - 2022)

College / Program	Historical Student Population													10-year CAGR
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
College of Agriculture and Forestry														
Doctor of Philosophy in Agronomy	-	6	-	1	1	3	3	1	1	1	5	-	-	
Doctor of Philosophy in Animal Science	-	1	4	4	4	4	3	1	2	1	3	-	-	
Doctor of Philosophy in Poultry Production	-	10	19	25	23	15	21	-	-	-	-	3	5	
Doctor of Philosophy in Rural Development	-	5	3	7	3	1	2	1	4	5	6	8	5	
Master of Science in Agriculture*	-	3	3	4	2	5	6	46	54	66	55	22	41	
Master of Science in Forestry	-	-	-	-	-	-	3	6	2	4	6	2	4	
Master of Forestry major in Reforestation Management	-	-	2	1	-	-	-	-	-	-	-	-	-	
Master of Forestry major in Community Forestry	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bachelor of Science in Agriculture	141	221	321	400	549	648	564	592	698	822	790	822	831	
Bachelor of Animal Science	231	310	412	484	643	721	525	418	579	692	741	1,013	897	
Bachelor of Science in Food Technology	105	133	128	99	90	99	64	46	107	167	189	254	289	
Bachelor of Science in Forestry	1	20	18	34	73	85	53	45	105	183	171	247	300	
CAF - Subtotal	**478**	**709**	**910**	**1,059**	**1,388**	**1,581**	**1,244**	**1,156**	**1,552**	**1,941**	**1,966**	**2,371**	**2,372**	**17.01%**
College of Arts and Science														
Bachelor of Arts in Economics	53	53	41	61	57	89	67	43	68	227	205	215	241	
Bachelor of Science in Development Communication	-	-	-	-	-	-	-	-	43	224	226	288	308	
Bachelor of Science in Psychology	111	111	132	130	176	194	201	142	163	204	231	323	283	
CAS - Subtotal	**164**	**164**	**173**	**191**	**233**	**283**	**268**	**185**	**274**	**655**	**662**	**826**	**832**	**16.77%**

College / Program	Historical Student Population													10-year CAGR
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
College of Business and Management														
Bachelor of Science in Tourism Management	-	-	-	-	-	-	-	-	26	144	143	307	380	
Bachelor of Science in Business Administration	288	338	394	429	489	534	365	259	283	407	505	689	692	
Bachelor of Science in Entrepreneurship	32	65	83	102	124	127	84	54	155	333	297	335	334	
Bachelor of Science in Agribusiness	-	-	-	-	-	-	-	-	-	-	29	73	103	
CBM - Subtotal	**320**	**403**	**477**	**531**	**613**	**661**	**449**	**313**	**464**	**884**	**974**	**1,404**	**1,509**	**13.16%**
College of Education														
Doctor of Philosophy in Development Education	-	10	19	25	23	15	21	22	22	32	28	20	20	
Master of Arts in Education*	-	95	81	62	77	81	77	143	159	192	125	115	95	
Bachelor of Secondary Education	172	179	207	258	311	352	263	204	133	91	117	164	154	
Bachelor of Elementary Education	349	417	428	435	479	496	392	264	166	99	94	117	140	
Bachelor of Techology and Livelihood Education	-	-	-	-	-	-	-	-	33	76	97	143	143	
Bachelor of Early Childhood Education	-	-	-	-	-	-	-	-	18	53	74	102	114	
Bachelor of Science in Home Technology Management	-	-	-	94	129	175	117	80	44	5	-	-	-	
Bachelor of Science in Home Technology	36	59	107	36	19	4	1	-	-	-	-	-	-	
Certificate in Home Technology Management	-	-	-	-	-	-	-	-	-	-	20	54	39	
Teacher Certificate Program	-	-	-	-	4	7	7	-	-	-	-	-	-	
CEd - Subtotal	**557**	**760**	**842**	**910**	**1,042**	**1,130**	**878**	**713**	**575**	**548**	**555**	**715**	**705**	**-0.04%**
College of Engineering and Technology														
Master of Science in Agricultural Engineering	-	-	3	3	6	6	12	21	20	14	18	9	16	

College / Program	Historical Student Population													10-year CAGR
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
major in Soil and Water Management														
Bachelor of Science in Agricultural and Biosystems Engineering	53	53	76	75	100	112	132	137	215	271	257	228	203	
Bachelor of Science in Geodetic Engineering	110	108	111	122	138	180	140	114	162	257	249	249	226	
Bachelor of Science in Information Technology	436	376	349	343	415	419	293	193	230	310	326	335	305	
CET - Subtotal	**599**	**537**	**539**	**543**	**659**	**717**	**577**	**465**	**627**	**852**	**850**	**821**	**750**	**3.97%**
College of Veterinary Medicine														
Doctor of Veterinary Medicine	84	84	108	126	148	204	186	186	253	357	364	435	470	
CVM - Subtotal	**84**	**84**	**108**	**126**	**148**	**204**	**186**	**186**	**253**	**357**	**364**	**435**	**470**	**17.69%**
Laboratory School														
Senior High School	-	-	-	-	-	-	505	635	288	276	292	259	129	
Junior High School	518	528	534	541	559	581	611	585	518	456	389	348	341	
Laboratory School - Subtotal	**518**	**528**	**534**	**541**	**559**	**581**	**1,116**	**1,220**	**806**	**732**	**681**	**607**	**470**	**3.09%**
TOTAL - TAU	**2,720**	**3,185**	**3,583**	**3,901**	**4,642**	**5,157**	**4,718**	**4,238**	**4,551**	**5,969**	**6,052**	**7,179**	**7,108**	**9.29%**

Data Sources: TAU Planning and Development Office, and TAU Admission and Registration Service

Table 2-18: TAU Projected Student Population (2023 - 2032)

College / Program	Projected Student Population									
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
College of Agriculture and Forestry										
Doctor of Philosophy in Agronomy	-	6	-	1	1	3	3	1	1	1
Doctor of Philosophy in Animal Science	-	1	4	4	4	4	3	1	2	1
Doctor of Philosophy in Poultry Production	-	10	19	25	23	15	21	-	-	-
Doctor of Philosophy in Rural Development	-	5	3	7	3	1	2	1	4	5
Master of Science in Agriculture*	-	3	3	4	2	5	6	46	54	66
Master of Science in Forestry	-	-	-	-	-	-	3	6	2	4

College / Program	Projected Student Population									
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Master of Forestry major in Reforestation Management	-	-	2	1	-	-	-	-	-	-
Master of Forestry major in Community Forestry	-	-	-	-	-	-	-	-	-	-
Bachelor of Science in Agriculture	141	221	321	400	549	648	564	592	698	822
Bachelor of Animal Science	231	310	412	484	643	721	525	418	579	692
Bachelor of Science in Food Technology	105	133	128	99	90	99	64	46	107	167
Bachelor of Science in Forestry	1	20	18	34	73	85	53	45	105	183
CAF - Subtotal	**478**	**709**	**910**	**1,059**	**1,388**	**1,581**	**1,244**	**1,156**	**1,552**	**1,941**
College of Arts and Science										
Bachelor of Arts in Economics	53	53	41	61	57	89	67	43	68	227
Bachelor of Science in Development Communication	-	-	-	-	-	-	-	-	43	224
Bachelor of Science in Psychology	111	111	132	130	176	194	201	142	163	204
CAS - Subtotal	**164**	**164**	**173**	**191**	**233**	**283**	**268**	**185**	**274**	**655**
College of Business and Management										
Bachelor of Science in Tourism Management	-	-	-	-	-	-	-	-	26	144
Bachelor of Science in Business Administration	288	338	394	429	489	534	365	259	283	407
Bachelor of Science in Entrepreneurship	32	65	83	102	124	127	84	54	155	333
Bachelor of Science in Agribusiness	-	-	-	-	-	-	-	-	-	-
CBM - Subtotal	**320**	**403**	**477**	**531**	**613**	**661**	**449**	**313**	**464**	**884**
College of Education										
Doctor of Philosophy in Development Education	-	10	19	25	23	15	21	22	22	32
Master of Arts in Education*	-	95	81	62	77	81	77	143	159	192
Bachelor of Secondary Education	172	179	207	258	311	352	263	204	133	91
Bachelor of Elementary Education	349	417	428	435	479	496	392	264	166	99
Bachelor of Techology and Livelihood Education	-	-	-	-	-	-	-	-	33	76
Bachelor of Early Childhood Education	-	-	-	-	-	-	-	-	18	53
Bachelor of Science in Home Technology Management	-	-	-	94	129	175	117	80	44	5
Bachelor of Science in Home Technology	36	59	107	36	19	4	1	-	-	-
Certificate in Home Technology Management	-	-	-	-	-	-	-	-	-	-
Teacher Certificate Program	-	-	-	-	4	7	7	-	-	-

College / Program	Projected Student Population									
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
CEd - Subtotal	**557**	**760**	**842**	**910**	**1,042**	**1,130**	**878**	**713**	**575**	**548**
College of Engineering and Technology										
Master of Science in Agricultural Engineering major in Soil and Water Management	-	-	3	3	6	6	12	21	20	14
Bachelor of Science in Agricultural and Biosystems Engineering	53	53	76	75	100	112	132	137	215	271
Bachelor of Science in Geodetic Engineering	110	108	111	122	138	180	140	114	162	257
Bachelor of Science in Information Technology	436	376	349	343	415	419	293	193	230	310
CET - Subtotal	**599**	**537**	**539**	**543**	**659**	**717**	**577**	**465**	**627**	**852**
College of Veterinary Medicine										
Doctor of Veterinary Medicine	84	84	108	126	148	204	186	186	253	357
CVM - Subtotal	**84**	**84**	**108**	**126**	**148**	**204**	**186**	**186**	**253**	**357**
Laboratory School										
Senior High School	-	-	-	-	-	-	505	635	288	276
Junior High School	518	528	534	541	559	581	611	585	518	456
Laboratory School - Subtotal	**518**	**528**	**534**	**541**	**559**	**581**	**1,116**	**1,220**	**806**	**732**
TOTAL - TAU	**2,720**	**3,185**	**3,583**	**3,901**	**4,642**	**5,157**	**4,718**	**4,238**	**4,551**	**5,969**

Data Sources: TAU Planning and Development Office, and TAU Admission and Registration Services

Note: Excludes the projections for the following courses since they have not been offered in the university since the school years indicated: MA Teaching (SY 2012-2013), BA Entrepreneurship (SY 2016-2017), BS Nursing (2012-2013), Certificate in Computer Hardware Technology (SY 2018-2019), Certificate in Office Management (SY 2018-2019), Certificate in Forest Ranger (SY 2014-2015), Certificate in Home Technology (SY 2012-2013), Associate in Animal Technology (SY 2012-2013).

PROJECTED DEMAND FOR BUILDINGS AND FACILITIES

The demand for buildings and facilities may be estimated in consideration of resulting student population projections, prevailing educational facility quality standards and targets defined by the Commission on Higher Education (CHED), Department of Education (DepEd) and other relevant national government agencies, and specific targets defined by Tarlac Agricultural University.

For the standards for classrooms and laboratories, since CHED is aligned with an Outcomes-based approach to tertiary education, along with the autonomy granted to State Universities and Colleges, no specific standards have been defined for tertiary education facilities, apart from specific degrees and programs. Given that not all degrees and programs have a specified ratio for these parameters, the DepEd standards have been adopted to serve as a basis in projecting demand for these facilities.

The specific facilities which demand projections were determined are classrooms, laboratories, student dormitories, and health facilities. The standards utilized for the demand projections are summarized in **Table 2-19**, while the resulting demand projections are enumerated in the succeeding sections.

Table 2-19: Standards for Demand Projections and Facilities Planning

Facility	Target	Unit	Reference
Classroom	40	Students per classroom	2022 DepEd Target for Senior High School based on PDP 2017-2022
Laboratory	40	Students per laboratory	Adopting the same ratio as classrooms as the CHED promotes an outcome-based approach and gives the universities the autonomy to designate their own standard. Can be further specified by program
Student Dormitory	12.51%	Estimated share of students living outside of Tarlac	TAU Survey on Area of Origin Undergraduate Student Population (2021)
Personnel Housing	36.25%	Estimated share of General Administration and Support Services Employee	Assumed that said employees are prioritized for employee housing
Health Facility	1	infirmary for whole university	Upgrade of existing health facility

References: Philippine Development Plan 2017-2022 in Navarro (2022). School Infrastructure in the Philippines: Where Are We Now and Where Should We Be Heading?. Discussion Paper Series. 2022-10. https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps2210.pdf.

The resulting projected demand for these facilities approximates the gap between the identified target and the existing conditions. The resulting projection serves as a baseline to characterize the additional investments in facilities that may be necessary within the planning horizon. In determining the projected demand for the aforementioned facilities, the consideration of the following factors and variables have been limited:

- ***Introduction of interventions to specific programs and colleges that may impact enrollment.*** The projection of the student population was based on trends derived from historical enrollment data. Thus, any new initiatives that may result in additional enrollments have not been

factored in. This may include introduction of new degrees and certificate programs[5], expansion of recruitment and outreach to secondary school students, and other external factors that may impact enrollment growth rates.

- ***Utilization and absorptive capacity of classrooms and laboratories***. Absorptive capacity of facilities have not been taken into consideration due to the lack of information on how they are currently being used. Variables such as specific space requirements, types of laboratories, and scheduling were not taken into account in the demand projections. Thus, prior to the development of any additional facilities, the optimization of the existing classrooms and laboratories can first be implemented. Upon availability of data on utilization and absorptive capacity, the projections for the classrooms and laboratories can be further refined in the succeeding stages of project development, such as the conduct of feasibility studies and detailed engineering design.

- ***Special requirements for services and facilities***. General design guidelines and floor area assumptions were adopted in projecting the additional space requirements. For the required services for the health facility, due to the data gaps, the specific medical services that are required have not been identified. Upon availability of the information, the top causes of morbidity and the corresponding medical specialization required may be prioritized for investments and partnerships in health services.

Projected Demand for Classrooms

To estimate the demand for classrooms, the existing number of classrooms per college was identified to determine the existing classroom-to-student ratio. The number of students, number of classrooms, and classroom-to-student ratio as of 2022 is presented in **Table 2-11**.

As highlighted in **Table 2-20**, only the classrooms in CVM, CET, CEd and LS meet the existing targets, while the rest of the colleges have not met the target number of classrooms. For the case of CBM and CAF, they have to increase by more than double their current classrooms in order to meet the target.

Table 2-20: Current Status of Classroom Facilities per College (2022)

College	No. of Students	No. of Classrooms	Ratio
College of Arts and Sciences	832	13	1:64
College of Business and Management	1509	16	1:94
College of Agriculture and Forestry	2372	22	1:108
College of Veterinary Medicine	470	15	1:31
College of Engineering and Technology	750	23	1:33
College of Education and Laboratory School	1175	31	1:38
Total	**7108**	**120**	**1:59**

Data Sources: TAU Planning and Development Office
Note: Students in CEd and LS are combined as they utilize the common buildings which are subsumed under the College of Education.

[5] Such as certificate programs anticipated for the College of Education as of January 2023.

Table 2-21 and **By Year** 2032, TAU has to have at least a total of 463 classrooms in order to ensure that existing classroom-to-student ratios are maintained given the estimated student population in the same year.

For CVM, the existing classrooms are only sufficient until the year 2023. By 2024, demand deficits have been projected. Thus, additional classrooms may need to be constructed starting then. It must be noted, however, that a new building which is allocated for CVM is currently being constructed. This then may result in possible adjustments to the projected demand and extend the period wherein additional classrooms might be needed for the college.

For CET, additional classrooms will only be required by the year 2029. Until then, the current number of classrooms can conductively accommodate the existing and projected number of students in the college.

For CEd, based on the resulting projections, there is no need to increase the number of classrooms given the planning horizon. However, since both the College of Education programs and the Laboratory School students utilize common facilities, the utilization needs to be rationalized and must be designed to cater to the specific needs of the students and teachers utilizing them.

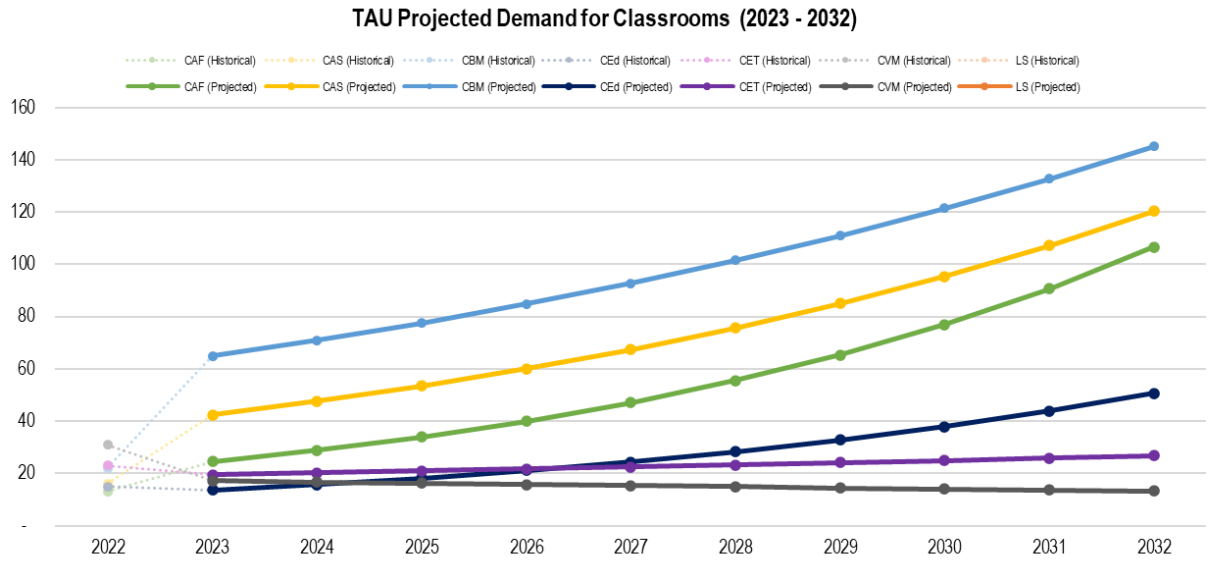


Figure 2-46 present the projection assumptions, projected classroom demand and the demand deficit from 2023 to 2032.

A detailed inventory of the existing classrooms per college can be found in Annex B. .

Table 2-21: Projected Demand for Classrooms (2023-2032)

Projections	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Projections										
Projected Student Population	7,738	8,452	9,260	10,175	11,213	12,391	13,727	15,244	16,969	18,931
Target Ratio (Students per Classroom)	40	40	40	40	40	40	40	40	40	40
Projected Classroom Demand										
College of Arts and Sciences	24	29	34	40	47	55	65	77	91	107
College of Business and Management	42	48	53	60	67	76	85	95	107	120

Projections	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
College of Agriculture and Forestry	65	71	78	85	93	102	111	121	133	145
College of Veterinary Medicine	14	16	18	21	24	28	33	38	44	51
College of Engineering and Technology	19	20	21	22	22	23	24	25	26	27
College of Education	17	17	16	16	15	15	14	14	14	13
Total Projected Classroom Demand	**182**	**200**	**220**	**243**	**269**	**299**	**333**	**371**	**414**	**463**
Demand Deficit										
College of Arts and Sciences	-11	-16	-21	-27	-34	-42	-52	-64	-78	-94
College of Business and Management	-26	-32	-37	-44	-51	-60	-69	-79	-91	- 104
College of Agriculture and Forestry	-43	-49	-56	-63	-71	-80	-89	-99	- 111	- 123
College of Veterinary Medicine	1	-1	-3	- 6	- 9	-13	-18	-23	-29	-36
College of Engineering and Technology	4	3	2	1	1	- 0	- 1	- 2	- 3	- 4
College of Education	14	14	15	15	16	16	17	17	17	18

By Year 2032, TAU has to have at least a total of 463 classrooms in order to ensure that existing classroom-to-student ratios are maintained given the estimated student population in the same year.

For CVM, the existing classrooms are only sufficient until the year 2023. By 2024, demand deficits have been projected. Thus, additional classrooms may need to be constructed starting then. It must be noted, however, that a new building which is allocated for CVM is currently being constructed. This then may result in possible adjustments to the projected demand and extend the period wherein additional classrooms might be needed for the college.

For CET, additional classrooms will only be required by the year 2029. Until then, the current number of classrooms can conductively accommodate the existing and projected number of students in the college.

For CEd, based on the resulting projections, there is no need to increase the number of classrooms given the planning horizon. However, since both the College of Education programs and the Laboratory School students utilize common facilities, the utilization needs to be rationalized and must be designed to cater to the specific needs of the students and teachers utilizing them.

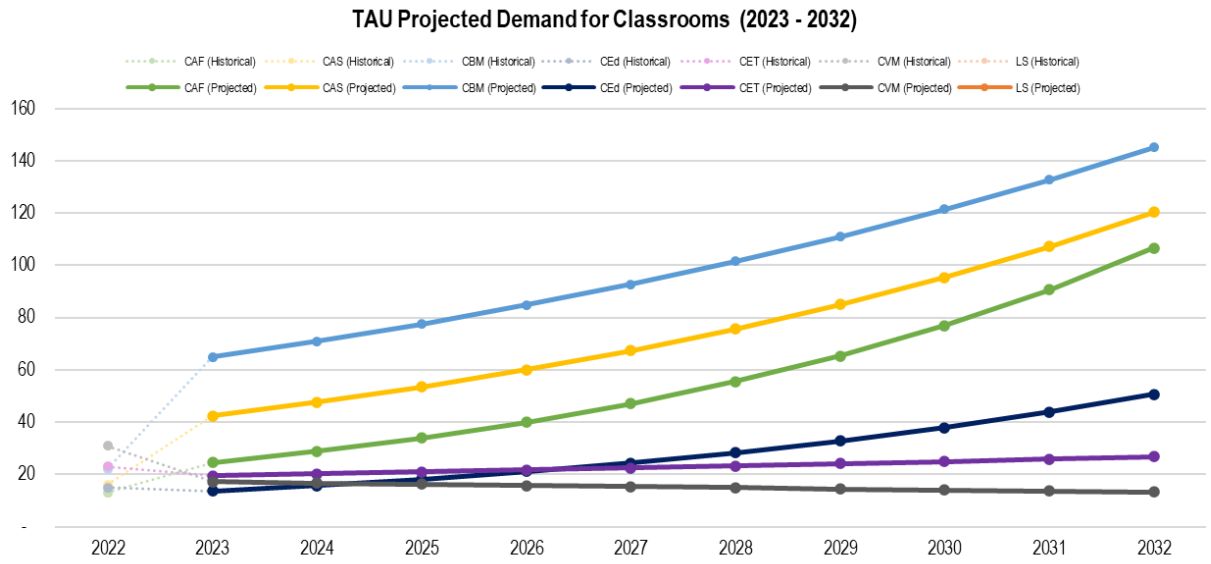


Figure 2-46: TAU Historical and Projected Demand for Classrooms

Table 2-22: Projected Area Demand for Classrooms

Year	Total No. of Classroom Deficit	Standard Classroom Size	Total Additional Floor Area Needed
2023	62	63 SQ M	3,906 SQ M
2032	343	63 SQ M	21,609 SQ M

Based on data from the institution, 63 square meters is the standard classroom size. There will be 62 fewer classrooms in 2023, adding 3,906 square meters to the floor area. There are many classroom deficiencies for the year 2032. To meet the demand, 343 new classrooms must be constructed. An additional 21,609 sq m of floor space is needed to meet the demand.

Projected Demand for Laboratories

To estimate the demand for laboratories, the existing number of laboratories per college was identified to determine the existing laboratory-to-student ratio. The number of students, number of laboratories, and laboratory-to-student ratio as of 2022 is presented in **Table 2-15**. As shown in the table, none of the colleges have met the target ratio for laboratories.

A detailed inventory of the existing laboratories per college can be found in Annex B.

Table 2-23: Current Status of Laboratory Facilities per College (2022)

College	No. of Students	No. of Laboratories	Ratio
College of Arts and Sciences	832	9	1:92
College of Business and Management	1509	6	1:252
College of Agriculture and Forestry	2372	10	1:237
College of Veterinary Medicine	470	8	1:59
College of Engineering and Technology	750	11	1:68

College	No. of Students	No. of Laboratories	Ratio
College of Education and Laboratory School	1175	15	1:78
Total	**7108**	**59**	**1:120**

Data Sources: TAU Planning and Development Office

Note: Students in CEd and LS are combined as they utilize the common buildings which are subsumed under the College of Education.

Table 2-15 and **By Year** 2032, TAU has to have at least a total of 463 laboratories in order to ensure a conducive and up-to-standard laboratory-to-student ratios given the estimated student population in the same year.

For all colleges, the laboratory facilities are at a deficit across the planning horizon with an exception to CEd. Given the projected student population, the existing laboratories of CEd shall be sufficient by 2028 assuming the downward trend of enrollment of CEd and LS programs.

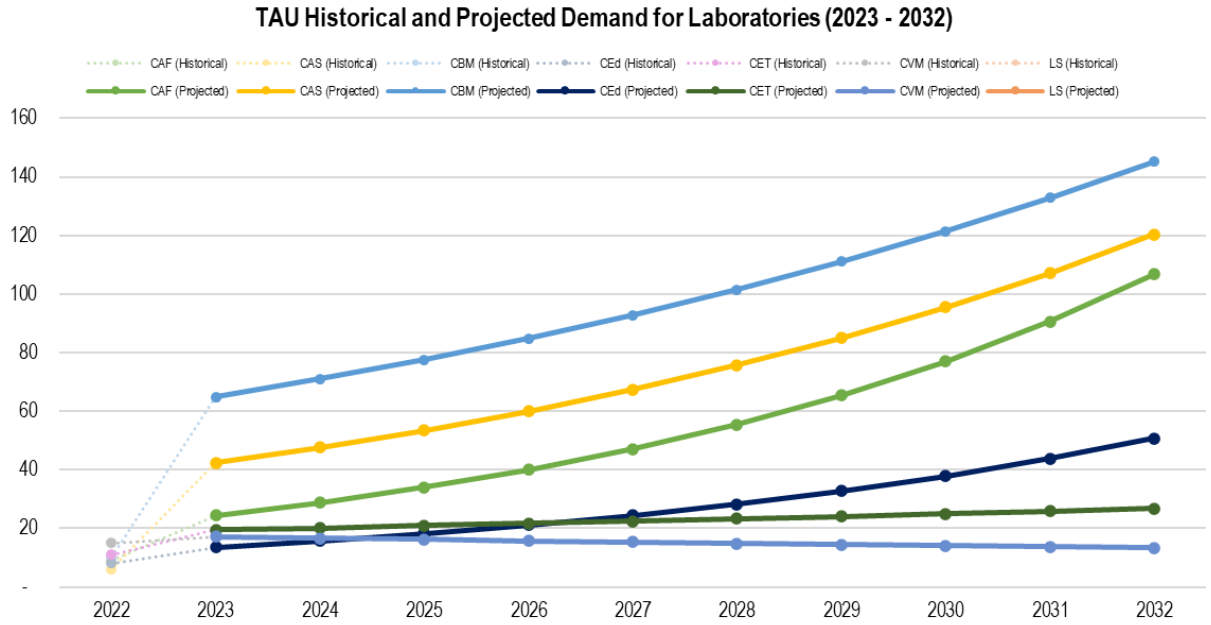


Figure 2-33 present the projection assumptions, projected laboratory demand and the demand deficit from 2023 to 2032.

Table 2-24: Projected Demand for Laboratories (2023-2032)

Projections	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Projections										
Projected Student Population	7,738	8,452	9,260	10,175	11,213	12,391	13,727	15,244	16,969	18,931
Target Ratio (Students per Classroom)	40	40	40	40	40	40	40	40	40	40
Projected Classroom Demand										
College of Arts and Sciences	24	29	34	40	47	55	65	77	91	107
College of Business and Management	42	48	53	60	67	76	85	95	107	120
College of Agriculture and Forestry	65	71	78	85	93	102	111	121	133	145

Projections	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
College of Veterinary Medicine	14	16	18	21	24	28	33	38	44	51
College of Engineering and Technology	19	20	21	22	22	23	24	25	26	27
College of Education	17	17	16	16	15	15	14	14	14	13
Total Projected Classroom Demand	**182**	**200**	**220**	**243**	**269**	**299**	**333**	**371**	**414**	**463**
Demand Deficit										
College of Arts and Sciences	-15	-20	-25	-31	-38	-46	-56	-68	-82	-98
College of Business and Management	-36	-42	-47	-54	-61	-70	-79	-89	- 101	- 114
College of Agriculture and Forestry	-55	-61	-68	-75	-83	-92	- 101	- 111	- 123	- 135
College of Veterinary Medicine	- 6	- 8	-10	-13	-16	-20	-25	-30	-36	-43
College of Engineering and Technology	- 8	- 9	-10	-11	-11	-12	-13	-14	-15	-16
College of Education	- 2	- 2	- 1	- 1	- 0	0	1	1	1	2

By Year 2032, TAU has to have at least a total of 463 laboratories in order to ensure a conducive and up-to-standard laboratory-to-student ratios given the estimated student population in the same year.

For all colleges, the laboratory facilities are at a deficit across the planning horizon with an exception to CEd. Given the projected student population, the existing laboratories of CEd shall be sufficient by 2028 assuming the downward trend of enrollment of CEd and LS programs.

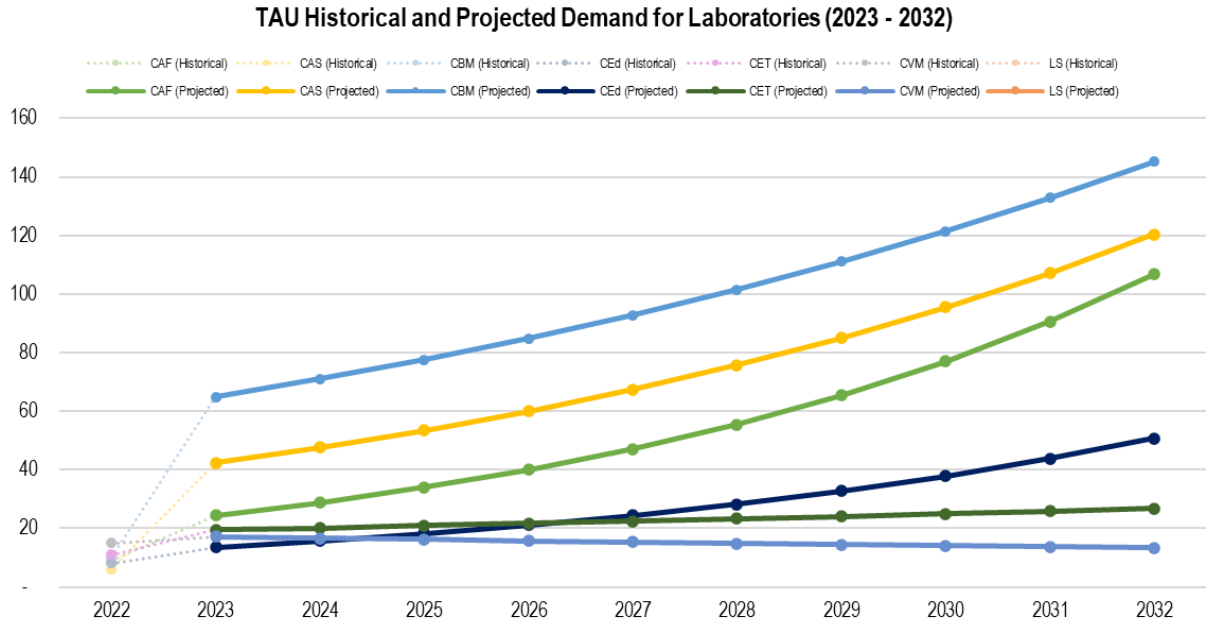


Figure 2-47: TAU Historical and Projected Demand for Laboratories

Across all colleges, CBM and CAF have the greatest number of laboratories that are required just in consideration of the existing number of students within their respective colleges. Without consideration of additional number of students in the succeeding years, the two colleges have to increase their number of laboratories by about 6 times their existing number in order to promote a conducive environment for their students and teachers.

As per the institution's data, the university's laboratories vary in size. The laboratory size indicated in the table was derived from the total average area size. There will be 123 fewer laboratories in 2023, adding 9,225 sq m to the floor area. There are many laboratory deficiencies for the year 2032. To meet the demand, 404 new laboratories must be constructed. An additional 30,300 sq m of floor space is needed to complete the said demand.

Table 2-25: Projected Area Demand for Laboratories

Year	Total No. of Laboratory Deficit	Average Laboratory Size	Total Additional Floor Area Needed
2023	123	75 SQ M	9,225 SQ M
2032	404	75 SQ M	30,300 SQ M

Projected Demand for Student Dormitories

To estimate the demand for student dormitory units, the existing number of rooms of the existing dormitories have been identified. Currently, there are three dormitories being utilized by the University, namely Ladies' Dormitory, Mens' Dormitory, and Bachelors' Pad. **Table 2-18** summarizes the number of rooms (total and functional), floor area per room, capacity per person, and space allocated per dormer.

A detailed inventory of the student dormitories can be found in Annex B.

Table 2-26: Current Status of Student Dormitories in TAU (2022)

Name of Facility	Floor Area per Room (sqm)	Number of Functional Rooms	Total Number of Rooms	Capacity per Room (persons)	Total Capacity (persons)	Total Floor Area (sqm)	Space per person (sqm)
Ladies' Dormitory	45	24	24	7	168	1080	0.16
Mens' Dormitory	24	15	20	6	90	360	0.25
Bachelors' Pad	32	5	5	2	10	160	0.06

The Bachelors' Pad units were intended for the use of TAU employees. However, during the pandemic, its use was modified and has since then accommodated international students of the university. However, for the demand projections, the ideal scenario is assumed wherein all rooms are functional and only facilities intended to house students are utilized.

Apart from these, other assumptions in demand projections are as follows:

- All existing rooms of the Ladies' and Mens' Dormitories are functional and fully occupied.
- Existing design (i.e., floor area, capacity) is maintained and expected for future units to be constructed.
- In determining the demand for student dormitories, the results of the 2021 undergraduate survey by the TAU Planning and Development Office (12.51%) or served as a basis to identify how much of the population is targeted to be served by the dormitory buildings. Due to the lack of historical data on the area of origin of the students, it is assumed that this ratio of target dormers remains constant across the planning horizon.
- The 5-year average male-female ratio (2018-2022) was utilized in distributing the dormitory demand.

Based on these assumptions, the dormitory facilities have an existing demand deficit of 889 potential dormers that they can house, or an additional 55 rooms in the Ladies' Dormitory and an additional of 50

rooms for the Mens' Dormitory. By the end of the planning period, a total of 319 rooms (170 Ladies', and 149 Men's) for 2372 projected potential dormers may be needed.

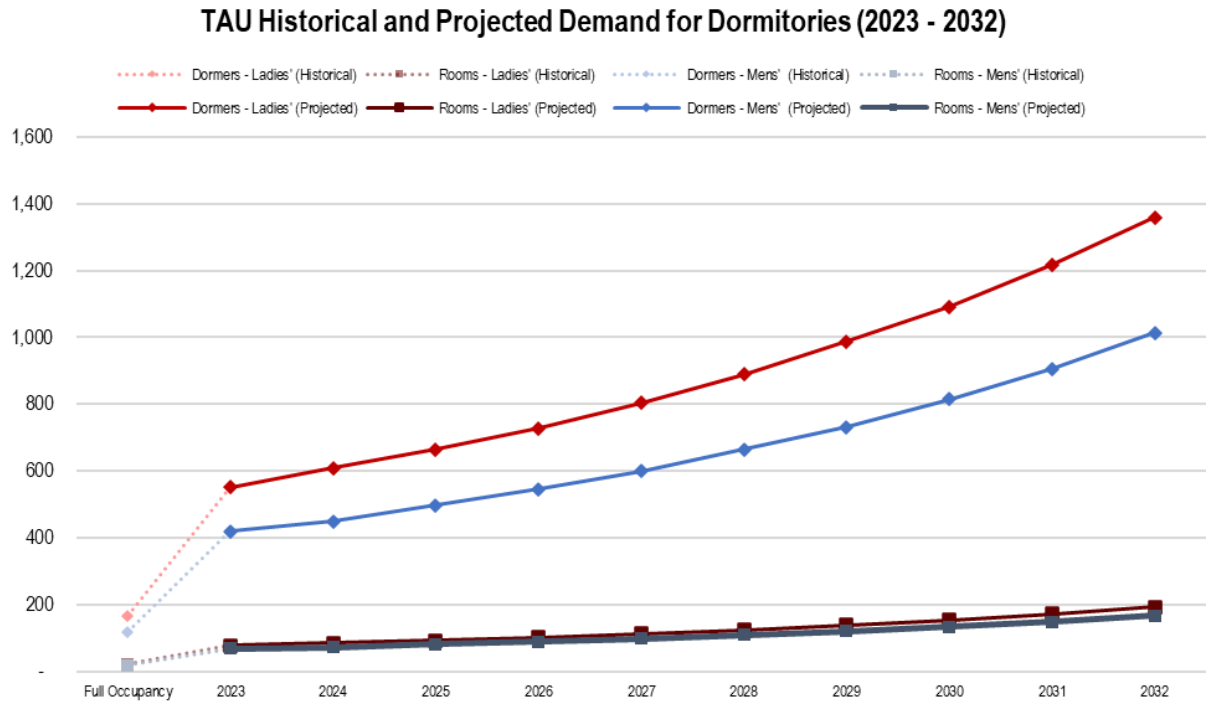


Figure 2-48 TAU Historical and Projected Demand for Student Dormitories

The average dormitory size based on the data given by the university is 24 sq m. In 2023, there will be a 50-room deficit in the Men's dormitory. An additional 1,200 sq m is needed to supply the demand given. In 2032, it significantly increased, resulting in other demand of 149 rooms. Another floor area of 3,576 sq m is needed. Another option was provided by using the BP 220 standard. The total floor area required for the deficits has significantly decreased.

Table 2-27: Projected Area Demand for Student Dormitories: Men's Dormitory – Based on the Average University Dormitory Size

Year	Total No. of Men's Dorm Room Deficit	Average Dormitory Size	Total Additional Floor Area Needed
2023	50	24 SQ M	1,200 SQ M
2032	149	24 SQ M	3,576 SQ M

Table 2-28: Projected Area Demand for Student Dormitories: Men's Dormitory – Based on BP 220 Minimum Condo Area

Year	Total No. of Men's Dorm Room Deficit	Average Condo Size	Total Additional Floor Area Needed
2023	50	18 SQ M	900 SQ M
2032	149	18 SQ M	2,682 SQ M

The number of deficiencies in the women's dormitory is higher than in the men's. The women's dormitory will be 55 rooms short in 2023. To meet the demand, an additional 1,320 square meters are required. It will significantly rise in 2032, creating a new demand for 170 rooms. 4,080 sq m of extra floor space is needed. The BP 220 standard offered an additional choice. The overall floor area needed to cover the deficit has drastically lowered.

Table 2-29: Projected Area Demand for Student Dormitories: Ladies' Dormitory – Based on the Average University Dormitory Size

Year	Total No. of Ladies' Dorm Room Deficit	Average Dormitory Size	Total Additional Floor Area Needed
2023	55	24 SQ M	1,320 SQ M
2032	170	24 SQ M	4,080 SQ M

Table 2-30: Projected Area Demand for Student Dormitories: Ladies' Dormitory – Based on BP 220 Minimum Condo Area

Year	Total No. of Ladies' Dorm Room Deficit	Average Condo Size	Total Additional Floor Area Needed
2023	50	18 SQ M	990 SQ M
2032	170	18 SQ M	3,060 SQ M

Projected Demand for Personnel Housing

Prior to estimating the demand for personnel housing, the projected demand for university employees needed to be estimated. The projected total number of employees will serve as the baseline of which a certain share of the employee population shall be targeted to be provided with employee housing.

Projected Demand for University Employees

Using the resulting student population projections, the 10-year average employee-student ratio was calculated. From 2013 to 2022, the employee population accounted for 7.87% of the total student population, or an average ratio of 1 employee for every 13 students (1:12.79). This ratio was adopted to project the total number of university employees from 2023 to 2032.

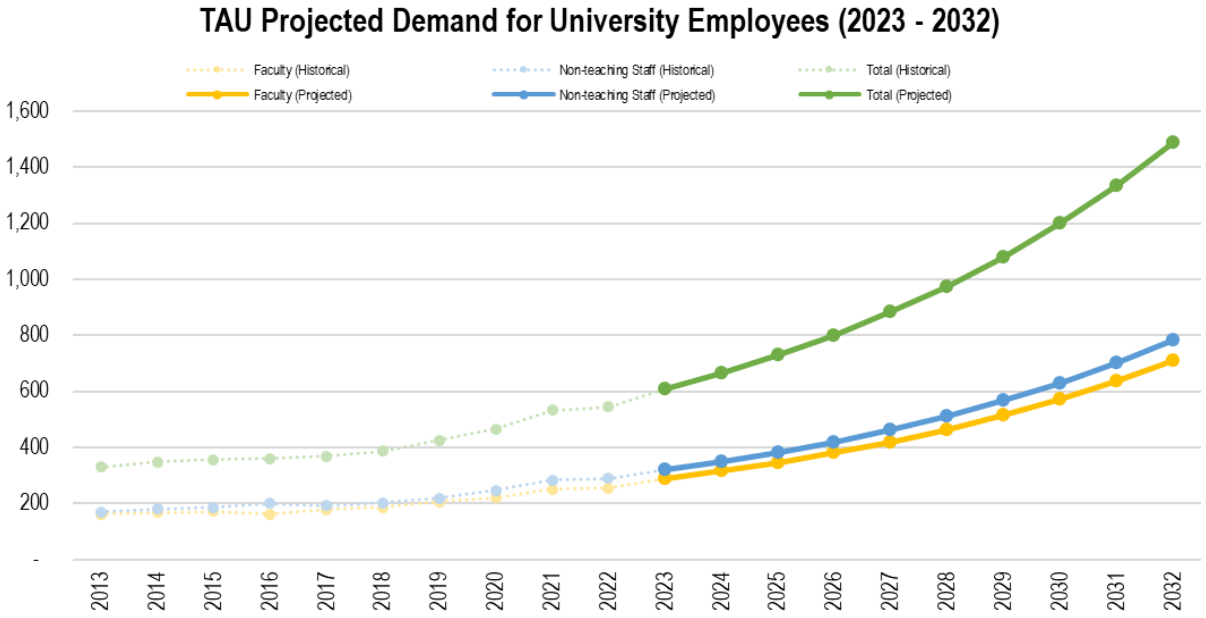


Figure 2-49: TAU Historical and Projected Demand for University Employees

Target Number of Personnel Housing

The target share of employees to be allocated personnel housing is 36.25% which represents the 10-year average share of employees engaged in General Administration and Support Services. These employees were identified to be prioritized for personnel housing due to their functions that may require access to the campus.

To establish the demand deficit, the existing number of personnel housing units have been identified and presented in **Table 2-23**. Currently, there are 41 personnel housing units, 97.56% of which are occupied. There are eight different areas where these are situated, as shown in the table. While these units have varying floor areas, the average floor area is at 73.81 sqm.

A detailed inventory of the personnel housing can be found in Annex D.

Table 2-31: Current Status of Personnel Housing in TAU (2022)

Location	Average Floor Area (sqm)	Total Number of Units	Occupied Units
Old Cottage (Sta. Maria)	117.06	12	12
Back of Dormitory	135.38	2	2
Animal/Crop Production	65.91	4	4
Palayamanan	103.52	2	2
Lovers' Lane	91.90	5	5
R&D Gate	144.11	8	7
Old Apartment	108.75	6	6
Others	-	2	2
Total	**73.81**	**41**	**40**

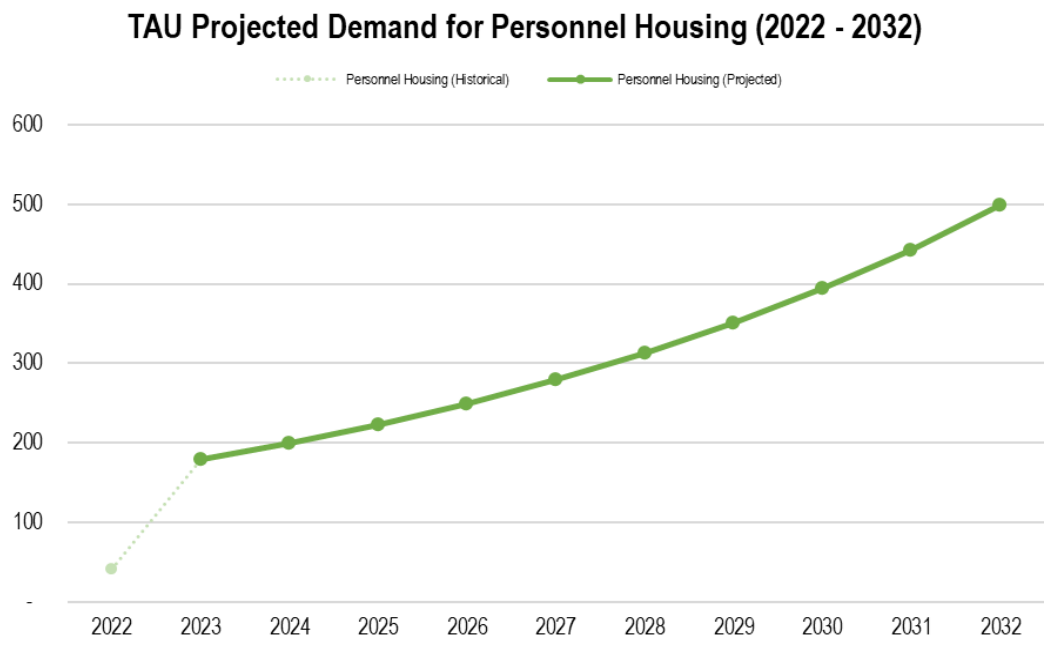
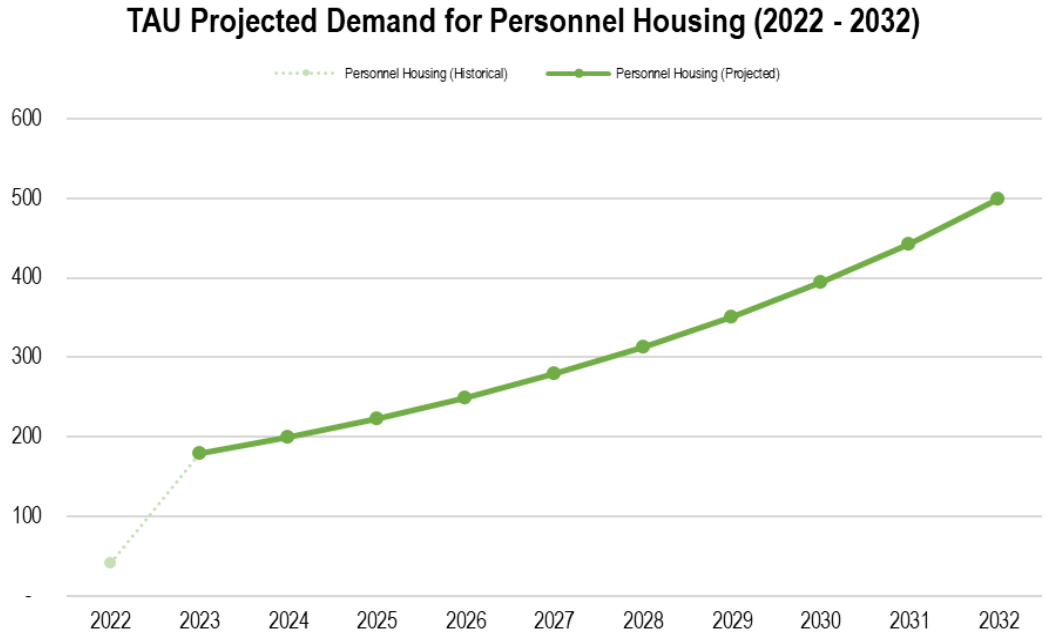


Figure 2-50: TAU Historical and Projected Demand for Personnel Housing

Given the target share of employees that may require personnel housing and the current stock of housing units, the demand deficit and requirements were calculated which are presented in



In 2023, the personnel housing deficit is at 180 units, while at the end of the planning period, this will increase to 458 units if no additional housing units were to be developed.

The 18 sq m standard minimum single occupancy condo size derived from the BP 220, Economic and Socialized Housing, was used as a multiplier to get the minimum total floor area needed for the projected demand for personnel housing.

Table 2-32: Projected Area Demand for Personnel Housing

Year	Total Requirement for Additional Personnel Housing	
2023	No. of Occupants	180

	Floor Area Needed	**3,240 SQ M**
2024	No. of Occupants	20
	Floor Area Needed	**360 SQ M**
2025	No. of Occupants	23
	Floor Area Needed	**414 SQ M**
2026	No. of Occupants	26
	Floor Area Needed	**468 SQ M**
2027	No. of Occupants	30
	Floor Area Needed	**540 SQ M**
2028	No. of Occupants	34
	Floor Area Needed	**612 SQ M**
2029	No. of Occupants	38
	Floor Area Needed	**684 SQ M**
2030	No. of Occupants	43
	Floor Area Needed	**774 SQ M**
2031	No. of Occupants	49
	Floor Area Needed	**882 SQ M**
2032	No. of Occupants	56
	Floor Area Needed	**1,008 SQ M**
	Total Floor Area Needed	**8,982 SQ M**

Table 2-33: Projected Demand for Student Dormitories (2023-2032)

Projections	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Number of Dormitory Rooms	149	162	178	195	215	238	263	292	325	363
Ladies' Dormitory	79	87	95	104	115	127	141	156	174	194
Mens' Dormitory	70	75	83	91	100	111	122	136	151	169
Bachelors' Pad										
Number of Dormers	**973**	**1059**	**1163**	**1274**	**1405**	**1555**	**1719**	**1908**	**2124**	**2372**
Ladies' Dormitory	**553**	**609**	**665**	**728**	**805**	**889**	**987**	**1092**	**1218**	**1358**
Mens' Dormitory	**420**	**450**	**498**	**546**	**600**	**666**	**732**	**816**	**906**	**1014**
Bachelors' Pad*										
Share of Demand Catered	**100.52%**	**100.19%**	**100.43%**	**100.08%**	**100.14%**	**100.32%**	**100.12%**	**100.05%**	**100.05%**	**100.17%**
Demand Deficit										
Ladies' Dormitory	- 55	- 63	- 71	- 80	- 91	- 103	- 117	- 132	- 150	- 170
Mens' Dormitory	- 50	- 55	- 63	- 71	- 80	- 91	- 102	- 116	- 131	- 149
Number of New Rooms to be Constructed per year										
Ladies' Dormitory	**55**	**8**	**8**	**9**	**11**	**12**	**14**	**15**	**18**	**20**
Mens' Dormitory	**55**	**5**	**8**	**8**	**9**	**11**	**11**	**14**	**15**	**18**
Total	**110**	**13**	**16**	**17**	**20**	**23**	**25**	**29**	**33**	**38**

Table 2-34: Projected Demand for University Employees (2023-2032)

Scenarios	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Projections										
Total Projected Student Population	7,738	8,452	9,260	10,175	11,213	12,391	13,727	15,244	16,969	18,931
Projected Demand by Employee Type										
Faculty	290	316	347	381	420	464	514	571	635	709
Non-Teaching Staff	319	349	382	420	463	511	566	629	700	781
Total	**609**	**665**	**729**	**801**	**882**	**975**	**1,080**	**1,200**	**1,335**	**1,490**
Total Additional Employee Requirements per year	**65**	**56**	**64**	**72**	**82**	**93**	**105**	**119**	**136**	**154**
Faculty	36	27	30	34	39	44	50	57	65	73

Scenarios	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Non-Teaching Faculty	29	29	33	38	43	49	55	63	71	81
Projected Demand for University Employees by Tenure Type										
Permanent	378	413	453	498	548	606	671	745	830	926
Temporary	75	82	90	99	109	121	134	149	165	184
Contract of Service	130	142	156	171	188	208	231	256	285	318
Part-time	25	27	30	33	36	40	45	50	55	61
Total	**609**	**665**	**729**	**801**	**882**	**975**	**1,080**	**1,200**	**1,335**	**1,490**
Total Additional Employee Requirements per year	**65**	**56**	**64**	**72**	**82**	**93**	**105**	**119**	**136**	**154**
Permanent	105	35	40	45	51	58	65	74	84	96
Temporary	-11	7	8	9	10	11	13	15	17	19
Contract of Service	-45	12	14	15	17	20	22	26	29	33
Part-time	15	2	3	3	3	4	4	5	6	6

Table 2-35: Projected Demand for Personnel Housing (2023-2032)

Scenarios	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Projections										
Total Projected Student Population	7,738	8,452	9,260	10,175	11,213	12,391	13,727	15,244	16,969	18,931
Total Projected Employee Population	609	665	729	801	882	975	1,080	1,200	1,335	1,490
Projected Demand for Personnel Housing										
Projected General Administration and Support Services Employees	221	241	264	290	320	353	392	435	484	540
Total Requirements for Personnel Housing	**180**	**200**	**223**	**249**	**279**	**312**	**351**	**394**	**443**	**499**
Total Additional Personnel Housing Requirements per year	**180**	**20**	**23**	**26**	**30**	**34**	**38**	**43**	**49**	**56**

Projected Demand for Health Facilities

For the case of the health facility, particularly the University Clinic, it was identified during the consultative workshops that it is intended to be upgraded into an infirmary in order to provide round-the-clock health services.

Based on the existing definitions of the Department of Health, an infirmary is classified as a primary care facility. The Planning and Design Guidelines for Primary Care Facilities and other reference documents released by the Health Facilities and Services Regulatory Bureau of the Department of Health (DOH-HFSRB) shall serve as a reference for the design of the infirmary.

Upon availability of morbidity and health services requirements information, the specific services to be prioritized for provision of equipment, or for partnership with other hospitals and health facilities can be identified. For the latter, a preliminary list of potential hospital services partners were identified in **Table 2-36**. Only secondary hospital facilities were found within the 5-km radius of the university. The nearest tertiary hospitals located about 28 kilometers away in Tarlac City.

Table 2-36: Nearby Public and Private Hospitals to Tarlac Agricultural University

Name of Hospital	Location	Type	Category [6]		Bed Capacity
Gilberto O. Teodoro Memorial Hospital (formerly Camiling District Hospital)	≤5km	Public	Secondary		25
Salvador General Hospital	>5km	Private	Secondary		20
Señor Sto. Niño Hospital	Satellite (≤5km) Main (>5km)	Private	Secondary		40

Data Sources: Tarlac Provincial Profile (2018), Camiling CLUP (2017-2026), Private Hospitals Association of the Philippines, Inc. (n.d.)

Table 2-37: Dental Report of the TAU Clinic (2018-2022)

Dental Report					
	2018	**2019**	**2020**	**2021**	**2022**
Consultation with Meds	349	294	49	78	
Oral Prophylaxis	235	356	11	51	222
Tooth Extraction	120	182	35	9	43
dental examination of LS Grade 7	96				
Dental Examination of Freshman	1099				
screening of new students		1994			
issued dental certification		4			
screening of division athletes		45			
municipal meet		35			
Direct Consultation				3	100
Teleconsultation				4	19
	1899	**2910**	**95**	**145**	**384**
Breakdown of Patients					
Lab High School and SHS	235	60			
Senior High	35	44			
College Students	1448	2555	50	2	198
Teaching Staffs	59	58	6	39	38
Non Teaching Staffs	70	60	30	93	92
Out Patient	44	53	9	11	56
Graduate Studies	8				
Others		80			
	1899	**2910**	**95**	**145**	**384**

Data Sources: Tarlac Agricultural University Clinic

[6] Primary Hospital: service capabilities in Medicine, Pediatrics, Obstetrics and Minor Surgery
Secondary Hospital: service capabilities in Medicine, Pediatrics, Obstetrics and Gynecology, General Surgery and other Ancillary Services
Tertiary Hospital: departmentalized and service capabilities in Medicine, Pediatrics, Obstetrics and Gynecology, Surgery, their subspecialties and other Ancillary Services

Table 2-38: Medical Report of the TAU Clinic (2018-2022)

Medical Report					
	2018	**2019**	**2020**	**2021**	**2022**
Consultations	2843	2831	678	1001	2151
BP Reading	518	1706	156	350	328
Medical Certificate issued	1365	1631	515	974	614
Israel OJT Pre-Med	119			38	
Medical and Dental Screening	604	220			
New Employee	2	1548			
Medical for Municipal Meet	110	147			
COEd Field Study	231				
Medical Screening (Freshmen)	591	496			
Medical Screening (CAASUC)	120				148
Screening of SCUAA	114				
Medical Exam PT Students	156				
Vaccination	60	54	287	211	423
Annual Clearance		276			
Bantay BP		94			
Field Study (BEEEd PSEd IV)		25			
Practice Teaching Students					98
BPMonitoring Walk In					358
BP Monitoring (on Site)					1040
BSFT					40
ROTC					159
AME					1014
Teleconsultation					23
Covid Vaccination					106
	6833	**9028**	**1636**	**2574**	**6502**
Breakdown of Patients					
	2018	**2019**	**2020**	**2021**	**2022**
Lab High School and SHS	196	207	21		64
Senior High	167	138	5		10
College Students	1595	2358	192		398
Teaching Staffs	301	282	96	231	576
Non Teaching Staffs	504	529	279	700	1188
Out Patient	68	131	7	19	78
Graduate Studies					
	2831	**3645**	**600**	**950**	**2314**

Data Sources: Tarlac Agricultural University Clinic

Table 2-39: Summary of Classroom Projection with Estimated Budget & Funding Source

YEAR	PROJECTED ENROLLMENT USING METHOD 1 (TABLE 2-16)	PROJECTED CLASSROOM DEMAND	PROJECTED AREA	ESTIMATED BUDGET	FUNDING SOURCE
2023	7738	62	3906	SEE ANNEX B	SEE ANNEX B
2024	8452	80	5040		
2025	9260	100	6300		
2026	10175	123	7749		
2027	11213	149	9387		
2028	12391	179	11277		
2029	13727	213	13419		
2030	15244	251	15813		
2031	16969	294	18522		
2032	18931	343	21609		

Table 2-40: Summary of Laboratory Projection with Estimated Budget & Funding Source

YEAR	PROJECTED ENROLLMENT USING METHOD 1 (TABLE 2-16)	PROJECTED CLASSROOM DEMAND	PROJECTED AREA	ESTIMATED BUDGET	FUNDING SOURCE
2023	7738	123	9225	SEE ANNEX B	SEE ANNEX B
2024	8452	141	10575		
2025	9260	161	12075		
2026	10175	184	13800		
2027	11213	210	15750		
2028	12391	240	15120		
2029	13727	274	2055		
2030	15244	312	23400		
2031	16969	355	26625		
2032	18931	404	303300		

Table 2-41: Summary of Men's Dormitory Projection based on Average University Dorm Size

YEAR	PROJECTED ENROLLMENT USING METHOD 1 (TABLE 2-16)	PROJECTED DORMITORY DEMAND	PROJECTED AREA	ESTIMATED BUDGET	FUNDING SOURCE
2023	7738	50	1200	SEE ANNEX B	SEE ANNEX B
2024	8452	55	1320		
2025	9260	63	1512		
2026	10175	71	1704		
2027	11213	80	1920		
2028	12391	91	2184		
2029	13727	102	2448		
2030	15244	116	2784		
2031	16969	131	3144		
2032	18931	149	3576		

Table 2-42: Summary of Ladies' Dormitory Projection based on Average University Dorm Size

YEAR	PROJECTED ENROLLMENT USING METHOD 1 (TABLE 2-16)	PROJECTED DORMITORY DEMAND	PROJECTED AREA	ESTIMATED BUDGET	FUNDING SOURCE
2023	7738	55	1320	SEE ANNEX B	SEE ANNEX B
2024	8452	63	1512		
2025	9260	71	1704		
2026	10175	80	1920		
2027	11213	91	2184		
2028	12391	103	2472		
2029	13727	117	2808		
2030	15244	132	3168		
2031	16969	150	3600		
2032	18931	170	4080		

GEOGRAPHICAL DESCRIPTION OF SITE FOR HOUSING FACILITIES

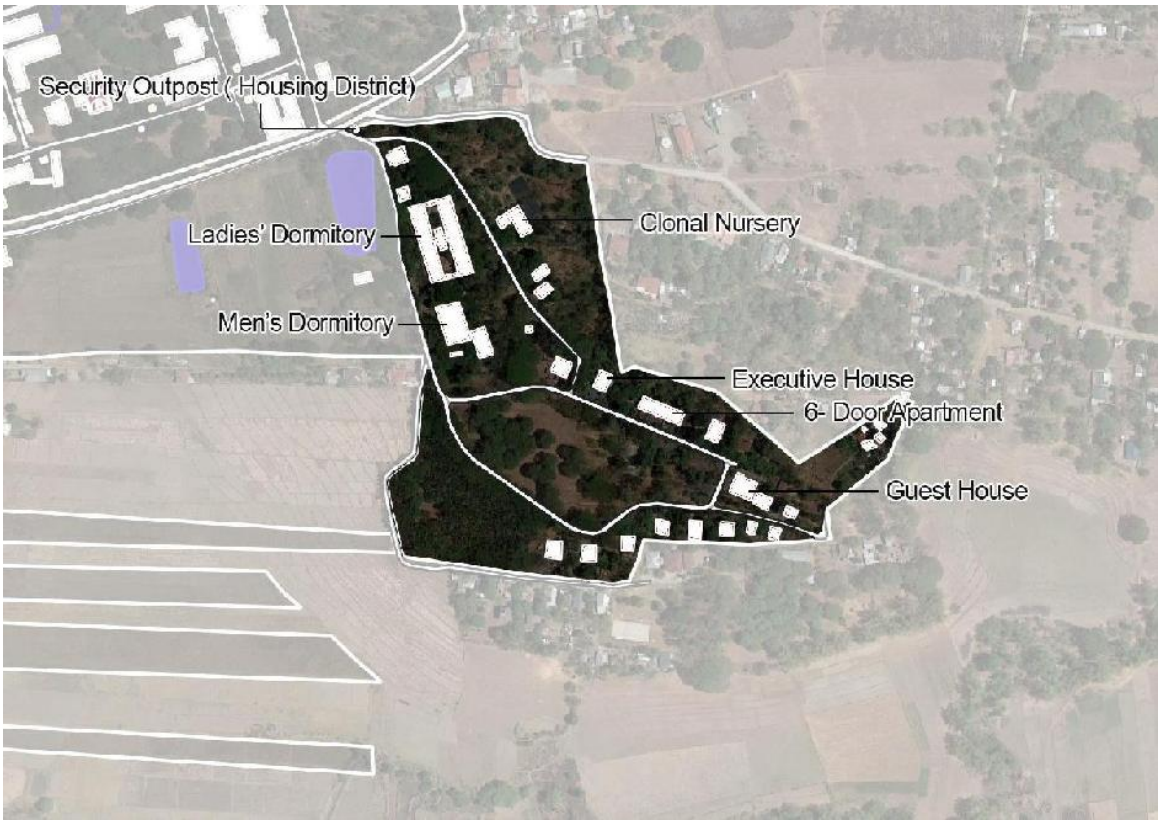


Figure 2-51: Map of College Housing District (Now University District)

Figure 2-52: Geotagged Photo of the Student-Ladies' Dormitory

Figure 2-53: Geotagged Photo of the Student-Men's Dormitory

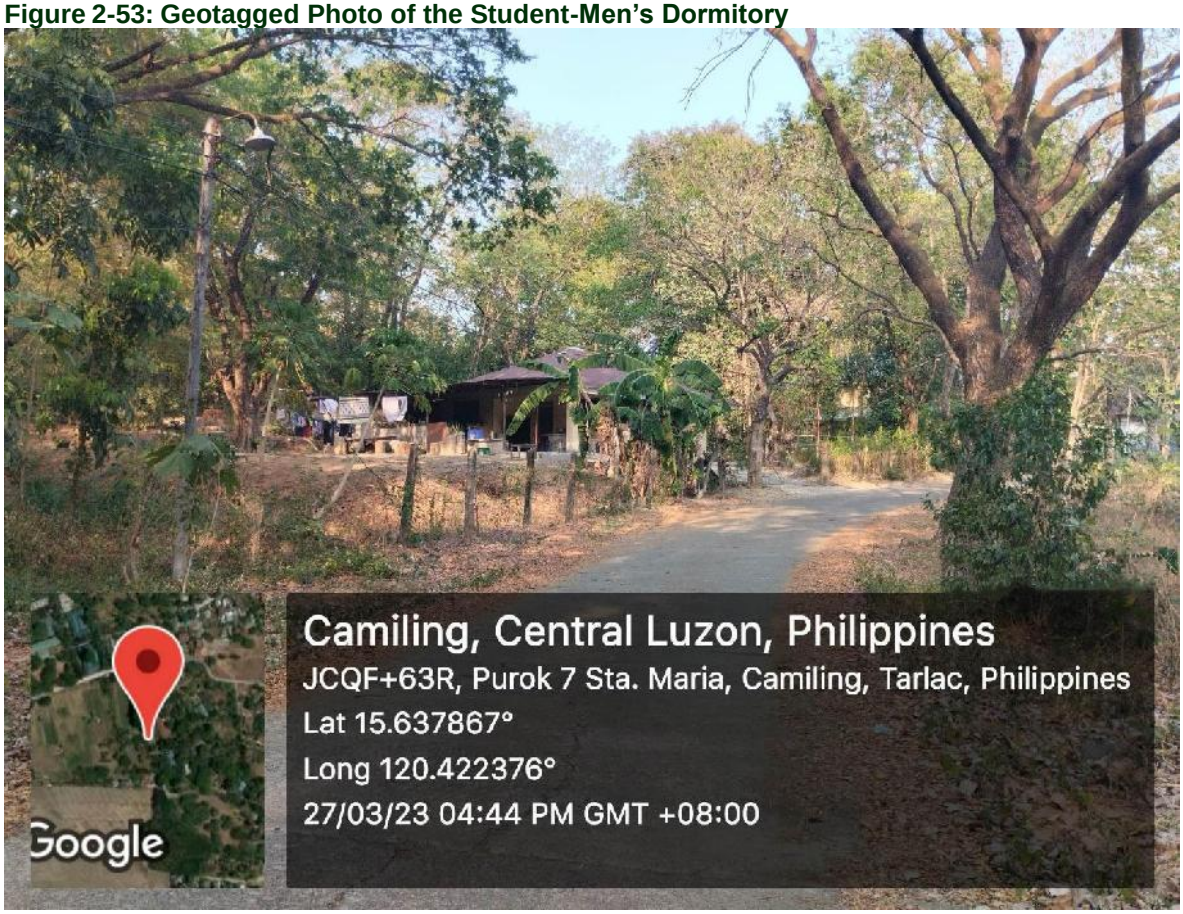


Figure 2-54: Geotagged Photo of the Staff Housing

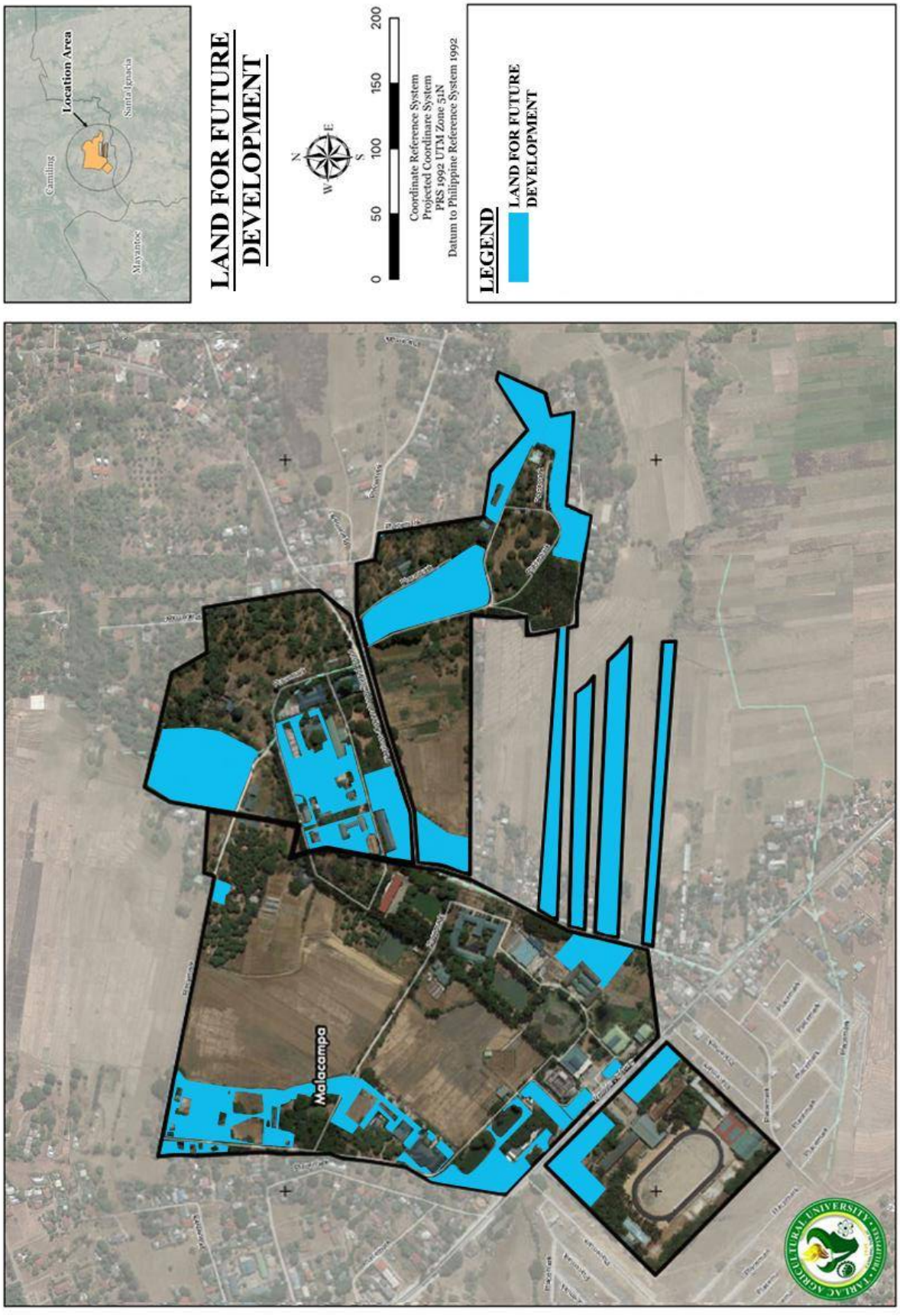


Figure 2-55: Land for Future Developments

LAND FOR FUTURE DEVELOPMENT

As an agricultural university and in support to the carbon neutrality programme of the Philippine government, TAU must properly manage and conserve much of its land for production, vegetation for green spaces, and open areas. However, there are parts of the land inside the university designated for future developments which are strategically located to maximize its usage and to serve better and provide comfort for its constituents. **Refer to Figure 2-55 above**

OTHER SITES OCCUPIED BY THE SUC

By virtue of Presidential Decree No. 1506, TAU was awarded the Calao Forest Reserve located in Sitio Titi Calao, Barangay San Jose, Mayantoc, Tarlac. With approximately 665 hectares, Calao Campus has three (3) structures erected therein, Ecovilla 1, Ecovilla 2 and Bamboo Processing Plant.

The reserve serves as laboratory for field practice and for the establishment of projects which will promote forest conservation and development supportive of agriculture in restorations of watersheds, prevention of floods and drought and maintenance of ecological balance within the natural environment.

Calao Forest Reserve is basically a secondary forest dominated with planted exotics like *Sweitenia macrophylla*, *Tectona grandis*, *Gmelina arborea* and *Bauhinia monandra* and natives like *Piliostigma malabarica*, *Syzygium cumini*, *Pittosporum pentandrum*, *Pterospermum diversifolium*, *Antidesma ghaesambilia*, *Mallotus* cf *philippensis* and *Vitex negundo*. Also, planted species of Bamboo, i.e. *Bambusa blumeana* and *Bambusa merilliana* as one of the banner commodities of the university.

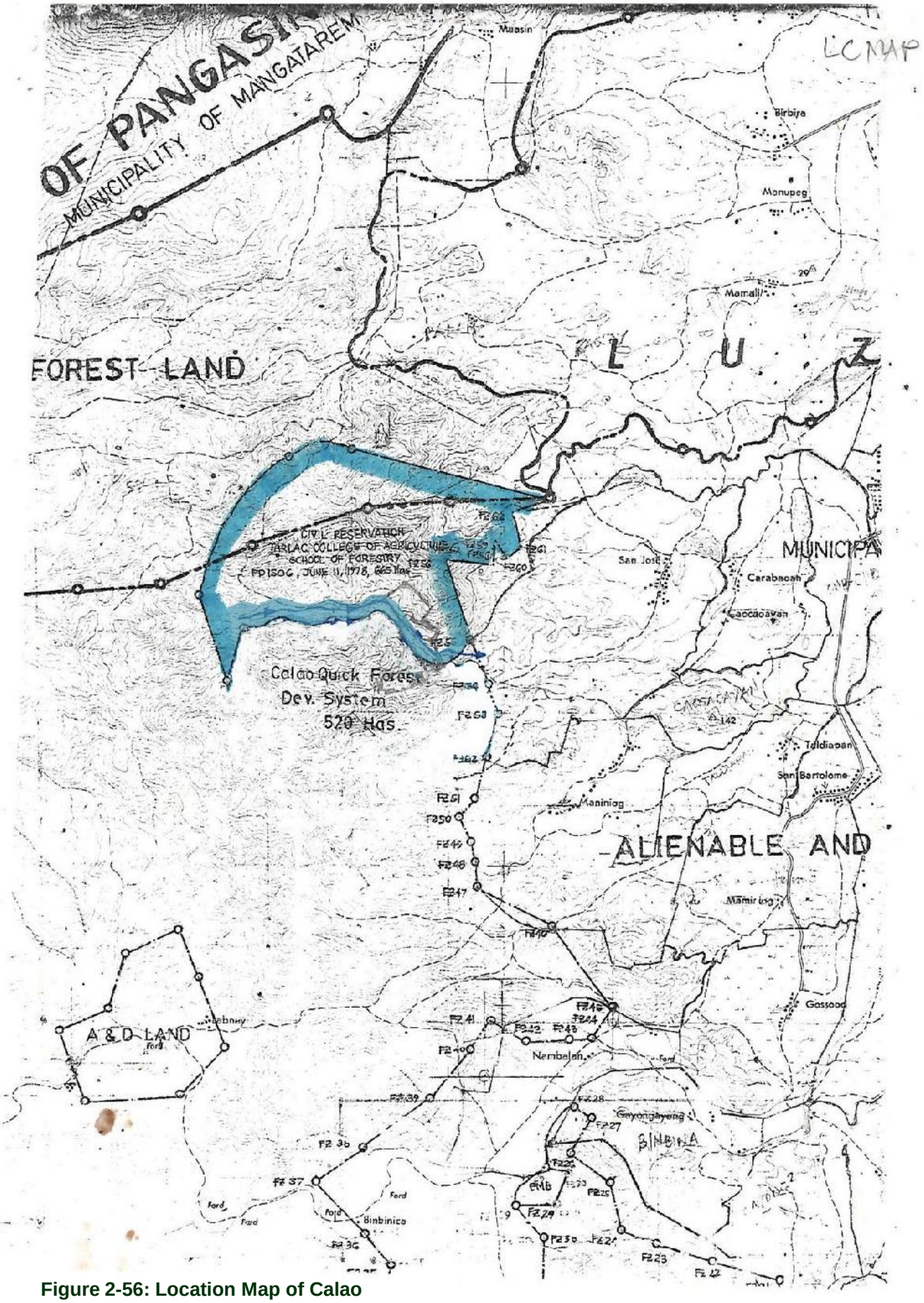


Figure 2-56: Location Map of Calao

Table 2-43: Technical Description of Lots in Calao acquired through PD1506

LINES	BEARING AND DISTANCE	COR.	DESCRIPTION OF CORNERS
1-2	N 790W 400 METERS	1	MBM No. 20 or Cor I A & D Blk I, Proj. 13
2-3	S SE 600 meters	**2**	Kaldios 10 cms. Cor. 62″ Blk I, Proj. 13
3-4	S SE 150 meters	3	Binayoyo 15 cms. Cor 61″ Blk I, Proj. 13
4-5	N 40W 375 meters	**4**	Binayoyo 20 cms. Cor. 60″ Blk I, Proj. 13
5-6	S 9W 487 meters	**5**	Himbabao 20 cms. Cor. 59″ Blk I, Proj. 13
6-7	S 89W 150 meters	**6**	Binayoyo 10 cms. Cor. 58″ Blk I, Proj. 13
7-8	S 89W 358 meters	**7**	Misc. Sp. 10 cms. Cor. 57″ Blk I, Proj. 13
8-9	S 24E 750 meters	8	Misc. Sp. 10 cms. Cor. 56″ Blk I, Proj. 13
9-10	S 44W 410 meters	9	Banaba 15 cms. Cor. 55″ Blk I, Proj. 13
10-11	S 22W 140 meters	10	Alibangbang 25 cms. at N. Bank Titi creek
11-12	Foll. Titi Creek in the Gen direction of NW with a distance of 416 M 11	Alibangbang 20 cms. N. Bank of Creek	
12-13	Foll. Titi Creek in a NW direction at a distance of 12	Alibangbang 20 cms. N. Bank of Creek of 496 m.	
13-14	Foll. Titi Creek in a SE direction at a distance of 218 M. 13	Alibangbang 25 cms. N. Bank of Creek.	
14-15	Foll. Titi Creek in a westerly direction 260 m. distance14	Alibangbang 20 cms. N. Bank of Creek.	
15-16	Foll. Titi Creek in a westerly direction 255 m. distance15	Alibangbang 30 cms. N. Bank of Creek.	
16-17	Foll. Titi Creek in a westerly direction 440 m. distance16	Alibangbang 25 cms. N. Bank of Creek.	
17-18	Foll. Titi Creek in a westerly direction 405 m. distance 16	Alibangbang 25 cms. N. Bank of Creek.	
18-19	Foll. Titi Creek in a westerly direction at a distance of 441 m. 18	Alibangbang 30 cms. N. Bank of Creek.	

19-20	Foll. Titi Creek in a SW direction at a distance of 170 m. 19	Alibangbang 30 cms. N. Bank of Creek.	
20-21	Foll. Titi Creek in a SW direction 438 m. distance 20 Stake at N	Bank of Titi Creek	
21-22	170 W 80 Meters 21 Stake		
22-23	19 W 200 Meters 22 Stake		
23-24	19 W 200 Meters 23 Stake		
24-25	19 W 160 Meters 24 Lamong, 114 cms.		
25-26	19 W 200 Meters 25 Stake		
26-27	19 W 180 Meters 26 Stake		
27-28	19 W 180 Meters 27 Stake		
28-29	61 E 180 Meters 28 Bingas, 100 cms.		
29-30	61 E 180 Meters 29 Stake		
30-31	Foll. Tugui Creek downstream 220 M	30	Stake at a source of Tugui Creek
31-32	Foll. Tugui Creek downstream 340 M.	31	Stake
32-33	Foll. Palis E. Downstream 400 m.	32	Junction of Tugui Creek & Palis River
33-34	Foll. Palis R. Meters stream 280 M	33	Stake
34-35	Foll. Palis R. downstream 510 M.	34	Stake
35-36	Foll. Palis R. Downstream 400 M.	35	Stake
36-37	Foll. Palis R. Downstream 540 M.	36	Stake
37-38	S 73 E. 220 Meters	37	Junction of Palis R. and Pias Creek
38-39	S 73 180 Meters	38	Stake

39-40	S 73 240 Meters	39	Stake
40-41	200	40	Akleng Parang, 40 cms.
41-42	180	41	Stake
42-43	250	42	Stake
43-44	220	43	Stake
44-45	200	44	Stake
45-46	240	45	Alibangbang, 25, cms.
46-47	180	46	Duhat, 30 cms.
47-48	160	47	Binayoyo, 25, cms
48-49	142	48	Stake
49-1	150	49	Stake

2.5 Inventory of Existing Buildings, Facilities and Other Infrastructure

An inventory of the existing buildings of TAU is included in the annex of the draft plan.

Table 2-44:Total Area and Percentage Share per district and vegetation pattern

Zone	Total Area (sqm)	Percentage Share (%)
Academic District		
Built-up Area	23,774.271	3.42%
Forested Vegetation	3,378.818	0.49%
Planted Vegetation	48,436.018	6.97%
Other Areas for Water Absorption	19,741.644	2.84%
Open Space Area	9,939.199	1.43%
University Services		
Built-up Area	3486.0175	0.50%
Forested Vegetation	0	0.00%

Planted Vegetation	0	0.00%
Other Areas for Water Absorption	1589.026	0.23%
Open Space Area	11129.1065	1.60%
Agro-Ecotourism		
Built-up Area	15,546.3475	2.24%
Forested Vegetation	9,406.7	1.35%
Planted Vegetation	0	0.00%
Other Areas for Water Absorption	39,983.634	5.75%
Open Space Area	12,045.7985	1.73%
Sports and Athletic District		
Built-up Area	16,273.14	2.34%
Forested Vegetation	0	0.00%
Planted Vegetation	33,954.37	4.89%
Other Areas for Water Absorption	10,344.36	1.49%
Open Space Area	7,570.13	1.09%
Agri-technology Park		
Built-up Area	4,006.03	0.58%
Forested Vegetation	0	0.00%
Planted Vegetation	37,089.95	5.34%
Other Areas for Water Absorption	0	0.00%
Open Space Area	2,481.93	0.36%
Research and Production District		
Built-up Area	21,475.18	3.09%
Forested Vegetation	0	0.00%
Planted Vegetation	133,858.29	19.26%
Other Areas for Water Absorption	0	0.00%
Open Space Area	15,072.00	2.17%
University Housing District		
Built-up Area	5,695.65	0.82%
Forested Vegetation	9,970.65	1.43%

Planted Vegetation	58,567.33	8.43%
Other Areas for Water Absorption	0	0.00%
Open Space Area	2,512.72	0.36%
Bamboo Park		
Built-up Area	2,916.82	0.42%
Forested Vegetation	0	0.00%
Planted Vegetation	39,828.69	5.73%
Other Areas for Water Absorption	0	0.00%
Open Space Area	2,230.41	0.32%
Road Network	**58,132.38**	**8.37%**
Land Allocated Outside the Campus	**34,417.00**	**4.95%**
TOTAL	**694,853.60**	**100**

Table 2-45: Open Space Calculation

District	Zone based on PD 1096	Percentage of Site Occupancy	Total Open Space of the Lot	PROPOSED AREA (SQ.M)	Allowable Maximum PSO	Area for Open Space
Academic	GI	50%	50%	105,269.95	52,634.98	52,634.98
College Services	GI	50%	50%	20,751.21	10,375.61	10,375.61
Agro-Ecotourism	C3	80%	20%	72,435.42	57,948.34	14,487.08
Sports and Athletic	GI	50%	50%	68,142.00	34,071.00	34,071.00
Agri-Business Hub	C3	80%	20%	51,392.75	41,114.20	10,278.55
Research and Production	PRE	20%	80%	256,888.00	51,377.60	205,510.40
Bamboo Park	PRE	20%	80%	44,975.91	8,995.18	35,980.73
College Housing	R2	55%	45%	76,746.36	42,210.50	34,535.86

Table 2-46: Inventory of Built Up Area Carrying Capacity

Zone	Existing Built Up Area	Capacity/ Land Budget	Current Status
Academic District	23,774.271	52,634.98	45% of the capacity
College Services (University Services Now)	3486.0175	10,375.61	34% of the capacity
Agro Eco-Tourism	15,546.3475	57,948.34	27% of the capacity
Sports and Athletic District	16,273.14	34,071.00	48% of the capacity
Agricultural Technological Park (Agri-Business Hub Now)	4,006.03	41,114.20	10% of the capacity
Research and Production District	21,475.18	51,377.60	42% of the capacity
Bamboo Park	2,916.82	8,995.18	32% of the capacity
College Housing District (University Housing District Now)	5695.65	42,210.50	13% of the capacity

Table 2-47: Inventory of Built Up Areas for Technological Infrastructure and Utilities

Water Supply			
Infrastructure	**Length/Size/Power**	**Condition/Status**	**Location**
7 Solar Pumps			
Solar Pump 1	2 HP	Functional	Academic District
Solar Pump 2	2 HP	Functional	Agro-Ecotourism District
Solar Pump 3	2 HP	Functional	Agricultural Technological Park
Solar Pump 4	2 HP	Functional	Research and Production District
Solar Pump 5	2 HP	Functional	Agro-Ecotourism District
Solar Pump 6	2 HP	For repair	Research and Production District
Solar Pump 7	2 HP	For repair	Bamboo Park
2 Deep Well Pumps			
Deep Well Pump 1	10 HP	Functional	University Housing District
Deep Well Pump 2	15 HP	Functional	Agro-Ecotourism District
7 Submersible Pumps			
Submersible Pump 1	2 hp	Functional	Academic District
Submersible Pump 2	2 hp	Functional	Research and Production District
Submersible Pump 3	2 hp	Functional	Academic District
Submersible Pump 4	2 hp	Functional	Research and Production District
Submersible Pump 5	2 hp	Functional	Sports and Athletic District
Submersible Pump 6	2 hp	Functional	Bamboo Park
Submersible Pump 7	2 hp	Functional	Agro-Ecotourism District
Water Supply Line	23 Accounts- 23 Tapping Points	Functional	

Power Supply			
Infrastructure	**Length/Size/Power**	**Condition/Status**	**Location**
Primary Line	68,000 kwh-2022 Ave. per month	Functional	
	49,296 kwh-2021 Ave. per month	Functional	
15 Step Down Transformer		Functional	
Step Down Transformer	3 Phase	Functional	Sports and Athletic District
Step Down Transformer	3 Phase	Functional	University Services District
Step Down Transformer	3 Phase	Functional	University Services District
Step Down Transformer	3 Phase	Functional	Agro-Ecotourism District
Step Down Transformer	3 Phase	Functional	Agro-Ecotourism District
Step Down Transformer	3 Phase	Functional	Research and Production District
Step Down Transformer	3 Phase	Functional	Academic District
Step Down Transformer	3 Phase	Functional	Agro-Ecotourism District
Step Down Transformer	3 Phase	Functional	Agro-Ecotourism District
Step Down Transformer	3 Phase	Functional	Academic District
Step Down Transformer	3 Phase	Functional	Academic District
Step Down Transformer	3 Phase	Functional	Academic District
Step Down Transformer	3 Phase	Functional	University Housing District
Step Down Transformer	3 Phase	Functional	University Housing District
Step Down Transformer	3 Phase	Functional	Research and Production District

Waste Water Management		
Infrastructure	**Length/Size/Quantity**	**Condition/Status**
Drainage System		
Open Type	2644m	Functional
Box Type	2656m	Functional
Culvert	22	Functional

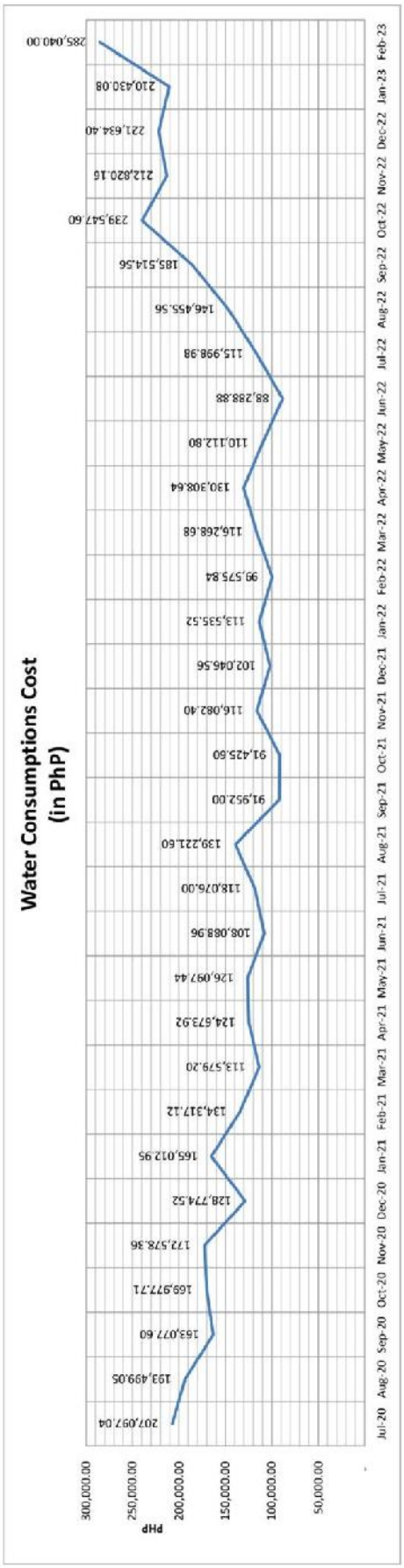


Figure 2-57: Water Consumption Cost (in PHP)
Data Source: TAU General Services Office

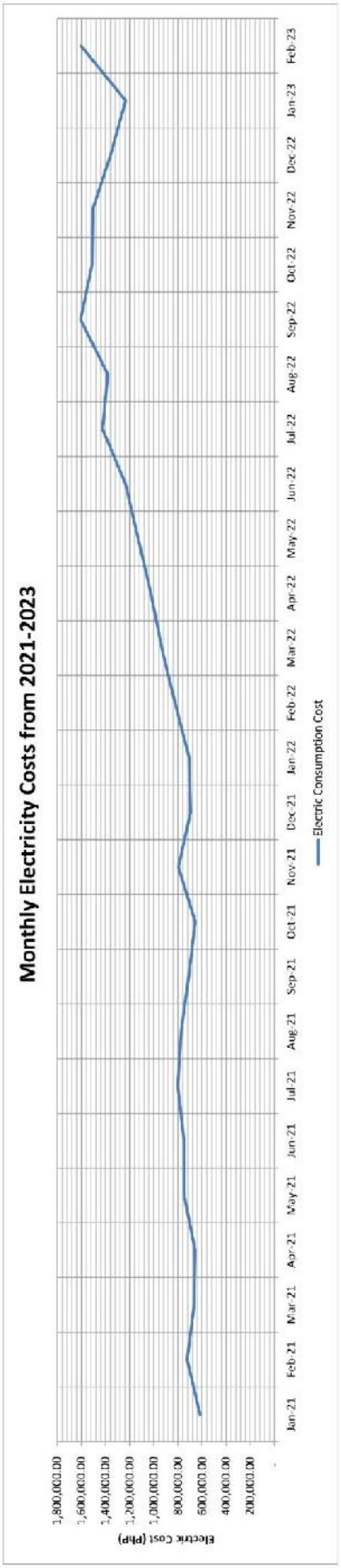


Figure 2-58: Monthly Electricity Costs from 2021-2023
Data Source: TAU General Services Office

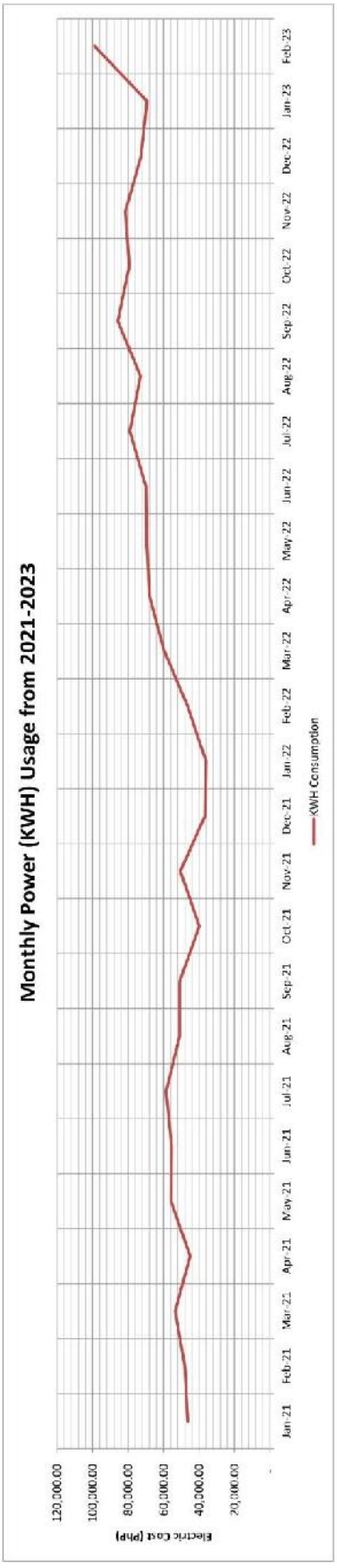


Figure 2-59: Monthly Power (KWH) Usage from 2021-2023
Data Source: TAU General Services Office

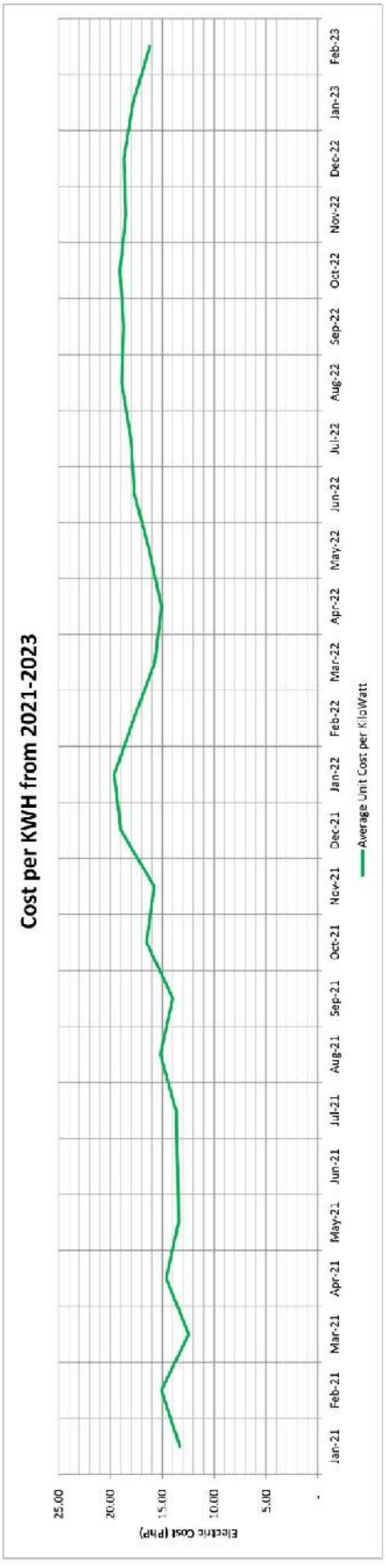


Figure 2-60: Cost per KWH from 2021-2023
Data Source: TAU General Services Office

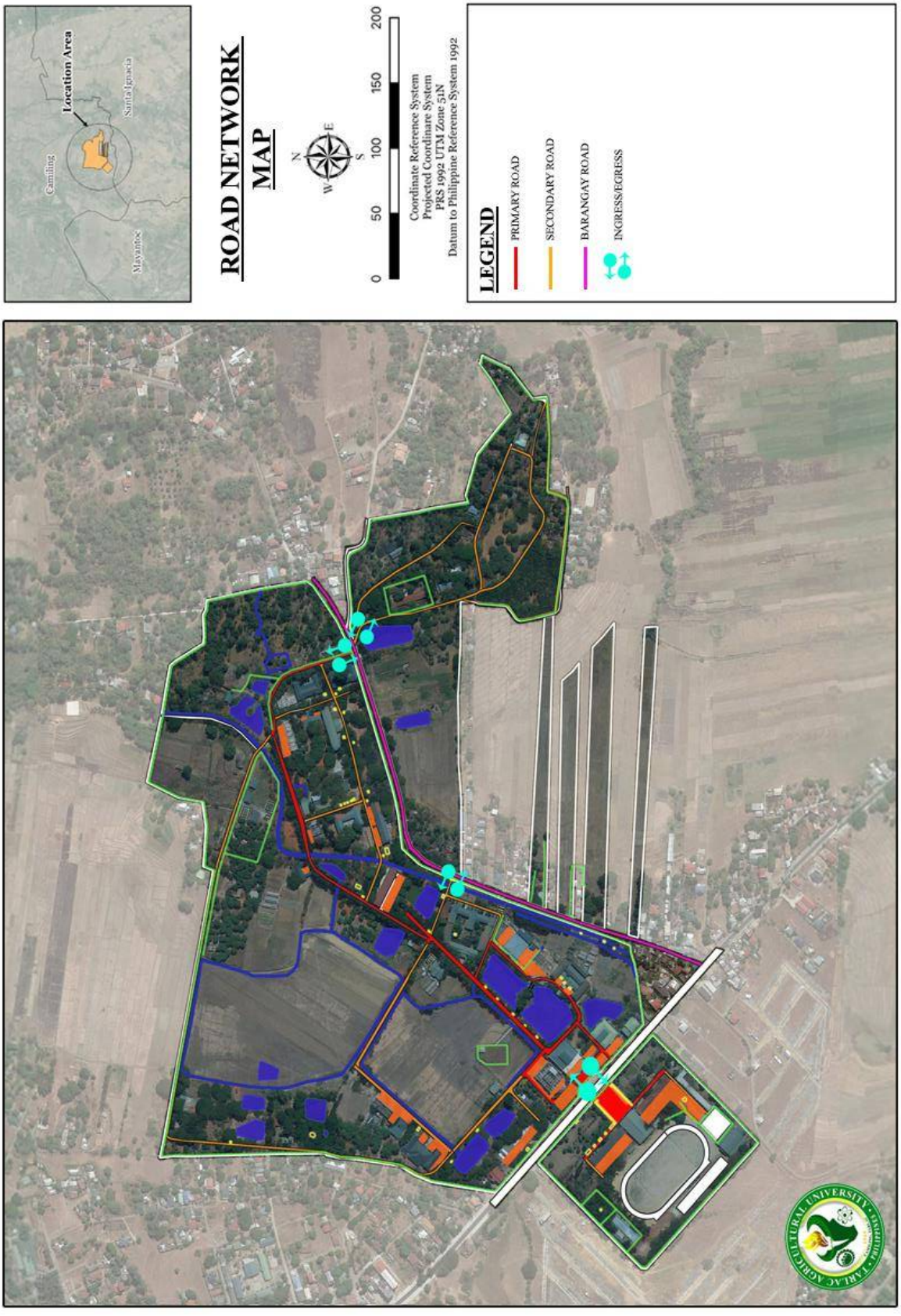


Figure 2-61: Map of Road Networks

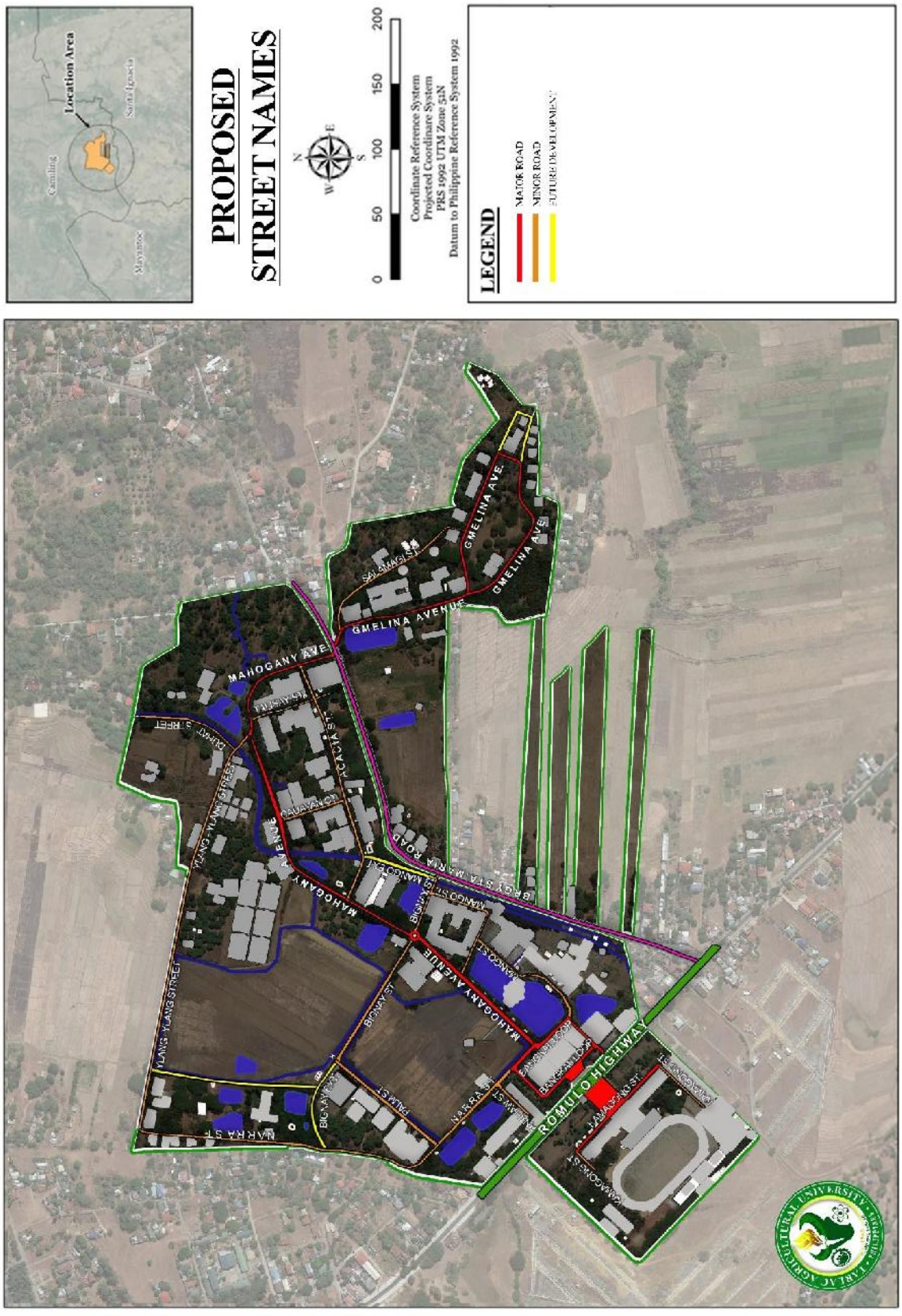


Figure 2-62: Proposed Street Names

Road Name	Classification	Year Constructed	Road Surface Type								Hazard Susceptibility (H/M/L)					
			Right of Way	Total Length(m)	Concrete			Earth								
					L (m)	%	C	L (m)	%	C	FI	TC	Eq	Vo	Ln	Lq
Bangkal Loop	Major Road	2017	8.1	436	436	100	F				L	M	M	L	L	L
Mahogany Avenue	Major Road	1992	8.4	849.77	849.77	100	P				L	M	M	L	L	L
Gmelina Avenue	Major Road	1997	4	1070	1070	100	F				L	M	M	L	L	L
Kamagong Street	Major Road	1992	4.5	387	387	100	F				L	M	M	L	L	L
Anahaw Street	Minor Road	2004	4	70	70	100	F				L	M	M	L	L	L
Narra Street	Minor Road	2008	7.3	650	650	100	C				L	M	M	L	L	L
Palm Street	Minor Road	2000	6.7	192	192	100	F				I	M	M	I	I	I
Mango Street	Minor Road	2000	5.4	388	388	100	P				L	M	M	L	L	L
Bignay Street	Minor Road	2000	4	86.66	86.66	100	F				I	M	M	I	I	I
Acacia Street	Minor Road	1992	4	401	401	100	P				L	M	M	L	L	L
Cauayan Street	Minor Road	1992	4	101	101	100	P				L	M	M	L	L	L
Talisay Street	Minor Road	1992	4	100.68	100.68	100	P				L	M	M	L	L	L
Ylang-ylang Street	Minor Road	2014	4	655	196.5	30	C	196.5	30	C	I	M	M	I	I	I
Salamagi Street	Minor Road	2017	4	290	290	100	F				L	M	M	L	L	L

Table 1-48: Inventory of Roads

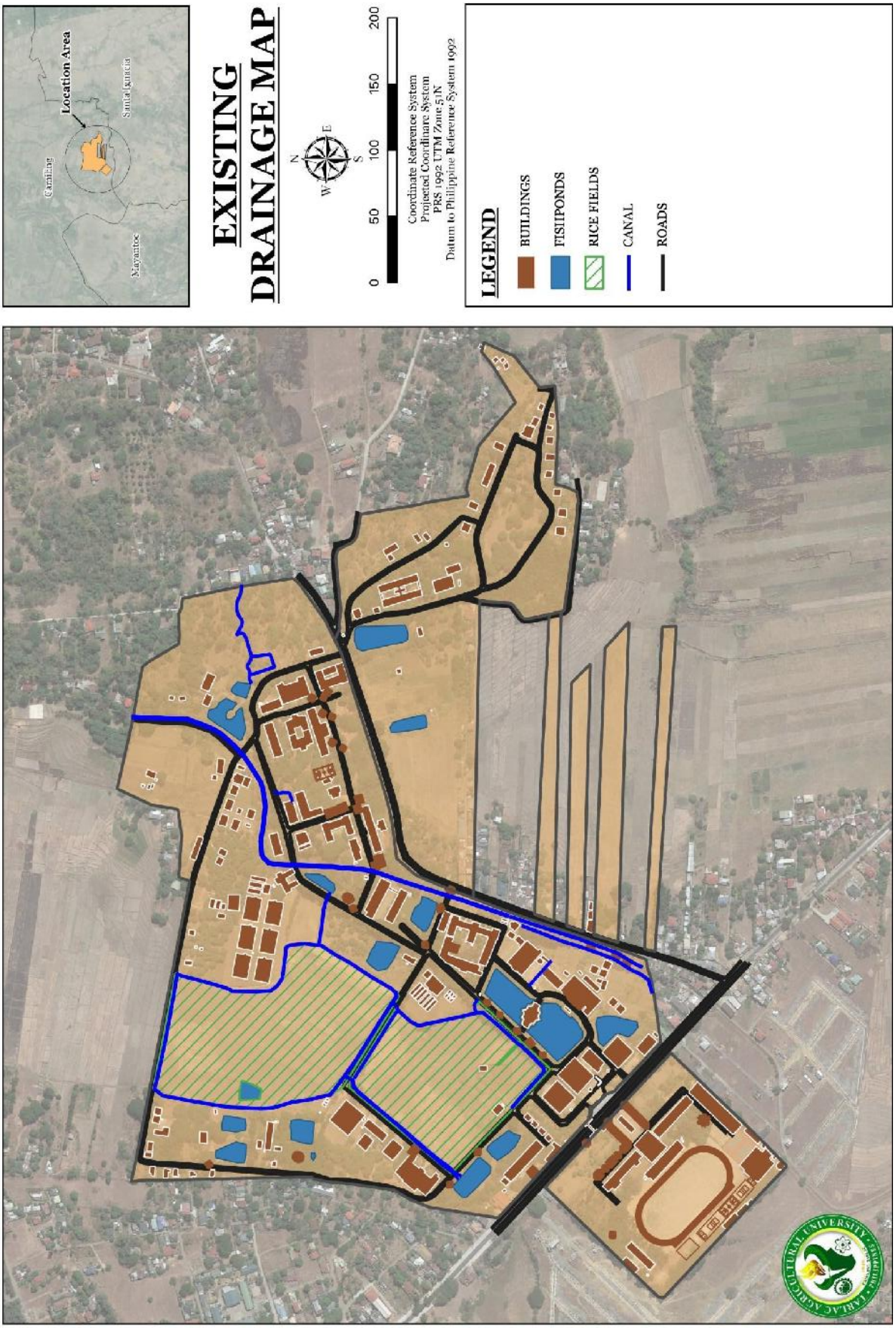


Figure 2-63: Existing Drainage Map of TAU

Figure 2-64: Map of Parking Areas

Parking Areas

The figure shows the proposed parking areas within the university premises. With that, standard parking slots is considered whereas there is 1 car slot for every five (5) classrooms, provision of one (1) off-RROW (or off-street) passenger loading space that accommodates two (2) queued jeepney or shuttle slots, and one (1) school bus slot for every 200 students. All PWD parking slots is situated near the building entrance.

ISSUES, GAPS, CHALLENGES AND OPPORTUNITIES

There is an existing 130,593 sq.m or 13.05 hectares of land allocated outside the campus of TAU.
Since 2001, the land titling and consolidation of the University has been ongoing. Of the 32 lots covering 70.8 hectares being claimed by TAU, 27 lots consisting of a land area of 57.75 hectares has formally been titled and included under the ownership or custodianship of the University. As noted in Table 2-5, five parcels of land have issues:

- *Lot No. 12017 − C (13,018 sqm)*: covers areas where administration and support services buildings are located, including the office of the DENR-CENRO Camiling Office, lot parcel has no land title available on hand.
- *Lot No. 12014 (45,074 sqm)*: covers areas where academic buildings, administration buildings, research, extension and training facilities, and utilities are located, lot parcel has no land title available on hand.
- *Lot No. 12019 (40,000 sqm)*: covers areas where academic buildings, and research, extension and training facilities are located, including the College of Veterinary Medicine, lot parcel has no land title available on hand.
- *Lot No. 14877 (3,486sqm)*: covers areas within the Research and Production District, and Academic District, lot parcel has no land title available on hand.
- *Lot No. 11999 (29,015sqm)*: area where various academic buildings are located, lot parcel has no land title available on hand.

Issues on these titles are addressed in coordination with the CENRO Camiling. Series of meetings are made with DENR and CENRO, including the inspection of DENR on lots to title these lots under the name of Tarlac Agricultural University.

SUSCEPTIBILITY TO HAZARDS

On the development of TAU, hazard susceptibility must be considered in order to reduce the economic losses and reduce the vulnerability of TAU. TAU should assess natural hazards as they develop to consider ways on how to avoid or mitigate damage. **Figure 2-18** and **Figure 2-19** shows the susceptible areas of TAU from flooding and liquefaction.

Risk Mitigation Measures:

- Information Dissemination;
- Establishment of power back-up system;
- Maintain a database of alternate suppliers;
- Improvement of the warning systems with the use of latest and available technology;
- Strengthen the capability of Local (University) responders.
- Development of an Effective Plan for Response and Recovery; and
- Strengthen the capability of structural designers and construction implementers of future projects.

DEVELOPMENT CONSTRAINTS

In line with its vision to build disaster-resilient and smart infrastructure, TAU **shall** maximize the availability of solar power by integrating solar photovoltaic (PV) panel to generate electricity for the buildings. Aside from that, TAU **shall** take advantage of the natural cooling, wherein building shall have adequate size of openings which can control the heat gain and heat dissipation within the building. This approach can lessen the use of air-conditioning and minimize the consumption of electricity, or no consumption at all. Aside from that, permeable paving surface shall be considered to reduce surface runoff and to filter pollutants from storm water.

Building designs shall comply with the existing laws such as PD 1096 or the National Building Code of the Philippines, in which the building shall follow the minimum setbacks and be oriented properly. Other than that, the building height shall conform to the law or the local ordinance, or whichever is more stringent.

To comply with RA 9514 or the Fire Code of the Philippines, buildings shall be integrated with FDAS or Fire Detection and Alarm System, as well as provision of two (2) means of egress.

All buildings shall be accessible to everyone regardless of one's physical condition. With that, all buildings must be designed in accordance with the BP 344 or the Accessibility Law. Provision of ramps and PWD comfort rooms shall be considered. Walkways shall be provided with slip-resistant material and shall conform with the minimum width of 1200mm. And for every 12 meters, a rest stop or turning space shall be provided. Also, dropped curb, curb cut-outs, signage, and warning blocks shall be provided along the walkways. Also, PWD parking shall be provided for every building, it shall be located to the nearest point of entry of the building.

3 TAU DEVELOPMENT, LAND USE AND INFRASTRUCTURE PLAN

The Planning Process

A Technical Working Group for the development of the Land Use and Infrastructure Development Plan of Tarlac Agricultural University was formed on October 14, 2022 by virtue of Memorandum No. 144, s. 2022. The TAU LUDIP TWG and the university community have been engaged in a series of consultations and workshops to gather their insights and to inform the development of the TAU LUDIP, namely in the following:

- On October 18 -19 2022, a planning workshop was conducted with the participation of various university offices and departments. The participants were divided into sectoral groups to ensure that all concerns are encompassed and covered. Grounded on the insights provided by key stakeholders the vision statement, mission statement, and university core values were reformulated to serve as guide in the development of the Tarlac Agricultural University Land Use Development and Infrastructure Plan. These are presented in **Section 3.**.

- From October to November 2022, outputs were requested from the respective sectoral groups to define the goals, objectives, targets, and strategies for the specific concerns of their sectoral groups. The activity was done remotely.

- On November 17-19, 2022, the second planning workshop was conducted to finalize the goals, objectives, targets, and strategies per sector, to identify the climate risk and hazard exposure within the campus, to identify and prioritize the programs, projects and activities to be included in the LUDIP. The resulting outputs are incorporated in **Section 3.5 and Section 3.6**

- On February 8, 2022, together with the TAU LUDIP TWG Members, the initial checking of CHEDRO III was conducted. Their outputs and recommendations were included in the TAU LUDIP.

- On February 9 to March 24, 2023, the TAU LUDIP TWG Members conducted a planning workshop that with the agenda of discussing the feedbacks and areas of concern of CHEDRO III representatives. This part of the planning process focused on the lapses of the Campus LUDIP based on the initial checking of CHEDRO. The TAU LUDIP TWG Members consolidated all the supplemental data needed for the TAU LUDIP and then updated the initial draft to provide the final out: The Tarlac Agricultural University Land Use Development and Infrastructure Plan.

Vision, Mission and Core Values

VISION

The vision statement of TAU depicts the desires of its people for the University in the next ten (10) years and beyond. This serves as the guiding framework for the University, which is translated into its major programs and projects across different sectors.

To develop the vision of TAU, a visioning workshop was conducted on October 18-19, 2022. During the workshop, participants from different societal sector of the university were grouped according to different sectors. Each group brainstormed on what vision to adopt for the university. At the end of the workshop, a formulated vision was presented. The formulated vision statement reads as follows:

"Tarlac Agricultural University as the premier agricultural university in Asia that produces holistic and globally-competitive individuals nurtured in an ecologically-balanced and sustainable environment with disaster-resilient and smart infrastructure led by transparent and capable leaders supported by adequate, diversified, and well-utilized financial resources."

Vision Elements

The vision statement shows the overall desired state and quality of TAU. It contains two major components: an outward looking component and an inward looking one.

Outward looking component

The outward looking component of the vision states the desired role that the university can play or the best contribution it can make to the development of a wider community. During the visioning workshop, two points were raised as regards the formulation of the outward looking component: (1) identifying the wider community to which the university intends to make a unique and substantial contribution, and (2) defining the university's role in that wider community.

The visioning workshop participants agreed that the wider community should be international in scope. Specifically, they identified the region of Asia as the wider community to which TAU should make a unique and substantial contribution. The participants also agreed that their desired role for TAU in the wider community is to become a premier agricultural university.

Thus, the outward looking component of TAU's vision was formulated into the university becoming the **premier agricultural university in Asia**. As the premier agricultural university in Asia, TAU shall provide excellent and internationally-recognized academic programs, with a focus on agriculture, food science, and allied disciplines. It shall also undertake research and extension services and production activities that support the development of the agricultural sector in Asia.

Inward looking component

The inward-looking component of the vision presents a picture of the university as a desirable environment for studying, working, and living. This component can be further analyzed into elements which correspond to the different development sectors of the university. The elements of the inward-looking component of the vision were formulated in relation to the following: (1) the values that the university community uphold (social sector), (1) its financial position (economic sector), (3) the condition of its built environment (infrastructure sector), (4) the state of its natural environment (environmental sector), and (5) the quality of its leadership (institutional sector).

Values that the university community upholds

TAU believes that harnessing the full potential of individuals means cultivating not just their intellectual capabilities but also their physical, emotional, moral, psychological, and spiritual attributes. Thus, the university envisions that students, faculty, administrative personnel, and all other members of its community will develop as holistic individuals that are capable of succeeding in a modernizing and interconnected world. With these, one of the visions of TAU is to become a university that **produces holistic and globally-competitive individuals.**

Financial position

TAU recognizes the need to have sufficient financial resources in order to sustain its operations, support its various endeavors and services, and turn its visions and plans into reality. With this, one of the visions of the university is to have **adequate, diversified, and well-utilized financial resources.**

To fulfill this, the university seeks to use its existing land and other assets to implement projects that

provide positive financial return. In implementing these projects, TAU commits itself in promoting environmental sustainability. These projects will not only bring additional revenue to the university but will also allow TAU to reduce its dependence on national government funding and utilize its funds more efficiently. TAU also envisions that 100 percent of its funds should be used only for its intended public purpose.

State of natural environment

TAU strives to **nurture individuals in an ecologically-balanced and sustainable campus.** This involves, among others, integrating and mainstreaming sustainability practices within campus, conserving and promoting renewable energy, and implementing policies and programs that reduce the carbon footprint of the university and protect its natural resources.

Condition of the built environment

TAU aims to build **disaster resilient and smart infrastructure** that will protect its stakeholders from various natural hazards. It shall develop its built environment in such a way that the impact of natural disasters such as typhoons, flood, storm surges, liquefaction, landslides, and earthquakes to the campus and its people will be minimal if not zero.

Quality of Leadership

TAU recognizes that the fulfillment of its vision and various objectives hinges in large part to having a leadership and governance system that manifests competence, transparency, and accountability. With this, the university desires to be led by **transparent and capable leaders.**

MISSION

"Tarlac Agricultural University, as a prestigious agricultural university, is committed to produce highly competent individuals by providing quality education, developing relevant and innovative research, collaborating with local and international communities, and venturing in impactful endeavors aimed at revitalizing the country's agricultural sector for the service of society"

CORE VALUES

Good governance

A TAUian is characterized by good governance. The way in which the power that they have is used for the wellbeing of the organization and the proper usage of economic and social resources for the development of the university.

Resilience

A TAUian is characterized by resilience. Individuals that have the capacity to persevere from difficulties and accomplish more than what is expected of them. In hardships and struggles they are able to persevere and become better individuals that carry themselves with dignity.

Excellence

A TAUian is characterized by excellence. TAU individuals perform competently to their fullest potential, thus rewarding the TAU community with achievements in all fields they undertake. The TAU community pursues a campus environment committed to a culture of excellence in academics and beyond.

Environmentally Responsive

A TAUian is characterized by being environmentally responsive. TAU values the importance of playing a part towards having an ecologically-balanced and sustainable environment by raising environmental

awareness to individuals, exercising environmental practices, being environmentally committed, and having policies and projects towards making TAU a green university.

Noble

A TAUian is characterized by being noble. They have fine personal qualities or high moral principles and ideals that show benevolence to all parts of society.

Trustworthy

A TAUian is characterized by being Trustworthy. Reliability and honesty of character are principles that tamaraws adhere to and follow a code of conduct that is instilled in all members of the TAU community.

Accountability

A TAUian is characterized by accountability. TAU individuals provide and assurance that they are responsible for honest and ethical conduct towards others.

Unity

A TAUian is characterized by unity. TAU is united and acts as a whole in all endeavors they partake to better the university and carry the prestige they have as a top agricultural university in the Philippines.

3.1 Goals and Objectives

SOCIAL SECTOR

Table 3-1: Goals and Objectives for Social Sector

Goals	Objectives
Goal 1: To provide the university with appropriate health support and services	To appoint adequate manpower providing prompt services by 2032
	To provide adequate health equipment and services by 2032
	To avoid mortality of patients in emergency situations by 2032
Goal 2: To provide sufficient residential facilities with a conducive and supportive environment for students and personnel	To supply adequate housing facilities in the university housing district by 2032
	To allocate complete maintenance and security staff for of all residential halls by 2032
	To allocate regular funds for the maintenance and beautification of all residential units by 2032
Goal 3: To secure all facilities and individuals from emergency situations	To provide adequate security force for the campus by 2032
	To have a prepared campus population for various emergency and hazard situations by 2032
Goal 4: To provide a supportive environment to enhance the academic and non-academic skills of students	To provide support programs and initiatives that will expand global presence and international academic outlook of the university by 2032
	To provide adequate facilities and incentives for sports and performance teams by 2033

ECONOMIC SECTOR

Table 3-2: Goals and Objectives for Economic Sector

Goals	Objectives
Goal 1: To have adequate financial resources that could sustain the operations of the University and support its various endeavors and services	To enhance the internally-generated income of the University to at least 40% of total revenue
	To increase the amount of external grants and donations from non-government agencies (e.g. private enterprises, philanthropic foundations)
Goal 2: To strengthen the financial management system of the University and ensure that all funds are utilized efficiently and for its intended public purpose	To maintain a high utilization rate of national government subsidy and external funds starting 2023

ENVIRONMENTAL SECTOR

Table 3-3: Goals and Objectives for Environmental Sector

Goals	Objectives
Goal 1: To ensure the sustainability of the natural resources of the university	To establish an effective management of the natural resources of the university by 2030
Goal 2: To ensure environmental compliance and partnerships of the university	To strengthen the partnerships of the university in terms of environmental sustainability by 2030
	To be known as an environmentally compliant and green university by 2025
Goal 3: To ensure a community that is responsive to waste management	To establish an effective waste management system for the university by 2032
	To create a waste management–focused community outreach program by 2025
Goal 4: To provide access to sufficient soil and water resources for the university	To improve practices on soil and water quality conservation by 2030
	To maximize the utilization of wastewater to become an alternative source of water by 2032
Goal 5: To ensure a carbon-neutral university	To decrease carbon emissions and increase carbon absorption within the university by 2032
Goal 6: To ensure resilient and disaster-ready campus	To design innovative technologies for renewable energy utilization by 2032
	To produce environmentally aware, conscious, and responsible individuals against natural disaster by 2025
	To improve the capacity development of individual TAU for DDRM and CCA by 2025
	To provide adequate DRRM and CCA facilities to support excellent delivery of service by 2030

INSTITUTIONAL SECTOR

Table 3-4: Goals and Objectives for Institutional Sector

Goals	Objectives
Goal 1: To provide excellent service and prosperous operations for the university and the community	Proper and accurate information dissemination to all stakeholders of the university
	Ease of transactions in working operation by 2030
	Foster inclusive and responsive roadmap for stakeholder engagement
Goal 2: To advance linkages with organizations in the country and overseas	To establish new partnerships and sustain existing collaborations to achieve mutually beneficial outcomes
Goal 3: To reinforce the University's national and international standing and impact	To develop a unique identity that will imbibe TAU's reputation
Goal 4: To strengthen good governance to ensure integrity, transparency, efficiency and accountability in management and leadership	To streamline operations based on statutory and regulatory requirements/standards
Goal 5: To produce excellent and competent Human Resources of TAU	Implement a holistic human resource development program focused towards the enhancement of leadership competencies of TAU employees responsive to the current and future needs of the university and its internal and external clients
	To develop graduate attributes that address the needs of industries and PQF standards
Goal 6: Enhance the universities research foundation and promote innovative, relevant, and appropriate research-based technology to provide world-class extension services through enhanced local and international collaborations	To conduct relevant training programs and short non- degree courses in agriculture and other disciplines
	To establish, maintain and sustain on-campus and off- campus demonstration projects showcasing various appropriate technologies generated by the University and its development partners
	To generate, package, and disseminate through tri- media the needed technology/information relevant to the needs of the people and the community
	To establish a strong research foundation through generating research outputs with societal impacts

INFRASTRUCTURE SECTOR

Table 3-5: Goals and Objectives for Infrastructure Sector

Goals	Objectives
Goal 1: To have accessible, usable, and inclusive infrastructure and physical spaces in the campus	To design and upgrade universally-accessible/world class infrastructure by 2032

Goal 2: To ensure a reliable and continuous power supply in the university	To install hybrid and renewable energy systems and upgrade existing power generation systems for efficient use of energy by 2032
Goal 3: To ensure reliable back-up communication system in the campus	To purchase and install mobile-based and land- based DMR as a backup communication system by 2025
	To upgrade existing centralized alarm and paging system by 2024
Goal 4: To have a secured repository of university data	To establish a cyber-threat proof back-up data server on-site and Cloud by 2027
Goal 5: To enhance the quality and quantity of potable water supply system by 2027	To enhance the quality and quantity of potable water supply system by 2027
Goal 6: To establish and maintain functional emergency operations and evacuation centers by 2032	To establish and maintain functional emergency operations and evacuation centers by 2032
Goal 7: To develop and utilize enterprise IT Solutions for university operations by 2025	To develop and utilize enterprise IT Solutions for university operations by 2025

3.2 Development Constraints

Development Constraints are factors that temporarily or permanently limits or prevents the use of land for future development. These development constraints are as follows:

BUILT-UP AREAS

As these areas are existing, they may not be considered for future development. These built-up areas include buildings, roads, canals, rice fields, fishponds, electrical posts, and trees. TAU is a green university that is why the rice fields and trees were considered as existing built-up areas which is not viable for development. **Figure 3-1** shows the built-up areas of TAU while Figure **3-2** shows the buildable and non-buildable areas of TAU.

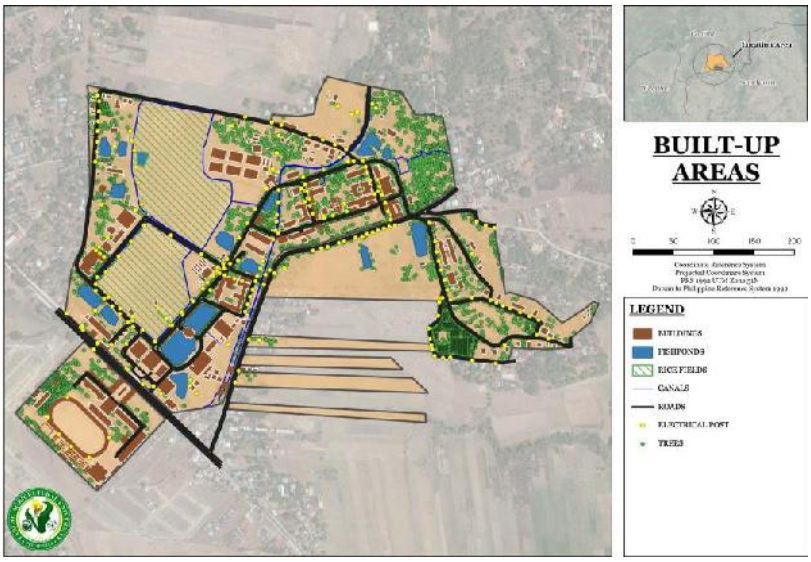


Figure 3-1: Map of Built-up Areas

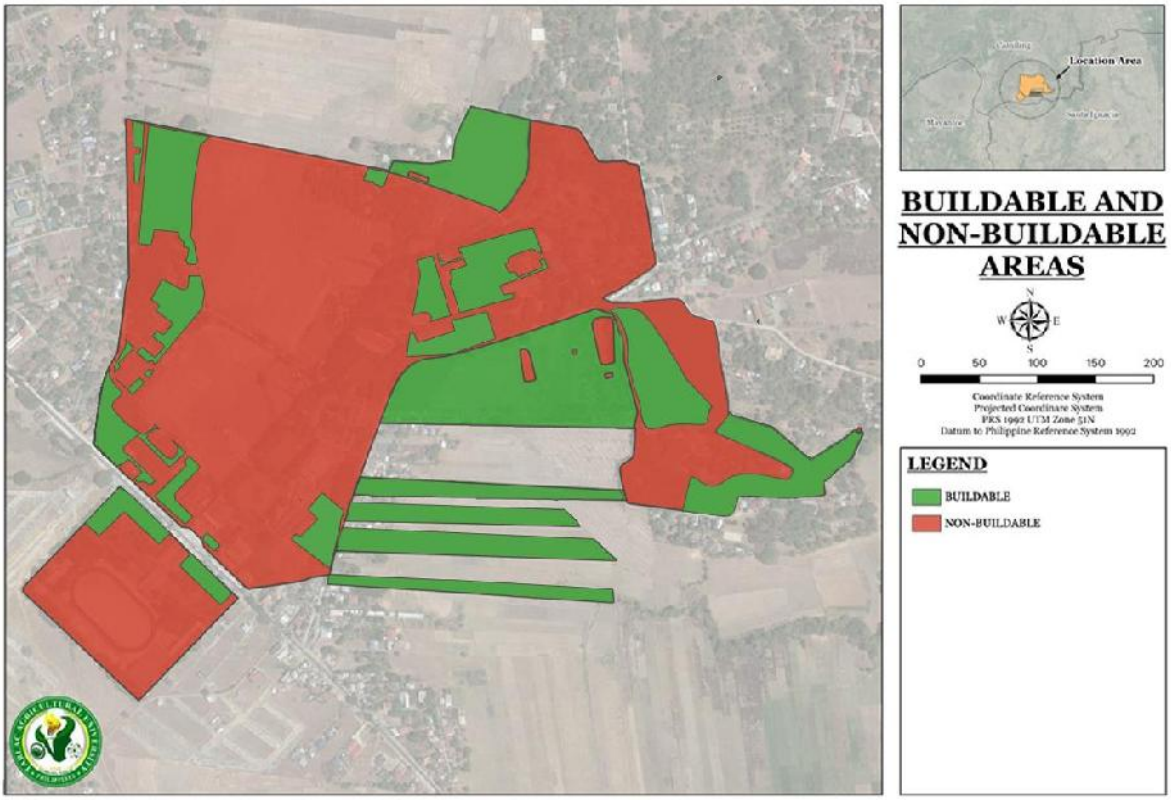


Figure 3-2: Map of Buildable and Non-Buildable Areas

SUSCEPTIBILITY TO HAZARDS

On the development of TAU, hazard susceptibility must be considered in order to reduce the economic losses and reduce the vulnerability of TAU. TAU should assess natural hazards as they develop to consider ways on how to avoid or mitigate damage. **Figure 2-18** and **Figure 2-19** shows the susceptible areas of TAU from flooding and liquefaction.

Risk Mitigation Measures:

- Information Dissemination;
- Establishment of power back-up system;
- Maintain a database of alternate suppliers;
- Improvement of the warning systems with the use of latest and available technology;
- Strengthen the capability of Local (University) responders.
- Development of an Effective Plan for Response and Recovery; and
- Strengthen the capability of structural designers and construction implementers of future projects.

LAND TITLING

Twenty-seven (27) of the thirty-five (35) lots of the campus have land titles comprising a total land area of 54.9 ha of the total campus land area. This may affect future development strategies of TAU because it may have legal implications due to the lack of ownership documents.

3.3 Campus Physical Development Strategies

DEVELOPMENT CONCEPT

Based on the TWG's workshops, the university's recommended development concept is as follows:

"A premier university with a strong sustainability focus that will serve as a growth hub for Camiling and neighboring municipalities."

DEVELOPMENT OBJECTIVES

The development objectives of the university are:

3.3.1 Ensure the University's financial sustainability through:

3.3.1.1 Well-developed projects/programs/activities that increase the internally generated income of the university and lessen its reliance on national government subsidies

3.3.1.2 Improved expenditure programming and procurement planning that minimize delays in the implementation of projects and ensure the proper utilization of funds

3.3.1.3 Proper formulation and implementation of development plans that would utilize the university's land and other assets for commercial activities while promoting environmental sustainability

3.3.2 Enhance the university's accessibility, resiliency, security, and sustainability through:

3.3.2.1 Application of the Accessibility law (BP 344) Standards in all the institute's facilities and buildings

3.3.2.2 Defined placement of the emergency facilities

3.3.2.3 Defined location of ingress and egress points

3.3.2.4 Adaptation of Green Technologies

3.3.3 Ensure environmental protection, conservation of natural resources, and environmental sustainability through:

3.3.3.1 Strict compliance and monitoring of environmental compliance

3.3.3.2 Inclusion and prioritization of environmental projects, programs, and activities

3.3.3.3 Adding and enhancing existing facilities for environmental sustainability

3.3.4 Strengthen the institute's adjacency and interdisciplinary collaboration through:

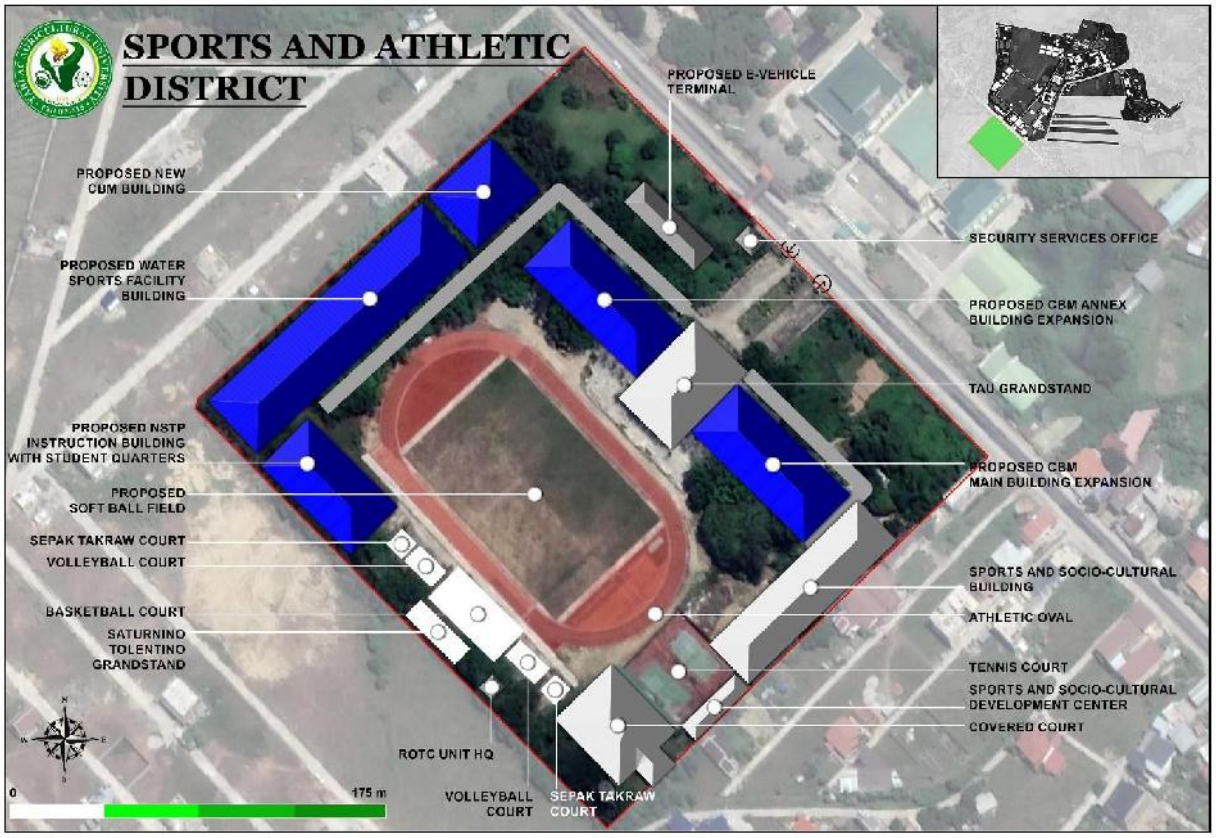
3.3.4.1 Defined location of academic and research production facilities

3.3.4.2 Zoning of Districts

3.3.4.3 Application of "Study, work, live and play" Concept

3.4 Development Concept and Structure Plan

PROPOSED SPORTS AND ATHLETIC DISTRICT



The Sports and Athletic District houses the different sports facilities of the University. The College of Business Management is also found here. The picture shown above shows the proposed development for the district. The buildings, which are in color, symbolize the proposed new developments and improvements that can be made in the future.

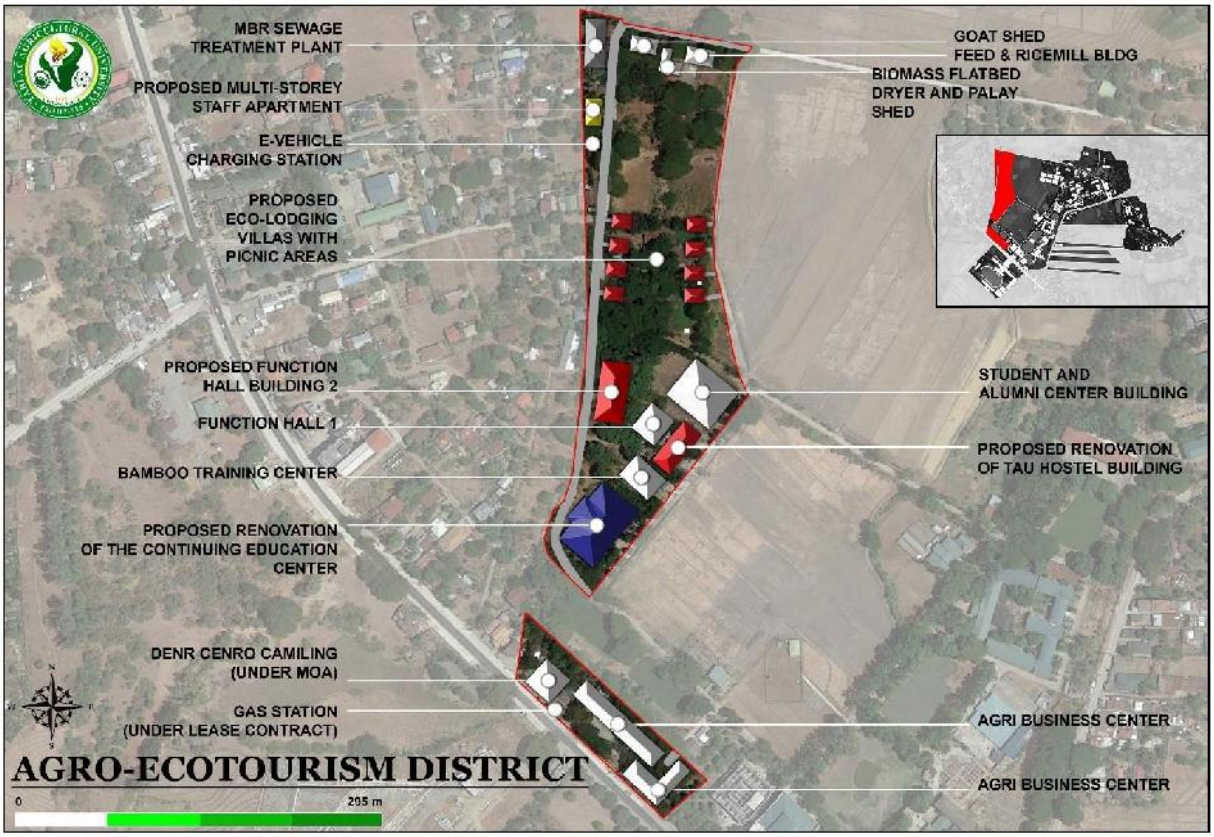
Expansion for the CBM buildings and even the construction of a new one is needed to cater to all classroom and laboratory deficits. There's a proposed E-Vehicle Terminal located in the front area of the zone, which will be the main terminal for the electricity-powered vehicles that the university aims to have in the future. The proposed water sports facility is also specified in the plan above, including the proposed NSTP instruction Building with student quarters that can also be used as accommodation for future significant sports events that the university will host.

PROPOSED COLLEGE SERVICES DISTRICT

The College Services District has increased its size due to transferring some areas from the Agro-Ecotourism District. These areas will be used for the proposed new infrastructures of the University. Since the university still doesn't have an emergency facility, a proposed disaster evacuation and emergency operations building is needed. The University Health Services building is strategically placed near the administration building to ease access for students who want to be admitted to TAU because health examinations are a requirement in college admissions. It is placed next to the University Health Services building, followed by the university's mental health facility, which is catharsis.

Locating these buildings in one zone is essential since it all falls into the college services category.

PROPOSED AGRO-ECOTOURISM DISTRICT



The Agro-Ecotourism district houses the primary source of income of the university, besides the revenue collected from college admissions. The main problem in the area is the sprawling residences of the employees. As a result, a proposed multi-story staff apartment was introduced to avoid further construction of residential developments in the area. An e-vehicle charging station is also located in the zone.

The University gains much income from the rental of spaces for events. Another function hall building is proposed to be constructed in the zone to have an additional revenue source. The proposed development for eco-lodging villas with picnic areas is also located here to offer potential customers a different accommodation option—the image below shows the perfect examples of the eco-lodging concepts for the university.

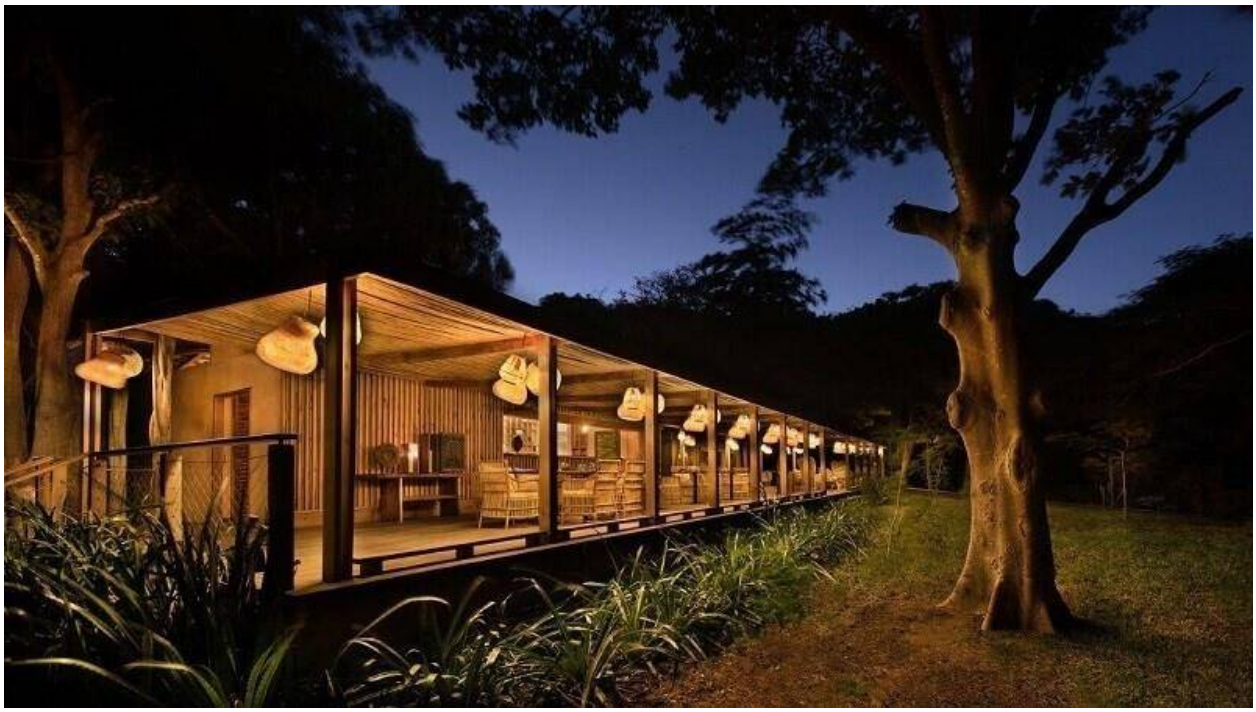


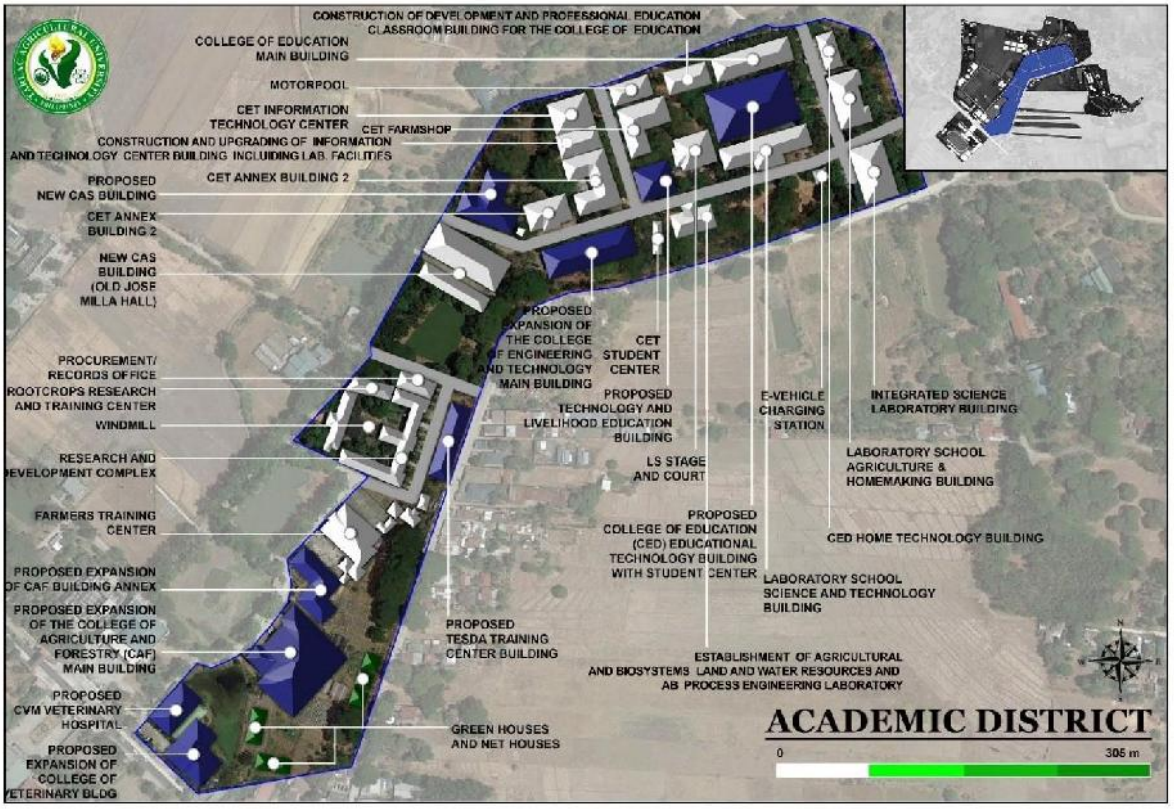
Figure 3-3: Eco Lodge Design Project in Costa Rica

Image: https://www.archi-living.com/32058/eco-lodge-design-project-kasiiya-papagayo-in-costa-rica/

Figure 3-4: Eco Villa, image from lanzaroteretreats.com

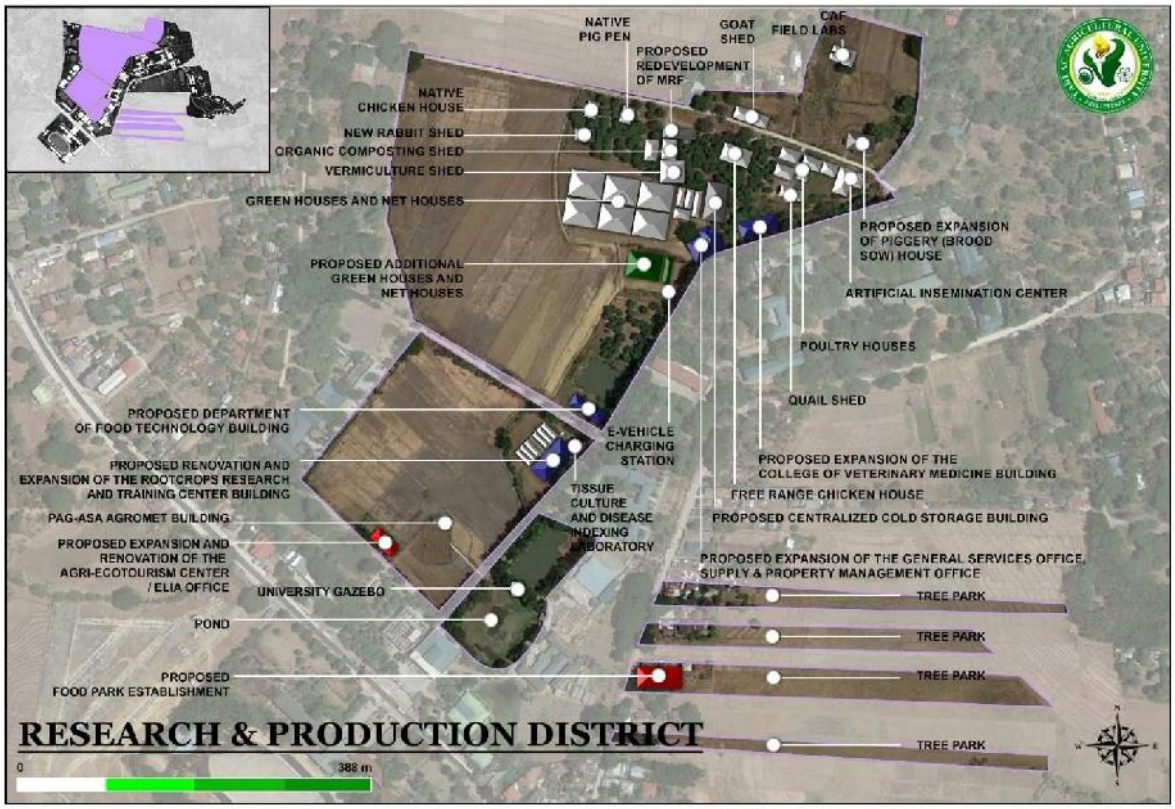
Image: https://www.lanzaroteretreats.com/holiday_home/eco-luxury-villa/

PROPOSED ACADEMIC DISTRICT



Due to the demand for educational facilities in the university, the proposed academic district will mostly have expansions and renovations in the future. There are only a few new constructions of buildings, such as the new CAS building and the TESDA training center building.

PROPOSED RESEARCH AND PRODUCTION DISTRICT



Agriculture is the core specialty of the University. Future advancements in research and production must therefore be prioritized. The strips of land in the southeastern part of the university will be converted into a tree park. Listed below are the possible endemic tree species that can be planted in the area, according to DENR:

- Kupang — Parkia timoriana
- Molave — Vitex parviflora
- Banaba — Lagerstroemia speciosa
- Malapapaya — Polyscias nodosa
- Narra — Pterocarpus indicus
- Toog — Petersianthus quadrialatus
- Agoho — Casuarina equisetifolia
- Katmon — Dillena philippinensis

It will also be an area designated for research and commercial, for there is also a proposed food park and an additional income-generating facility for the university. It also fits the area's market, mainly low to middle-income.

Additional buildings, such as the Department of Food Technology building and the centralized cold storage building, are located inside the district.

PROPOSED BAMBOO PARK DISTRICT

The Bamboo Park district is one of the protected areas in the University. To make the development more appealing, the zone will have additional infrastructures to support the activities that can be done here in the future. The existing cattle shed will be moved into the research and production district. The current establishment will be upgraded to a souvenir shop where different bamboo products can be seen.

Constructing an amphitheater is also beneficial for the park's development, for different discussions, lectures, and workshops about bamboo can be done here. Additional cottages for rent can also be constructed in the area to serve families on their picnics or even students on their field trips.

The following images showcase the possible looks of future developments in the area.

Figure 3-5: Bamboo Forest in Kyoto, by A_GARAGE

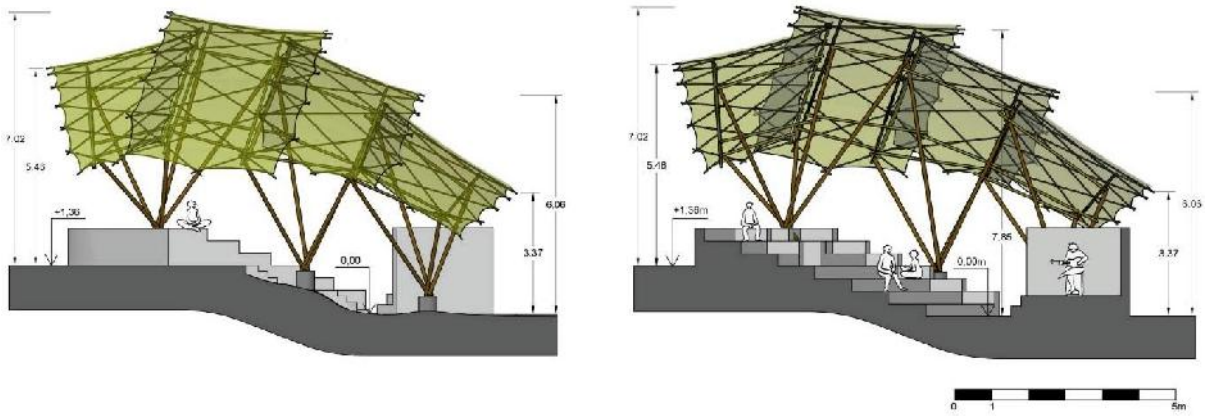
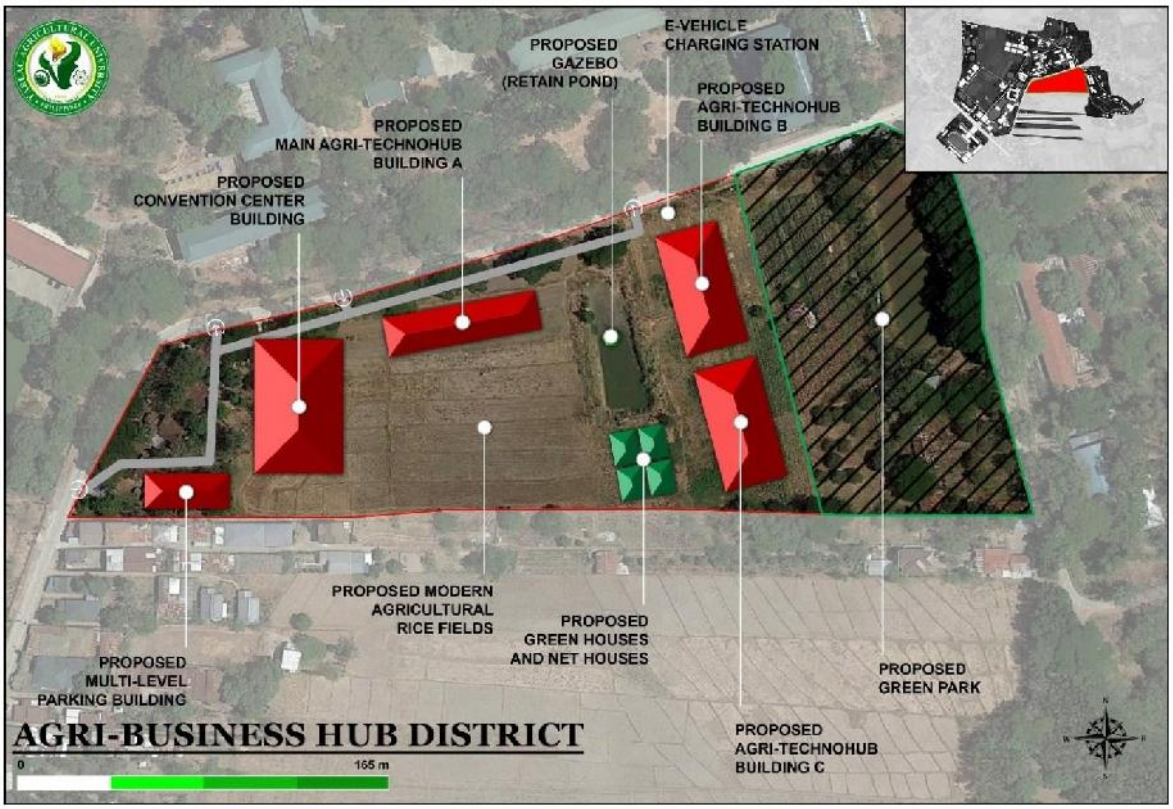


Figure 3-6: Bamboo Amphitheater, by Bambutec

PROPOSED AGRI-BUSINESS HUB DISTRICT



The Agri-business hub district will house the future significant commercial buildings in the university. Here, the multi-level parking building can be found to cater to the convention center building. Commercial buildings are also included in the development and a new approach to agriculture which are the modern rice paddies (see images below).

Figure 3-7: Modern Rice Paddies in Thailand (Smart Farming), by PraditPH

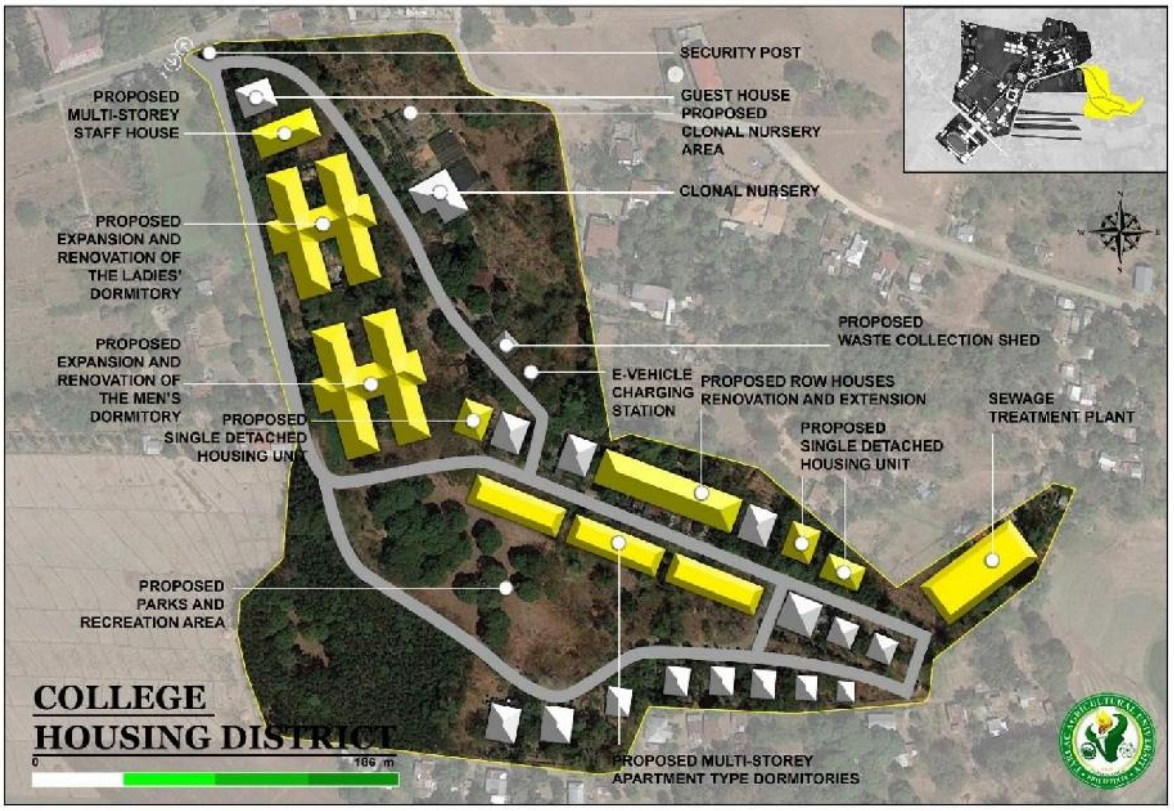
A green park also will be developed in the district that will serve as a separation between the College Housing District and the Agri-Business Hub District. Ponds in the area will be retained and can be enhanced. The developments in the green park must not greatly disturb the natural biodiversity in the area.

Figure 3-8: Modern Rice Paddies in Thailand (Smart Farming), by PraditPH

Figure 3-9: Green Park, by images.unsplash.com

PROPOSED COLLEGE HOUSING DISTRICT

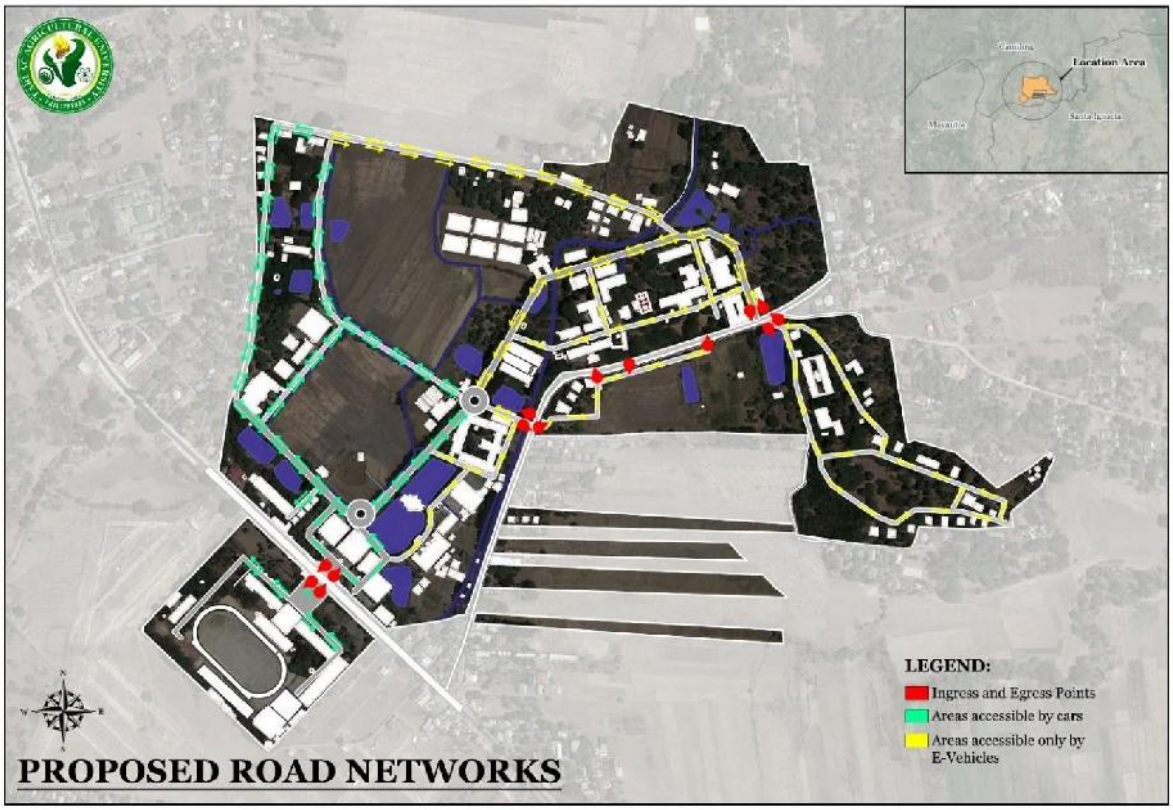
This area serves as the main zone for the university's residential infrastructures. To conserve space for the future, multi-level housing is prioritized in most of the proposed developments in the College Housing District. The university's study, work, live, and play concept has inspired the proposal to establish open places for parks and recreation.



PROPOSED ROAD NETWORKS

The university aims to improve its accessibility. To achieve this, the construction and redevelopment of roads and access ways inside the SUC are essential. In the image shown above, the ingress and egress points are specified. There are also proposed roundabouts to be constructed on the major road to improve the accessibility of the university. To achieve a decrease in the production of carbon, road networks are divided into two (2) categories, (1) roads accessible by cars and (2) roads accessible only by e-vehicles.

The pedestrian flow follows the road network layout. Unlike the road the network, pedestrian flow doesn't need to follow the one-way flow for vehicles. Pedestrian can walk freely along the 1.50 m. sidewalk. However, pedestrians are not allowed to cross the road anytime they want. Designated pedestrian lanes are provided at intersections and every 12 meters



PROPOSED RROW DIAGRAM

Figure 3-8 shows an image showcasing the proposed RROW Diagram for the University. The ideal road construction for the institution is a two-lane single carriageway with bike lanes and a 1.50-meter-wide sidewalk, totaling a 10-meter-wide RROW.

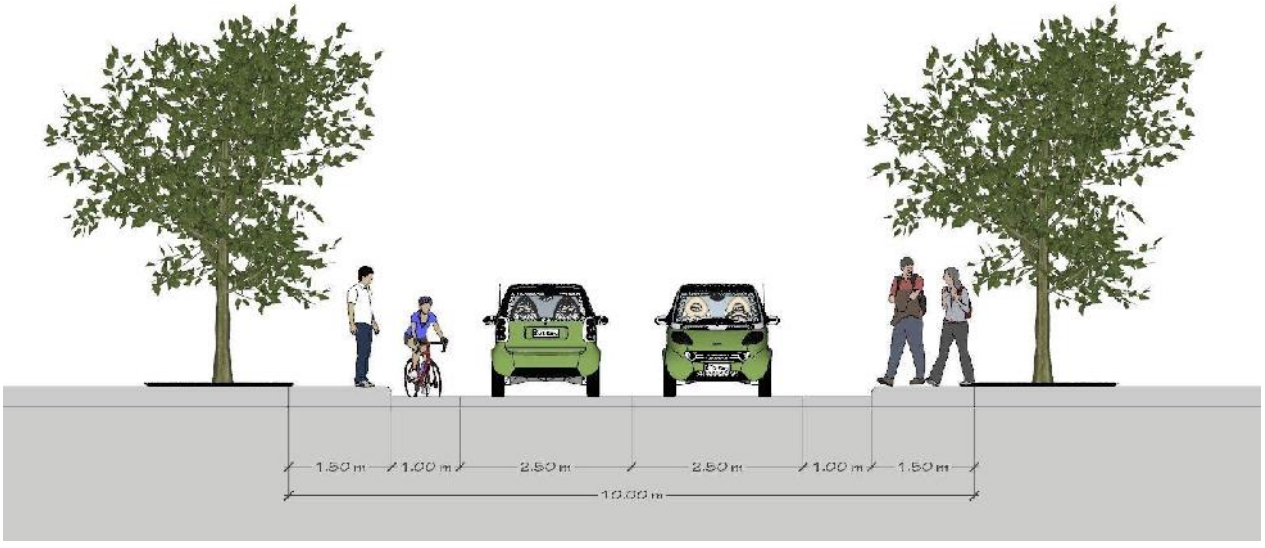
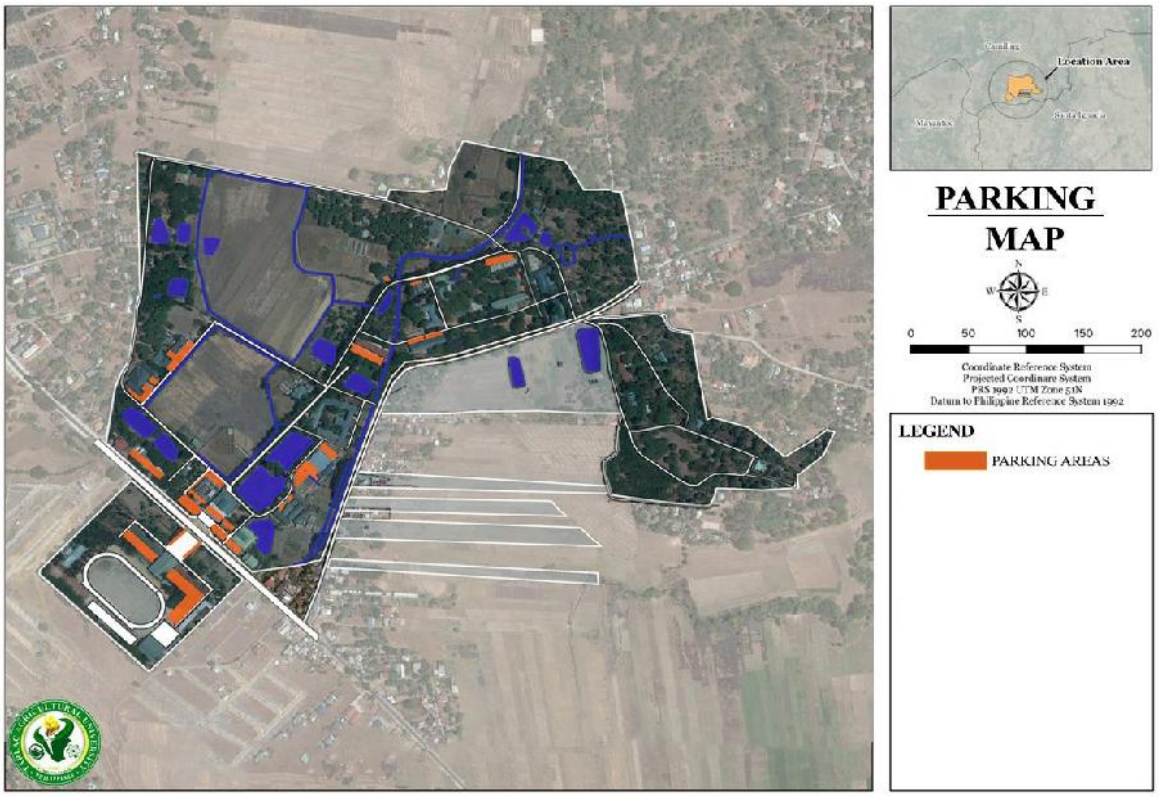


Figure 3-10: Proposed Road Right of Way Diagram



PROPOSED PARKING

The figure shows the proposed parking areas within the university/ with that, standard parking slots is considered whereas the is one car slot for every 5 classrooms, provision of one off-RROW passenger loading space that accommodates two jeepney or shuttle slots, and one school bus slot for every 200 students. All PWD parking slots is situated near the building entrance.

3.5 The Land Use Plan

The University is divided into eight (8) different districts. These zones are the (1) Academic District, (2) College Services District, (3) Agro-Eco Tourism, (4) Sports and Athletic District, (5) Agricultural Technology Park District, (6) Research and Production District, (7) Bamboo Park District, and lastly the (8) College Housing District. Although the institution has designated zones, one of its issues is the proximity and clustering of the buildings—the land use of the zones needed to be clearly defined on the maps. The table below shows the area covered by each district.

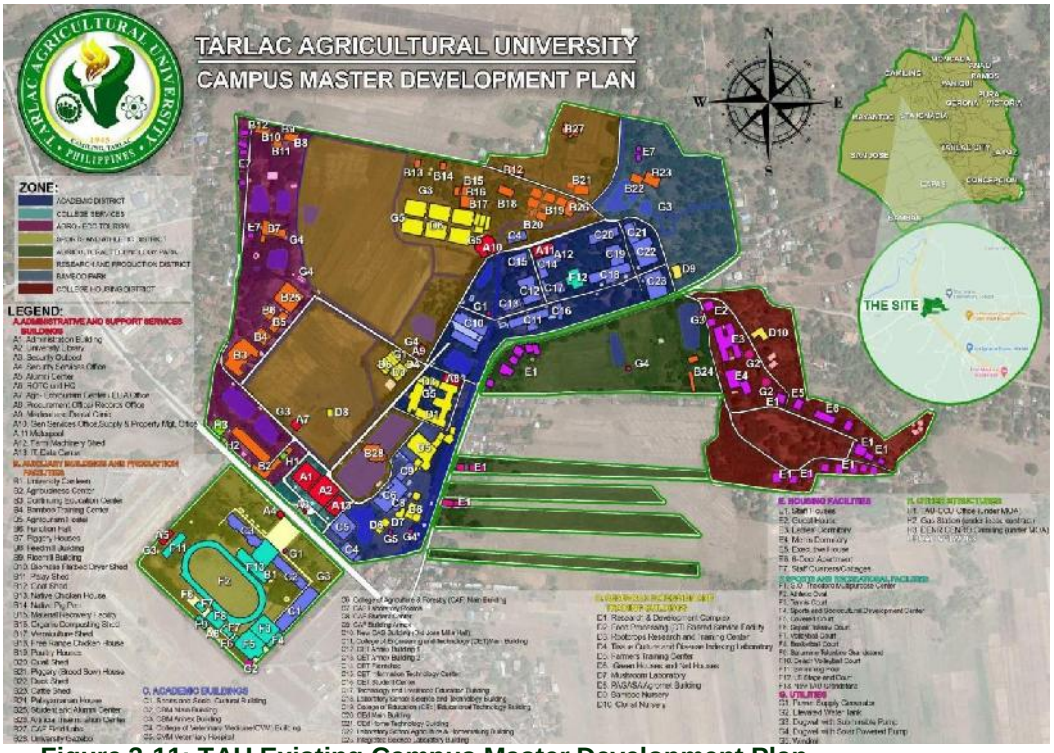


Figure 3-11: TAU Existing Campus Master Development Plan

Table 3-6: Districts and their corresponding area

Zones	Existing Area (in sq m)
Academic District	105,269.95
College Services District	16,204.15
Agro-Ecotourism District	76,982.48
Sports and Athletic District	68,142.00
Agricultural Technology Park District	98,292.25
Research and Production District	209,988.50
Bamboo Park District	44,975.91
College Housing District	76,746.36

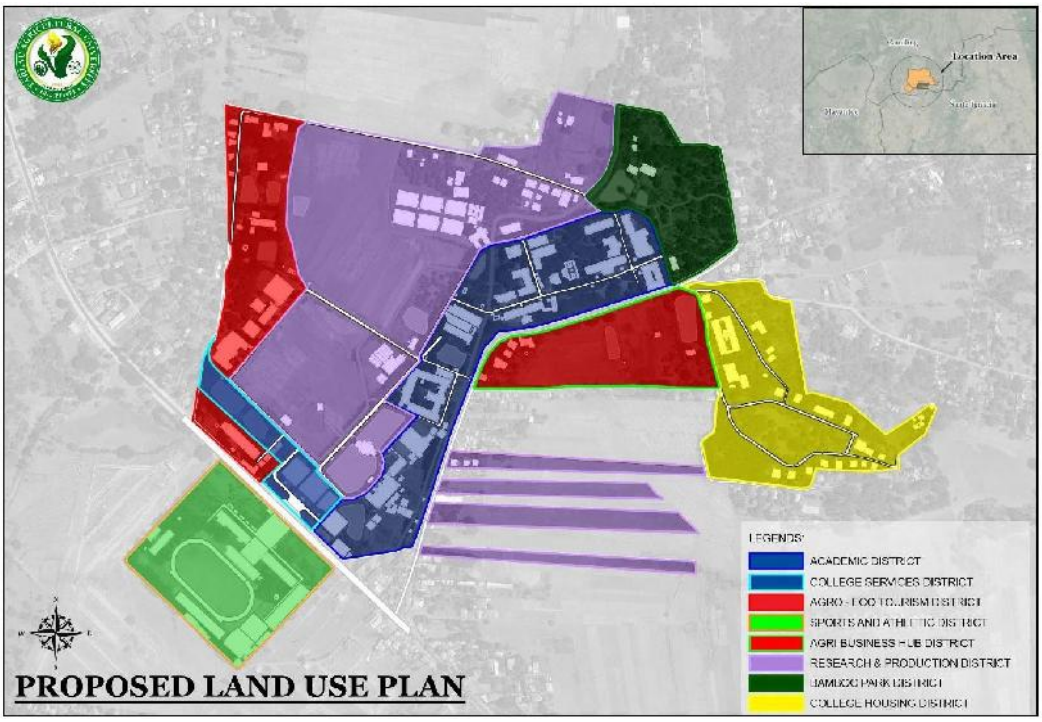


Figure 3-12: TAU Proposed Land Use Plan

The Tarlac Agricultural University's proposed land use plan is shown in the graphic above. Even though the eight (8) districts remained, certain areas have been moved to another zone. The strips of land in the southeastern part of the university development located in the Agricultural Technology Park District (now Agri-Business Hub District) are transferred to the Research and Production District, which is now converted into an Agri-Industrial Zone. The College Services district has an additional area taken from the Agro-Ecotourism District to cater to the other university services needed, such as the Emergency Center, Catharsis, and the new University Health Services building. The new area sizes are shown in the table below. Values on the written data given and SHP files do not match. Further validation on-site must be done.

Table 3-7: Proposed Land Use Plan Zones and their corresponding area

Zone	Existing Area (in sq m)	Proposed Area (in sq m)
Academic District	105,269.95	105,269.95
College Services District	16,204.15	20,751.21
Agro-Ecotourism District	76,982.48	72,435.42
Sports and Athletic District	68,142.00	68,142.00
Agri-Business Hub District (before Agricultural Technology Park District)	98,292.25	51,392.75
Research and Production District	209,988.50	256,888.00
Bamboo Park District	44,975.91	44,975.91
College Housing District	76,746.36	76,746.36

**Values need further validation on-site; some discrepancies are found between the written data and SHP files

Alignment of TAU LUDIP to the LGU

Camiling, dubbed as the “Old Lady in the Northwestern Province of Tarlac,” is a first-class municipality of the Province of Tarlac with a population of 87,319 based on the 2020 Census. The municipality is composed of sixty-one (61) barangays which are categorized into urban and rural barangays.

According to the Comprehensive Land Use Plan of Camiling, the town is divided into twelve (12) different zones of districts. These zones are the (1) Agricultural Zone (AGZ), (2) Agri-Industrial Zone (AIZ), (3) Cemetery/Interment Zone (CIZ), (4) Ecotourism Zone, (5) General Institutional Zone (GIZ),

(6) General Residential Zone (GRZ), (7) Greenbelt Zone (GBZ), (8) Heritage Conservation Zone (HCZ), (9) Mixed-Use Zone with Low-Rise Structures and Low-Density Commercial Development (MXD 1), (10) Mixed-Use Zone with Low-Rise Structures and Low-to Medium-Density Commercial Development (MXD 2), (11) Mixed-Use Zone with Low-Rise Structures and Medium-to High-Density Commercial Development (MXD 3), and the Municipal Water Zone (MWZ).

Tarlac Agricultural University is situated within the boundary of two rural barangays in Camiling, namely Barangay Malacampa and Barangay Santa Maria. Malacampa covers most of TAU's land area. In terms of its zoning category, TAU is classified as General Institutional Zone (GIZ) since it is an educational institution according to the Comprehensive Land Use Plan of Camiling. However, the two barangays where the university lies are categorized into different zones. They are both classified under Agricultural Zone (AGZ), Greenbelt Zone (GBZ), and Mixed-Use Zone with Low-Rise Structures and Low-Density Commercial Development (MXD 1). Moreover, Barangay Malacampa is classified as Agri-industrial Zone (AIZ), while Barangay Santa Maria is categorized as General Residential Zone (GRZ). The university can also be categorized as Agricultural Zone (AGZ) since the majority of the land area of the campus is suitable for agriculture and pasture use. The university has different agricultural activities, such as planting crops and vegetables, growing fruit trees and other trees, animal husbandry, aquaculture, harvesting farm products, and other farm activities and practices performed in conjunction with such farming operations. Moreover, the university is divided into eight (8) different districts. These districts are the (1) Academic District, (2) College Services District, (3) Agro-Eco Tourism District, (4) Sports and Athletic District, (5) Agribusiness Hub District, (6) Research and Production District, (7) Bamboo Park District, and (8) the College Housing District.

TAU's Land Use Plan districts align with the Land Use Plan and Zoning Ordinance of the Municipality of Camiling based on the eight (8) districts (internal zoning) of the University. The three districts, namely Academic, College Services, and Sports and Athletic, are classified as General Institutional Zone (GIZ) based on LGU Camiling Zoning Ordinance because these districts house the University's different educational and sports facilities that are designated for teaching, learning, and supporting various programs and endeavors and provide academic support to students and faculty that are aligned with the academic mission of TAU. In addition, the Agro-ecotourism District and the Research and Production District are classified as Agri-Industrial Zone because these districts house the primary source of income of the university. It is where agricultural production facilities are located, such as goat, native chicken, and native pig sheds of the university. The Agribusiness Hub of the university is classified as MXD 1 since it will house the future significant commercial buildings in the university that could address agricultural productivity issues and benefit relevant stakeholders such as farmers. The Bamboo Park district is under Greenbelt Zone (GBZ) since this is a protected area in the University comprised of bamboo nurseries. The university recognizes the wide array of uses and benefits of non-timber forest products. Lastly, the College Housing district is categorized as General Residential Zone (GRZ) since this provides accommodation to students, faculty, staff, and visitors and serves as the main zone for the university's residential infrastructures.

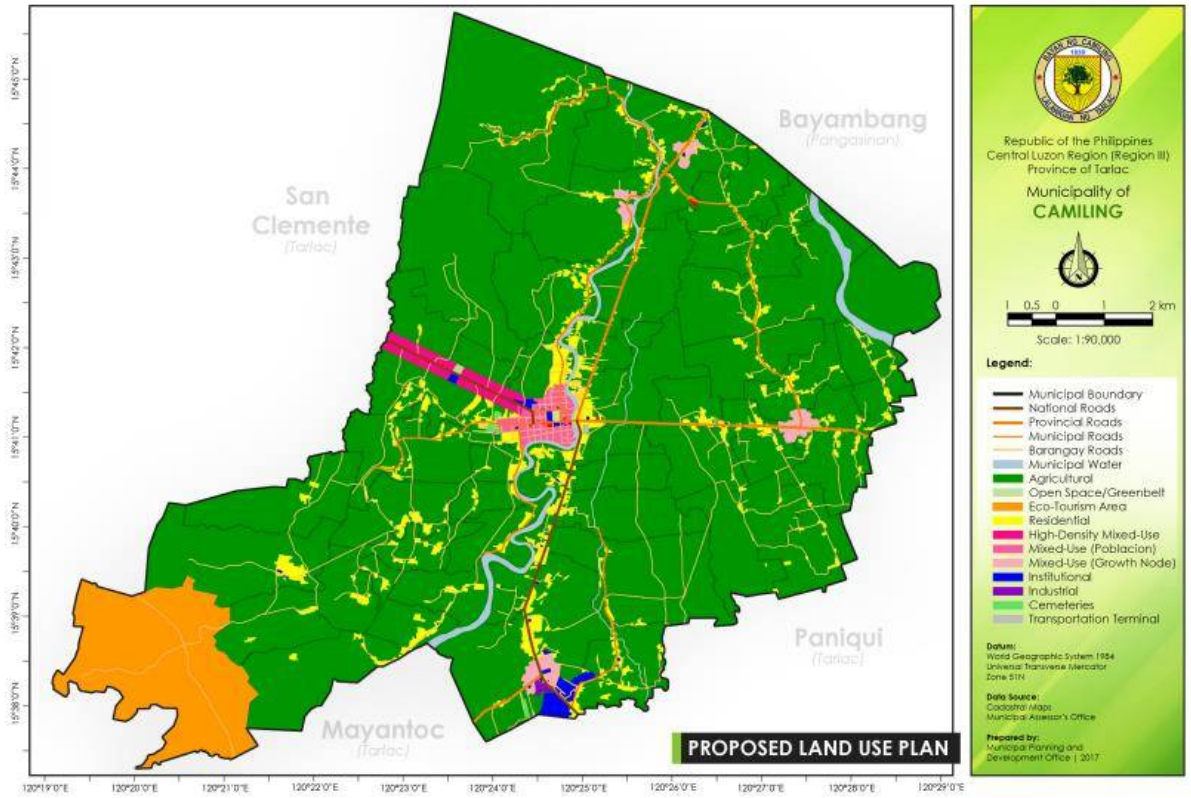


Figure 3-13: Camiling Proposed Land Use Plan

Image: Camiling Comprehensive Land Use Plan (2017-2026)

INSTITUTIONAL GOALS, OBJECTIVES, TARGETS AND STRATEGIES

SOCIAL SECTOR

Goal 1: To provide the university with appropriate health support and services

Table 3-8: Objectives, Targets, and Strategies under Goal 1 for the Social Sector

Objectives	Targets	Strategies
To appoint adequate manpower providing prompt services by 2032	All university health facilities appointed with complete medical staff by 2032	Hiring of additional medical personnel
	All university health facilities with designated health professional throughout the day by 2032	Upgrading of existing clinic to an infirmary
	100% of emergency vehicles with dedicated and designated emergency response team by 2032	Hiring of emergency medical technician for emergency operator vehicle Hiring of dedicated driver for emergency operator vehicle
To provide adequate health equipment and services by 2032	University health facilities completely compliant with Sanitation Code of the Philippines (1:5000) by 2032	Construction of a satellite clinic nearer the University Housing District
	All health facilities and services with feedback mechanism by 2032	Establishment of a client-feedback mechanism
	100% of students and personnel with access to primary mental health support services by 2032	Construction of a Mental Health and Well-being Center Integration of Mental Health Screening into Annual Physical Examinations for TAU Employees
To avoid mortality of patients in emergency situations by 2032	No incidences of death within campus due to emergency health situations by 2032	Operationalization of medical emergency response mechanism and team
	All health facilities with established referral system for specialized health services by 2032	Establishment of a referral system for specific and specialized health service requirements

Goal 2: To provide sufficient residential facilities with a conducive and supportive environment for students and personnel

Table 3-9: Objectives, Targets, and Strategies under Goal 2 for the Social Sector

Objectives	Targets	Strategies
To supply adequate housing facilities in the university housing district by 2033	100% of existing student dormitories fully-occupied by 2032	Renovation and upgrading of existing men's and women's dormitories
	Increase number of student dormitory units by 50% by 2032	Construction of additional dormitory buildings
	Increase number of personnel housing units by 50% by 2032	Construction of additional personnel housing units
	All student dormitories with access to common open and recreational spaces by 2032	Integration of health and wellbeing considerations in the design and construction of new residential structures, including proper ventilation and spacing Development of parks adjacent to the dormitories
	All student dormitories with access to essential commercial establishments by 2032	Development of a building with commercial establishments
To allocate complete maintenance and	All residence halls and facilities with 24/7 security by 2032	

security staff for of all residential halls by 2032	All dormitories with a houseparent by 2032	Designation of houseparent for each dormitory building
To allocate regular funds for the maintenance and beautification of all residential units by 2032	All open and recreational spaces well-maintained by 2032	Inclusion of dormitory maintenance and beautification in budget line items
	All support facilities in residential halls well-maintained by 2032	

Goal 3: To secure all facilities and individuals from emergency situations

Table 3-10: Objectives, Targets, and Strategies under Goal 3 for the Social Sector

Objectives	Targets	Strategies
To provide adequate security force for the campus by 2032	All campus zones with appointed security 24/7 by 2032	Hiring of additional security force
	100% at par to recommended security force-to-population ratio for academic institutions by 2032	
To have a prepared campus population for various emergency and hazard situations by 2032	100% of personnel underwent basic life support and CPR training	Conduct training assessment of all departments and offices Expand BLS and CPR training program
	All designated personnel provided with a DRRM training program	Designation of DRRM focal persons per unit Preparation of Training and Simulation Exercises Plan Conduct of table-top exercises and simulation trainings for natural and man-made hazard scenarios in contingency plan

Goal 4: To provide a supportive environment to enhance the academic and non-academic skills of students

Table 3-11: Objectives, Targets, and Strategies under Goal 4 for the Social Sector

Objectives	Targets	Strategies
To provide support programs and initiatives that will expand global presence and international academic outlook of the university by 2032	Rank in THE World University Rankings by 2032	Preparation of strategic plan for increased internationalization, research and citation
	Rank in QS University Rankings by 2032	
	Reach 4 stars under internationalization in QS University Rankings	Expansion of financial assistance for international mobility and placement programs Increase in participation of students, faculty, and other employees in international mobility and placement
	100% increase in alumni with international-level work experience	Establishment of alumni chapters globally Expanded alumni outreach initiatives
	100% increase in publications for agriculture-related disciplines by 2028	Expand training for guidelines for Scopus and Asian Citation Index publication

	50% increase in publications for non-agriculture disciplines by 2028	Expand published works for community outreach and technology transfer initiatives of the university
	100% increase in publications among students	Assessment of existing faculty-student engagements for research and extension activities Implement appropriate program to promote faculty-student engagement for research and extension activities
To provide adequate facilities and incentives for sports and performance teams by 2033	Sports teams placing in national-level sporting competitions doubled by 2032	Training allowance increase for athletes Provision of regular training allowance throughout competition training and preparations
	Sports teams participating in international sporting competitions doubled by 2032	Design of incentive program for participation and recognition in international sports competitions
	National-level performance competition awards and recognitions doubled by 2032	Provision of regular training allowance throughout competition training and preparations
	Teams joining international-level performance competitions doubled by 2032	Hiring of trainers to support in international competitions

ECONOMIC SECTOR

Goal 1: To have adequate financial resources that could sustain the operations of the University and support its various endeavors and services

Table 3-12: Objectives, Targets, and Strategies under Goal 1 for the Economic Sector

Objectives	Targets	Strategies
To enhance the internally-generated income of the University to at least 40% of total revenue	Increase number of students to 100% of the enrollment capacity of the University by 2032	-Improve University guidelines on scholarship grants - Improve the enrollment system to ease the process for students and parents - Implement regular capacity building programs for faculty and staff to improve the University's reputation and increase enrollment
	Increase annual collection rate of tuition and other students' fees is at least 90% by 2028	Improve the mode of payment for tuition and other student fees,, in accordance with government rules (e.g. create committee that will study and propose a modern payment facility)

	Year-on-year growth rate of income from auxiliary facilities or services (e.g., hostels, multi-purpose facilities) is at least 10% by 2032	-Continuously improve the quality and capacity of facilities and other auxiliary services provided -Develop marketing and branding initiatives to attract more clients of the auxiliary facilities or services
	University has produced at least 5 commercialized agricultural products that are making a positive net financial contribution to the University by 2032	- Increase incentives of faculty, students, and researchers to develop agricultural products and patents - Increase support to entire process of production to commercialization
	University has produced at least 5 patents that could generate royalties and licensing income by 2032	
	University has produced at least 3 agro-edutourism projects by 2032	- Create a committee that will develop a master plan for agro-edutourism projects, programs, and activities - Partner with private sector or government agencies in the development of Agro-Edutourism projects
To increase the amount of external grants and donations from non-government agencies (e.g. private enterprises, philanthropic foundations)	Establish a University Endowment fund that could contribute at least 10% of the University's annual income by 2032	- Create a committee that will develop a plan for the establishment of a university endowment fund
	Starting 2028, at least 3 new projects each year have successfully obtained funding from external non-government agencies (local and international institutions)	Develop strategic plans on the solicitation of grants and donations

Goal 2: To strengthen the financial management system of the University and ensure that all funds are utilized efficiently and for its intended public purpose

Table 3-13: Objectives, Targets, and Strategies under Goal 2 for the Economic Sector

Objectives	Targets	Strategies
To maintain a high utilization rate of national government subsidy and external funds starting 2023	At least 80% budget utilization rate starting 2023	- Strictly enforce the Ease of Doing Business Law - Simplify the documentation and disbursement process of the University - Install e-tracking system for documents
	100% of the funds of externally funded projects was utilized efficiently and for its intended purpose	- Strictly enforce the Ease of Doing Business Law - Simplify the documentation and disbursement process of the University - Install e-tracking system for documents - Strengthen the system for monitoring and updating the status of externally-funded projects

	100% of the total number of externally funded projects was completed within the agreed timeframe	- Strictly enforce contractual obligations as regards timeframe of externally funded projects - Strengthen the system for monitoring and updating the status of externally-funded projects

ENVIRONMENTAL SECTOR

Goal 1: To ensure the sustainability of the natural resources of the university

Table 3-14: Objectives, Targets, and Strategies under Goal 1 for the Environmental Sector

Objectives	Targets	Strategies
To establish an effective management of the natural resources of the university by 2030	100% of the natural resources are monitored and stored in a centralized database by 2030 50% reduction in the utilization of synthetic fertilizers and other synthetic farm inputs by 2030	Regular inventory and mapping of the University's natural resources Development of University resource management plan Conservation and multiplication of endemically endangered species of trees Increased production of organic fertilizers to be used in crop production Strengthen the utilization of natural products/ ETHNO veterinary medicine Reduce the utilization of chemical-based products for crop and animal production

Goal 2: To ensure environmental compliance and partnerships of the university

Table 3-15: Objectives, Targets, and Strategies under Goal 2 for the Environmental Sector

Objectives	Targets	Strategies
To strengthen the partnerships of the university in terms of environmental sustainability by 2030 To be known as an environmentally compliant and green university by 2025	50% increase in local and international partners for environmental sustainability by 2030 100% compliance to DAO 2003-03 by 2025	Increased partnerships with local and international agencies for the intensification of environmental sustainability Application of Environmental Compliance Certificate

Goal 3: To ensure a community that is responsive to waste management

Table 3-16: Objectives, Targets, and Strategies under Goal 3 for the Environmental Sector

Objectives	Targets	Strategies
To establish an effective waste management system for the university by 2032	100% reduction of non-biodegradable waste generation by 2032	Strict implementation of the Waste management action plan of the university
	100% zero waste university by 2032	Strict enforcement of RA 9006

	50% - 80% utilization of biodegradable waste by 2032	Integration of waste management programs in all the core mandates of the university (instruction, research, extension, and production)
		Conduct further R&D on biodegradation
To create a waste management–focused community outreach program by 2025	100% reduction of non-biodegradable waste generation by 2032	Heightened awareness of waste management to students, employees, and other TAU stakeholders

Goal 4: To provide access to sufficient soil and water resources for the university

Table 3-17: Objectives, Targets, and Strategies under Goal 4 for the Environmental Sector

Objectives	Targets	Strategies
To improve practices on soil and water quality conservation by 2030	100% integration of soil and water quality conservation practices by 2030	Intensified monitoring and maintenance of soil and water quality
		Increased integration practices for soil and water quality conservation by the TAU community
		Inclusion of soil health and water conservation in the R&D agenda of the university
To maximize the utilization of wastewater to become an alternative source of water by 2032	At least 1 centralized water treatment plant constructed by 2030	Provision of a centralized wastewater treatment plant Creation of a team to monitor and operate the wastewater treatment plant
	100% of wastewater is treated and utilized as recycled water sources by 2032	

Goal 5: To ensure a carbon-neutral university

Table 3-18: Objectives, Targets, and Strategies under Goal 5 for the Environmental Sector

Objectives	Targets	Strategies
To decrease carbon emissions and increase carbon absorption within the university by 2032	100% a non-smoking campus by 2025	Strict enforcement of signages of non-smoking signs
		Implementation of penalties for violators
	At least 50% of the university had plant or forest cover by 2032.	Strict monitoring of carbon emission vs. carbon sequestration
		Inclusion of air quality in the R&D agenda of the university
		Intensification of the “clean and green” program of the university

Goal 6: To ensure resilient and disaster-ready campus

Table 3-19: Objectives, Targets, and Strategies under Goal 6 for the Environmental Sector

Objectives	Targets	Strategies
To design innovative technologies for renewable energy utilization by 2032	70% of the university uses renewable energy by 2032	Increased utilization of renewable energy resources Increase partnerships for the provision of innovative technologies for renewable energy
To produce environmentally aware, conscious, and responsible individuals against natural hazards by 2025	100 % awareness and implementation of SDGs in lessons and activities within the university by 2025	Inclusion of the importance of SDGs
To improve the capacity development of individual TAU for DDRM and CCA by 2025	100% Climate Action Awareness of TAU community by 2025	Provisions of continued training for individuals on natural disasters
	100% highly trained and responsive TAU individuals for DRRM and CCA by 2025	
	100% reduction of vulnerability of TAU against natural disasters by 2025	Disaster-resilient infrastructures
To provide adequate DRRM and CCA facilities to support excellent delivery of service by 2030	100% improvement and sufficiency for facilities for DRRM and CCA operations by 2030	Intensification of personnel training for DRRM

INSTITUTIONAL SECTOR

Goal 1: To provide excellent service and prosperous operations for the university and the community

Table 3-20: Objectives, Targets, and Strategies under Goal 1 for the Institutional Sector

Objectives	Targets	Strategies
Proper and accurate information dissemination to all stakeholders of the university	Weekly updates on relative information the university would like to inform the stakeholders	An efficient and distinct information team to be created for the public relations and information sharing of the university
	Up to date university information and processes online for projects and programs by 2025	Online access to progress of TAU through enhancement of social media and other online platforms to spread awareness of the different activities being done in the university
		Strengthen the university's presence online through social media awareness
Ease of transactions in working operation by 2030	Streamline of university processes in instruction, research, extension, administration by 2030	Creation of a faster automated system online for enrollments that is linked to online banking for ease of payments.

Foster inclusive and responsive roadmap for stakeholder engagement	75% TAU graduates are contributing to the various industries in the Philippines and abroad by 2032	responsive curricular programs aligned along industry requirements (students) that include enhancement of skills for global competitiveness; Innovative Technology generation through proactive research initiatives; delivery of appropriate extension services to community partners in the local and national levels

Goal 2: To advance linkages with organizations in the country and overseas

Table 3-21: Objectives, Targets, and Strategies under Goal 2 for the Institutional Sector

Objectives	Targets	Strategies
To establish new partnerships and sustain existing collaborations to achieve mutually beneficial outcomes	At least 10% increase in the number of partnerships forged	Overseas partnership development program

Goal 3: To reinforce the University's national and international standing and impact

Table 3-22: Objectives, Targets, and Strategies under Goal 3 for the Institutional Sector

Objectives	Targets	Strategies
To develop a unique identity that will imbibe TAU's reputation	at least 3 international rankings per year	continuous improvement of university programs, initiatives, and technologies

Goal 4: To strengthen good governance to ensure integrity, transparency, efficiency and accountability in management and leadership

Table 3-23: Objectives, Targets, and Strategies under Goal 4 for the Institutional Sector

Objectives	Targets	Strategies
To streamline operations based on statutory and regulatory requirements/standards	records are readily available and accessible (FoI) and zero backlog of transactions	ensure legal compliance, digitization and automation of processes to minimize risk exposure

Goal 5: To produce excellent and competent Human Resources of TAU

Table 3-24: Objectives, Targets, and Strategies under Goal 5 for the Institutional Sector

Objectives	Targets	Strategies
Implement a holistic human resource development program focused towards the enhancement of leadership competencies of TAU employees responsive to the current and future needs of the university and its internal and external clients	Increase in the educational attainment of employees of the university through continued pursuit of advanced education by year 2032	Scholarships and subsidies for advanced education offered to the existing employees of TAU that would like to pursue further studies
	Knowledgeable and competent non-teaching staff in the university that supports the efficient and effective operations of the university by 2032	Seminars and workshops for non-teaching staff for the improvement of TAU employees
To develop graduate attributes that address the needs of industries and	At least 50% of the graduates will pass licensure examination; 80% employment rate among graduates	Designing and integration of industry-required competencies in the curricula, conducting of free board review (audit course), and

PQF standards		internationalization of programs.

Goal 6: Enhance the universities research foundation and promote innovative, relevant, and appropriate research-based technology to provide world-class extension services through enhanced local and international collaborations

Table 3-25: Objectives, Targets, and Strategies under Goal 6 for the Institutional Sector

Objectives	Targets	Strategies
To conduct relevant training programs and short non-degree courses in agriculture and other disciplines	At least 95% of the proposed trainings are conducted	Conduct of need-based trainings
To establish, maintain and sustain on-campus and off-campus demonstration projects showcasing various appropriate technologies generated by the University and its development partners	At least 90% of the generated technologies are showcased through establishment, maintenance and sustenance of demonstration projects	Establishment of techno-demo sites/farms
To generate, package, and disseminate through tri-media the needed technology/information relevant to the needs of the people and the community	At least 95% of the needed technologies are generated, packaged and disseminated through tri-media	Production of IEC materials through tri-media
To establish a strong research foundation through generating research outputs with societal impacts	At least 70% of the faculty researchers have published research in SCOPUS-indexed journals	Capacitate researchers on generation of researches worthy of publication in SCOPUS-indexed journals

INFRASTRUCTURE SECTOR

Goal 1: To have accessible, usable, and inclusive infrastructure and physical spaces in the campus

Table 3-26: Objectives, Targets, and Strategies under Goal 1 for the Infrastructure Sector

Objectives	Targets	Strategies
To design and upgrade universally-accessible/world class infrastructure by 2032	80% of all infrastructure are accessible, usable, inclusive, and compliant to all mandated laws by 2032 To reduce 50% of carbon emissions in the campus by 2032.	Ensure that all designs for infrastructure/physical spaces are compliant to Batas Pambansa Blg. 344 and universal design standards Integrate Tropical Design/Smart Building/Green Building Principles to ensure disaster-resilient infrastructure Rehabilitation and retrofitting of old buildings Future design and construction of buildings

		and infrastructure must be compliant to all mandated laws. Construction of perimeter roads and covered walkway network Improvement of existing road network (+inclusion of bike lanes) Gender-neutral comfort rooms; gender-responsive design Implement the use of solar-powered and e-powered vehicles inside the campus including establishment of charging stations and maintenance/servicing area Establishment of multi-level parking area for petrol vehicles at a strategic location (located near the university town center) Encourage active means of transportation (walking and cycling)

Goal 2: To ensure a reliable and continuous power supply in the university

Table 3-27: Objectives, Targets, and Strategies under Goal 2 for the Infrastructure Sector

Objectives	Targets	Strategies
To install hybrid and renewable energy systems and upgrade existing power generation systems for efficient use of energy by 2032	100% of all major/core physical plant and facilities have back-up power supply 2029	Integrate alternative and advanced Renewable Energy (Solar & Wind) systems per building as a back-up power supply Procure additional back-up power generator sets for lifeline/core facilities Replace/Upgrade existing power generator sets Relocation of aerial electrical cables to underground

Goal 3: To ensure reliable back-up communication system in the campus

Table 3-28: Objectives, Targets, and Strategies under Goal 3 for the Infrastructure Sector

Objectives	Targets	Strategies
To purchase and install mobile-based and land-based DMR as a backup communication system by 2025 To upgrade existing centralized alarm and paging system by 2024	All buildings have assigned trained personnel in DMR operation by 2025 All areas in the university are reached by the centralized alarm and paging system by 2025 Activation of at least one redundant network by 2023	Procure Digital Mobile Radio (DMR) including pertinent accessories for each building Relocation of all aerial ICT cables to underground Upgrade centralized alarm and paging system Increase speed and stability of internet connectivity by subscribing to higher bandwidth Subscribe to additional ISP as a redundant network

		*At least 2 radio operators are licensed and accredited by NTC by 2024 *Train personnel in the operation of DMR *Process registration of DMR in NTC

Goal 4: To have a secured repository of university data

Table 3-29: Objectives, Targets, and Strategies under Goal 4 for the Infrastructure Sector

Objectives	Targets	Strategies
To establish a cyber-threat proof back-up data server on-site and Cloud by 2027	To have a secured back-up data center by 2027 (1 on-site and 1 cloud)	Establish mirror on-premise data center Subscribe to Cloud Solutions as back-up storage (physical and digital) Subscribe to firewall and Denial of Service attack protection Upgrade internet connectivity strength *Capacitate all personnel assigned in data center with necessary skills and knowledge to efficiently manage and operate the back-up data center, cyber security, and data privacy

Goal 5: To improve the accessibility of potable water in the university

Table 3-30: Objectives, Targets, and Strategies under Goal 5 for the Infrastructure Sector

Objectives	Targets	Strategies
To enhance the quality and quantity of potable water supply system by 2027	75% availability of potable water in all buildings by 2027	To provide rainwater-harvesting tanks in all buildings To put up additional deep wells with elevated water tanks and revive existing underground water sources To utilize solar and wind-driven pumps To establish water filtration and treatment systems

Goal 6: To have functional emergency operations and evacuation centers

Table 3-31: Objectives, Targets, and Strategies under Goal 6 for the Infrastructure Sector

Objectives	Targets	Strategies

To establish and maintain functional emergency operations and evacuation centers by 2032	Fully operational Emergency Operations Center by 2025 Fully operational evacuation centers which can accommodate 75% of campus population by 2032	Construction of Emergency Operations Center with complete equipment, furniture, and facilities Construction of comfortable, accessible, and secure Evacuation Centers with complete amenities such as power, water, and communication supply and appropriate facilities (collapsible/privacy tents with beddings, food preparation and supply, etc.) Provide capability training for all emergency responders in disaster management and occupational safety and health

ALLOCATION OF LAND FOR ACADEMIC REQUIREMENTS

The table shows the forecasted allocation of land for TAU's academic requirements. A more detailed presentation for campus demand for infrastructure and services can be accessed on Table 2-19. Additional Laboratories, especially for CAF students can be accommodated in Titi Calao.

Table 3-32: Projected Area Demand for Classrooms and Laboratories

	Classrooms		Laboratories	
	Total No. of Classroom Deficit	Total Additional Floor Area Needed (SQ.M)	Total No. of Laboratory Deficit	Total Additional Floor Area Needed (SQ.M)
2023	62	3,906	123	9,225
2032	343	21,609	404	30,300

PLANNING AND DESIGN CONSIDERATIONS

In line with its vision to build disaster-resilient and smart infrastructure, TAU shall maximize the availability of solar power by integrating solar photovoltaic (PV) panels to generate electricity for the buildings. In addition, TAU **shall** take advantage of natural cooling, wherein the facility shall have an adequate size of openings to control the building's heat gain and heat dissipation. This approach can lessen the use of air-conditioning and minimize the consumption of electricity or no consumption at all. Furthermore, a permeable paving surface shall be considered to reduce surface runoff and filter pollutants from storm water. Finally, aside from these considerations, classroom-cum-laboratory concept shall be deemed to address the demand for classrooms and laboratories.

Building designs shall comply with existing laws such as PD 1096 or the National Building Code of the Philippines. The building shall follow the minimum setbacks and be appropriately oriented. Other than that, the building height shall conform with the law, local ordinance, or whichever is more stringent.

To comply with RA 9514 or the Fire Code of the Philippines, buildings shall be integrated with FDAS or Fire Detection and Alarm System, as well as provision of two (2) means of egress.

All buildings shall be accessible to everyone regardless of one's physical condition. All buildings must be designed following BP 344 or the Accessibility Law. The provision of ramps and PWD comfort rooms shall be considered. Walkways shall be provided with slip-resistant material and conform to the

minimum width of 1200mm. And for every 12 meters, a rest stop or turning space shall be provided. Also, dropped curbs, curb cut-outs, signage, and warning blocks will also be provided along the walkways. Also, PWD parking shall be provided for every building and located at the nearest point of entry to the building.

Figure 3-14: Fitzgerald Parking Grage Solar Canopy Building
Image: Fitzgerald Parking Garage Solar Canopy Building - Kirby Building Systems

Figure 3-15: Kinetic Solar Shading System
Image: LEED Certified Green Office Building Complex Rehabilitation | GLASSCON GmbH – Architectural Building Skins, Façade Solutions, Curtain Walls, Glazing, Solar Shading, Brise Soleil

LAND USE BUDGET

The table shows the land area covered for every district and the allowable area for construction. The

area for land supply is derived from the maximum allowable percentage of site occupancy then subtracted the existing gross floor area of the existing buildings while the land demand is based from the projected demand of land area for every district (**refer to Table 3-32**)

Table 3-33: Land Use Budget

District	Land Area (SQ.M.)	GFA of Existing Structures (SQ.M.)	Land Supply (SQ.M.)	Land Demand (SQ.M.)	Open Space Requirement (SQ.M.)
Academic	105,269.95	17,625.71	35,009.27	51,909.00	52,634.98
College Services	20,751.21	3,494.00	6,881.61	5,960.00	10,375.61
Agro-Ecotourism	72,435.42	6,695.00	29,522.71	-	57,948.34
Sports and Athletic	68,142.00	9,041.00	25,030.00	-	34,071.00
Agri-Business Hub	51,392.75	-	25,696.38	-	4,111,420.00
Research and Production	256,888.00	9,332.98	42,044.62	-	205,510.40
Bamboo Park	44,975.00	270.00	8,725.00		35,980.00
College Housing	76,746.36	4,223.50	37,987.00	16,122.00	34,535.86

Allowable Maximum Building Footprint is not applicable for the buildings since some structures and facilities are situated between 2-3 lots. Nevertheless, Allowable Maximum Percentage of Site Occupancy or PSO is determined by identifying the districts (internal zones) of TAU based on the Camiling CLUP. Based on the Camiling CLUP Volume 2, TAU falls under the GIZ, or General Institutional Zone. With that, GI Zone from Camiling CLUP is classified also as GI in the National Building Code of the Philippines, also known as PD 1096. However, based on the Land Use Plan of TAU, some districts (internal zone) fall under different zone.
Therefore, the districts (internal zones) of TAU are based on Camiling CLUP, then used the nomenclature of zones of the National Building Code for the PSO.

The table below shows the proposed land area per district, allowable maximum PSO, summation of the total gross floor area of the existing buildings per district, and the remaining area for construction.

Table 3-34: Percentage of Site Occupancy

District	Zone (based on PD 1096)	Percentage of Site Occupancy	TOSL	Proposed Area (SQ.M.)	Allowable Maximum PSO (SQ.M.)	GFA (Existing Structures)	Remaining Land Area for Construction (SQ.M.)
Academic	GI	50%	50%	105,269.95	52,634.98	17,625.71	35,009.27
College Services	GI	50%	50%	20,751.21	10,375.61	3,494.00	6,881.61
Agro-Ecotourism	PRE	20%	80%	72,435.42	14,487.08	6,695.00	7,792.08
Sports and Athletic	GI	50%	50%	68,142.00	34,071.00	9,041.00	25,030.00
Agri-Business Hub	GI	50%	50%	51,392.75	25,696.38	-	25,696.38

Research and Production	PRE	20%	80%	256,888.00	51,377.60	9,332.98	42,044.62
Bamboo Park	PRE	20%	80%	44,975.91	8,995.18	270.00	8,725.18
College Housing	R2	55%	45%	76,746.36	42,210.50	4,233.50	37,977.00

POLICIES

Land Use Policy

Set of rules and guidelines, such as land-use policy, is essential on how to properly manage and administer a land for numerous development objectives and future plans. It will serve as guide to improve livelihood, to promote environmental protection, public health and safety, among others.

1. Policy on Built-up Areas
    a. No structure shall be built without extensive research.
    b. No building shall be constructed without the recommendation of Planning and Development Office and approval of the Office of the President.
2. Policy on Building Design
    a. All building shall be constructed without compromising the area surrounding it.
    b. Green performance of the building shall be considered. All buildings shall be designed with respect to the 5 key parameters for a green building, such as Sustainable Site Development, Water Efficiency, Energy Efficiency, Indoor Environment Quality, and Material Selection.
3. Policy on Open Spaces
    a. Provision of green open spaces, such as parks, for relaxation of the students, employees, stakeholders, and other members of the community.
    b. Open spaces, such as forest preservation, shall be maintained.
    c. Open spaces for evacuation and temporary shelter shall be situated on hazard-free and constraints-free location within the university.
    d. Protect, preserve, and conserve all green open spaces.
    e. Prohibit construction of unnecessary structures within the space.
4. Policy on Solid Waste Management
    a. Management
        i. Observance of the 5Rs (refuse, reduce, reuse, repurpose, and recycle) of waste management.
        ii. All solid wastes shall be properly segregated for disposal.
    b. Area
        i. All areas for solid waste disposal shall be situated away from the administrative and academic buildings.
        ii. All areas for solid waste disposal shall be situated away from the water sources.

Water Use Policy

As water is linked to climate change, water use policy shall be applied.

1. Monitor and measure water consumption and identify significant and abnormal water use including leaks
2. To sustain water demand within the buildings, and also and to reduce water consumption, solar powered dug well and wind powered water pump shall be integrated to every building

3. Rainwater harvesting tank with filtration system shall be integrated in every building to reduce water consumption.
4. Filtered water shall be used for toilet flushing.
5. All greywater shall be filtered, through Sewage Treatment Plant, for reuse.
6. Water usage must be periodically reported to the Office of the President/ ADCO for information and monitoring.

Energy Use Policy

Tarlac Agricultural University regulates its energy consumption by issuing memorandum stating that air conditioning units must be turned on only from 9:00 am to 4:00 pm. All computers and other electronic appliances must be turned off when not in use. The use of energy-efficient lights and fixtures is also encouraged. All activities during weekend or outside office hours must be coordinated and approved by the Office of the President. Energy usage must be periodically reported to the Office of the President/ ADCO for information and monitoring.

Sectoral Framework Plan

The Framework Plans for the following Sectors can be accessed on **Annex A.**

Social Development

Economic Development and Investment Plan

Infrastructure, Utilities, and Road Network Development

Environmental Management

Institutional Development

3.6 Investment Program

The Tarlac Agricultural University Investment Program specifies the key development projects and investment program to be implemented by the University within the next 10 years. These programs and projects were determined as necessary in addressing the development challenges of the University, and were formulated with the end goal of attaining the desired visions of TAU.

The process of developing the campus development plan and investment program involves three streams of activities: 1) producing a ranked list of programs and projects with their individual and cumulative cost estimates, 2) determining available future funds for investment; and 3) matching the fund requirements with projected funds available and deciding the financing options.
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Ranked List of Projects

The first step in developing TAU's plan and investment program involves producing a ranked list of programs and projects, with an estimated cost and target year of implementation. It consisted of the following steps:

1. Collection and compilation of project ideas
2. Initial screening of projects
3. Conflict-Compatibility-Complementary Screening
4. Project Ranking
5. Refinements and Project Cost Determination

COLLECTION AND COMPILATION OF PROJECTS

Project ideas were collected and compiled from various sources in order to produce a random list of projects. For TAU, the primary source of project ideas was the priority programs and projects submitted by the University to the National Economic and Development Authority (i.e., those that were uploaded and to be uploaded to NEDA's Public Investment Program Online System). Additional projects that were identified during the GOTS workshop conducted in October 2022 were also a source of project ideas. Overall, there were 188 projects included in the random list of projects.

INITIAL SCREENING OF PROJECTS

The projects included in the random list underwent an initial screening process. Repetitive or redundant projects were consolidated together and treated as one project. Meanwhile, projects that were considered as impractical and those that are more appropriately implemented by other government agencies or organizations were sifted out. Likewise, non-projects and services were removed. Following the completion of this process, an initial list of projects was produced. The initial screening process yielded 99 projects.

CONFLICT-COMPATIBILITY-COMPLEMENTARY SCREENING

Another screening process was undertaken for the initial list of projects identified. Together with the ranking of projects, this particular activity involved a workshop which was held in November 2022 with

participation from representatives of the University's faculty, students, and administrative personnel. The participants were divided into two groups. Each group went through all projects included in the initial list and identified those that are complementary, compatible, or conflicting with other projects. Conflicting projects were removed from the list. Complementary projects were combined with other projects. Finally, compatible projects were retained. Following the completion of this process, a preliminary list of projects consisting of 44 projects was produced.

PROJECT RANKING

In order to determine the priority projects of TAU, a project prioritization workshop was conducted in November 2022. The same participants from the previous step ranked each project included in the preliminary list. These participants were divided into four groups: one group for students, one group for faculty, and two groups for administrative personnel (one for top management and one for administrative staff), with each representing a particular societal sector of the University (e.g., the students group represents the student body).

A Goal-Achievement Matrix (GAM) was used to facilitate the process of project prioritization. The GAM contains a listing of TAU's goals, which are weighted according to the perceptions, advocacies, and agendas of the different societal sectors of the University. These goals were used as criteria for rating each project.

In particular, TAU's goals or the criteria used for ranking each project were the components of the University's vision, namely:

1. A premier agricultural university in Asia
2. A university that produces holistic and globally-competitive individuals
3. A campus with ecologically-balanced and sustainable environment
4. A campus with disaster-resilient and smart infrastructure
5. A university led by transparent and capable leaders
6. A university with adequate, diversified, and well-utilized financial resources

Based on the perceived importance of the goals to the interests of the sector that each group represents, a weight for each goal was assigned. Thus, each group has different weights assigned for each goal.

The projects were then rated according to the extent to which the projects contribute to the attainment of the goals. In rating the projects, the following scale was used:

Table 3-35: Project Rating Scale

Rating	Description
3	Project contributes greatly to the fulfillment of the goal
2	Project contributes moderately to the fulfillment of the goal
1	Project contributes slightly to the fulfillment of the goal
0	Project does not contribute to the fulfillment of the goal
-1	Project slightly inconsistent with the goal
-2	Project moderately inconsistent with the goal
-3	Project greatly contradicts the goal

To get the total score for a particular project, the rating given for that project was first multiplied by the weight given to each goal. The project's score for each goal was then added to come up with the total score for the project.

The following are the top 5 projects that was produced during the PPA workshop last November 2022.

Table 3-36: Results of the November 2022 PPA Workshop

Project	Average Score	Rank
Construction and Development of Mental Health and Wellbeing Center (Catharsis)	2.51	1
Upgrading of TAU Health Facilities	2.40	2
Renovation of the Regional Rootcrops Research and Training Center	2.39	3
Expansion and Upgrading of Existing College of Education Building	2.34	4
Integration of Renewable Energy Systems in Existing Academic, Administrative, and Support Services Buildings in the University (Phase 1)	2.34	4

REFINEMENTS AND PROJECT COST DETERMINATION

Following the PPA workshop, refinements were made with the list of projects and ranking. Some of the projects were consolidated into programs. Further, non-infrastructure activities (e.g., capacity building activities for faculties) were included as components of the programs. This was done to align the projects to the vision and goals of the University. Following the refinements, 37 projects were retained.

The UP SURP Planning team then provided their own rating of the programs and projects, bringing the total group who ranked the project to 5. This resulted into the adjustment of the project ranking. The costs for each project and program were also determined based on (i) the estimated project cost provided in the list of priority projects submitted by TAU to NEDA and (ii) the cost per square meter of the projects. The table below shows the most updated ranking of the 37 programs, including the components for each program and their corresponding costs. For the costs, one column shows the cost of the program component and the other two reflects the individual and cumulative cost of the program. The total cost for the 37 programs is Php 1,534,380,000.

Determining Available Future Funds for Investments

The number of projects that TAU can finance is a function of its recurring revenue and operating expenditure level, the outstanding debt, and potential sources of financing. Thus, in determining the available future funds for investments in projects, the recurring revenue and operating expenditure level in future years was projected. In determining TAU's available future funds for investment, the following steps were followed:

3.6.1 Collection of financial data
3.6.2 Determination of historical financial trends
3.6.3 Projection of future recurring revenue and operating expenses
3.6.4 Determination of fiscal surplus

COLLECTION OF FINANCIAL DATA

Data on revenue, operating expenditure, and debt for the in the past were collected from the 2011 to 2021 audited financial statement of TAU. Specifically, the statement of financial performance was analyzed and historical data on the following financial variables were collected

1. Service and Business Income
2. Assistance and Subsidy
3. Personnel Services Expenses

4. Maintenance and Other Operating Expenses

DETERMINATION OF HISTORICAL FINANCIAL TRENDS

After collecting financial data, the 10-year (2013-2021) average annual growth rate of the revenue and expenditure items were computed. The average annual growth rate is the average increase in the value of the financial variable over a period of time. It is computed using the following formula:

Equation 4-1: Historical Financial Trends Formula

$$AAGR = \frac{GR_A + GR_B + \ldots ++ GR_N}{N}$$

where GR_A = growth rate in period A
GR_B = growth rate in period B
GR_N = growth rate in period N
N = number of periods

The table below shows the average annual growth rate of the four financial variables. Except for Assistance and Subsidy, the 10-year average annual growth rate was used to project future revenue and expenses as provided in the next step.

Table 3-37: Average Annual Growth Rate of Financial Variables

Financial Variable	Average Annual Growth Rate (10Y)
Service and Business Income	7.75%
Assistance and Subsidy	13.38%
Personnel Services Expense	7.59%
Maintenance and Other Operating Expenses	8.00%

PROJECTION OF FUTURE RECURRING REVENUE AND OPERATING EXPENSES

Recurring revenue and operating expenses refer to the portion of TAU's revenue and operating expenses that is expected to continue in the future. To predict the future values of TAU's service and business income, personnel services expenses, and maintenance and other operating expenses, its 10-year average annual growth rates was used.

Meanwhile, for assistance and subsidy, the 10-year average annual growth rate of 13.38% was not used because of the high growth rate calculated. An annual growth rate of 13.38% for national government subsidy to TAU appears to be unrealistic. Further, past growth rate in subsidy may not be a good indication of the future growth rate of national government subsidy. Instead, a modest growth rate of 7.75% was used to predict the future value of assistance and subsidy. This growth rate was based on the forecasted government spending growth rate of the Department of Budget and Management.

Another recurring expense that needs to be projected is TAU's obligated debt service. This pertains to the annual amount of debt payments for existing and other anticipated financial liabilities of TAU. Generally, historical growth rates are not a good indicator for projecting future obligated debt service because the debt level could fluctuate throughout the years. Thus, it was assumed that TAU's obligated debt service per year is equivalent to 10% of its projected annual total revenue. Projected annual total revenue is equivalent to the sum of the projected service and business income and projected assistance and subsidy.

The tables in the next two pages show the projected recurring revenue, operating expenses, and obligated debt service of TAU.

DETERMINATION OF FISCAL SURPLUS

Upon establishing the future recurring revenue inflows and expenditure outflows of TAU, the annual fiscal surplus was determined by taking the difference between total revenue and total expenses. TAU's available future funds for investment were then computed by taking the sum of the annual fiscal surplus for the next ten years. Based on the estimate, the available future funds for investment of TAU are **Php 1,354,973,786**.

Table 3-38: Projected Financials of Tarlac Agricultural University (2028-2032)

	0	1	2	3	4	5	10
	2022	**2023**	**2024**	**2025**	**2026**	**2027**	**2032**
Service and Business Income (a)	36,944,136	39,805,760	42,889,042	46,211,148	49,790,579	53,647,266	77,902,190.90
Assistance and Subsidy (b)	435,762,861	467,137,787	500,771,708	536,827,271	575,478,834	616,913,310	873,369,592.22
Total Revenue (c = a +b)	472,706,997	506,943,547	543,660,749	583,038,419	625,269,413	670,560,576	951,271,783,.13
Personnel Services Expense (d)	246,288,892	264,992,742	285,117,014	306,769,578	330,066,497	355,132,647	512,078,301.01

	0	1	2	3	4	5	10
	2022	**2023**	**2024**	**2025**	**2026**	**2027**	**2032**
Maintenance and Other Operating Expenses (e)	71,235,928	76,932,961	83,085,609	89,730,311	96,906,417	104,656,425	153,756,225.67
Obligated Debt Service (f)	56,724,840	60,833,226	65,239,290	69,964,610	75,032,330	80,467,269	114,152,613,.98
Total Expenses (g = d + e + f)	374,249,659	402,758,929	433,441,913	466,464,499	502,005,243	540,256,342	779,987,140.65
Fiscal Surplus (h = c – g)	**98,457,338**	**104,184,619**	**110,218,836**	**116,573,920**	**123,264,170**	**130,304,234**	**171,284,642.48**

Matching the fund requirements with projected available funds

The final step in the development of the investment program involves matching the fund requirements of the programs and projects with the available future funds for investment of TAU. This involves (1) determining the number of projects that can be funded and (2) determining the financing option of the university.

Table 3-39: List of Programs, Projects and Activities

No	Program Title	Cost ('000)
1	**Development of the Regional Root crop Research and Training Center**	44,300.00
2	**Development of the Department of Food Technology**	70,100.00
3	**Expansion and Upgrading of the College of Agriculture and Forestry**	157,300.00
4	**Development of Mental Health and Wellbeing Program**	25,000.00
5	**Expansion and Upgrading of the University Housing District**	399,200.00
6	**Expansion and Upgrading of the College of Education**	128,400.00
7	**Upgrading of TAU Health Facilities**	28,500.00
8	**Repair and Rehabilitation of Road Networks, Pedestrians, Walkways and Perimeter Fences Program**	190,000.00
9	**Integration of Renewable Energy Systems in Existing Academic, Administrative and Support Services Buildings in the University (Phase 1)**	70,000.00

10	**Expansion and Upgrading of the College of Engineering and Technology**	60,000.00
11	**Expansion and Upgrading of the College of Arts and Sciences**	119,200.00
12	**Drainage Development Program**	30,000.00
13	**Development of the Information Technology Center**	32,500.00
14	**Development of Integrated ICT System**	80,000.00
15	**Improvement of TAU Bamboo Park (Phase 2)**	6,200.00
16	**Establishment of Monitoring System for Air, Soil, and Water Quality**	16,000.00
17	**Improvement of TAU Hostel Facility**	61,300.00
18	**Development of the College of Veterinary Medicine**	91,000.00
19	**Expansion of Smart Greenhouse Facilities**	17,000.00
20	**Development of the College of Business and Management**	159,000.00
21	**Development of TAU's National Service Training Program (NSTP)**	24,500.00
22	**Development of Bamboo Forest Park**	25,000.00
23	**Retrofitting of the University Library, Archive and Museum**	75,000.00
24	**Development and Upgrading of Sports and Sociocultural Facilities and Athlete and Guild Development Programs**	33,000.00
25	**Construction of International Academic and Research Cooperation Center Convention Center)**	100,000.00
26	**Improvement of Shed for Small Ruminants**	28,000.00
27	**Integration of rainwater harvesting and filtration systems on buildings**	20,000.00
28	**Construction of TESDA Training Center**	22,500.00
29	**Waste Management Program**	20,000.00
30	**Construction of Disaster Evacuation and Emergency Operations Center**	22,500.00
31	**Rehabilitation and construction of new deep well systems with water tank for potable water**	25,000. 00

32	**Construction of Centralized Cold Storage Building**	36,800.00
33	**Transfer of aerial electrical cables and ICT cables to underground cabling system (Phase 1)**	75,000.00
34	**Repair/ Rehabilitation of Existing Staff Houses and Apartment**	31,000.00
35	**Expansion of University Storage and Supply Warehouse**	24,500.00
36	**Upgrading of existing power generator sets on lifeline and core facilities (Phase 1)**	22,500.00
37	**Establishment of multi-level parking area for vehicles at a strategic plan**	40,000.00
38	**Repair and Rehabilitation of Old Academic Buildings**	100,000.00
	TOTAL	**2,510,300.00**

*A detailed presentation for this table can be accessed in **Annex B.**

****** The projects for 2024 are already done (see **Annex B**). These projects are designed based on the requirements of the user. In addition, these buildings are compliant to the governing laws. Nevertheless, for 2025-2032 proposed projects still need further research and meeting with the end-user since the design is based on the requirements and outputs of the end-user, yet, the planning and design considerations and conceptual design shall be integrated in the buildings and strict implementation of the existing laws (e.g., PD 1096, BP 344, and RA 9514).

DETERMINATION OF PROJECTS THAT CAN BE FUNDED

Based on the available future funds for investment and the ranked list of projects and programs, only **12 out of the 38 projects** can be funded within the 10-year period. The total cost of funding these 28 programs/projects is **Php 1,354,380,000.** The table below shows the list of programs/projects that can be funded by TAU's available future funds.

Table 3-40: List of Programs That Can Be Funded

No	Program Title	Cost ('000)
1	**Development of the Regional Root crop Research and Training Center**	44,300.00
2	**Development of the Department of Food Technology**	70,100.00
3	**Expansion and Upgrading of the College of Agriculture and Forestry**	157,300.00
4	**Development of Mental Health and Wellbeing Program**	25,000.00
5	**Expansion and Upgrading of the University Housing District**	399,200.00
6	**Expansion and Upgrading of the College of Education**	128,400.00
7	**Upgrading of TAU Health Facilities**	28,500.00
8	**Repair and Rehabilitation of Road Networks, Pedestrians, Walkways and Perimeter Fences Program**	190,000.00
9	**Integration of Renewable Energy Systems in Existing Academic, Administrative and Support Services Buildings in the University (Phase 1)**	70,000.00
10	**Expansion and Upgrading of the College of Engineering and Technology**	60,000.00
11	**Expansion and Upgrading of the College of Arts and Sciences**	119,200.00
12	**Drainage Development Program**	30,000.00

	TOTAL	**1,322,000.00**

Meanwhile the total cost for the remaining 26 programs/projects is Php 1,183,300,000. The table below shows these remaining 9 programs/projects, including their estimated costs.

Table 3-41: List of Programs That Cannot Be Funded

No	Program Title	Cost ('000)
1	**Development of the Information Technology Center**	32,500.00
2	**Development of Integrated ICT System**	80,000.00
3	**Improvement of TAU Bamboo Park (Phase 2)**	6,200.00
4	**Establishment of Monitoring System for Air, Soil, and Water Quality**	16,000.00
5	**Improvement of TAU Hostel Facility**	61,300.00
6	**Development of the College of Veterinary Medicine**	91,000.00
7	**Expansion of Smart Greenhouse Facilities**	17,000.00
8	**Development of the College of Business and Management**	159,000.00
9	**Development of TAU's National Service Training Program (NSTP)**	24,500.00
10	**Development of Bamboo Forest Park**	25,000.00
11	**Retrofitting of the University Library, Archive and Museum**	75,000.00
12	**Development and Upgrading of Sports and Sociocultural Facilities and Athlete and Guild Development Programs**	33,000.00
13	**Construction of International Academic and Research Cooperation Center Convention Center)**	100,000.00
14	**Improvement of Shed for Small Ruminants**	28,000.00
15	**Integration of rainwater harvesting and filtration systems on buildings**	20,000.00
16	**Construction of TESDA Training Center**	22,500.00
17	**Waste Management Program**	20,000.00
18	**Construction of Disaster Evacuation and Emergency Operations Center**	22,500.00
19	**Rehabilitation and construction of new deep well systems with water tank for potable water**	25,000.00
20	**Construction of Centralized Cold Storage Building**	36,800.00

21	**Transfer of aerial electrical cables and ICT cables to underground cabling system (Phase 1)**	75,000.00
22	**Repair/ Rehabilitation of Existing Staff Houses and Apartment**	31,000.00
23	**Expansion of University Storage and Supply Warehouse**	24,500.00
24	**Upgrading of existing power generator sets on lifeline and core facilities (Phase 1)**	22,500.00
25	**Establishment of multi-level parking area for vehicles at a strategic plan**	40,000.00
26	**Repair and Rehabilitation of Old Academic Buildings**	100,000.00
	TOTAL	1,188,300.00

DETERMINATION OF FINANCING OPTIONS FOR THE UNIVERSITY

TAU has three financing options for the programs and projects that cannot be funded by its available future funds for investment. These are:

Conservative Approach

Under the conservative approach, only programs and projects that can be funded from regular sources will be implemented. TAU has to trim down the list of programs and projects into 28.

Development Approach

Under the development approach, the short list of projects (i.e., 37) is taken as final and irreducible. TAU will tap all sources possible to raise the needed funds to implement the remaining programs/projects.

Pragmatic Approach

This approach entails being conservative during the initial years and eventually becoming developmental as the status of TAU's finances improves and more fund sources become available.

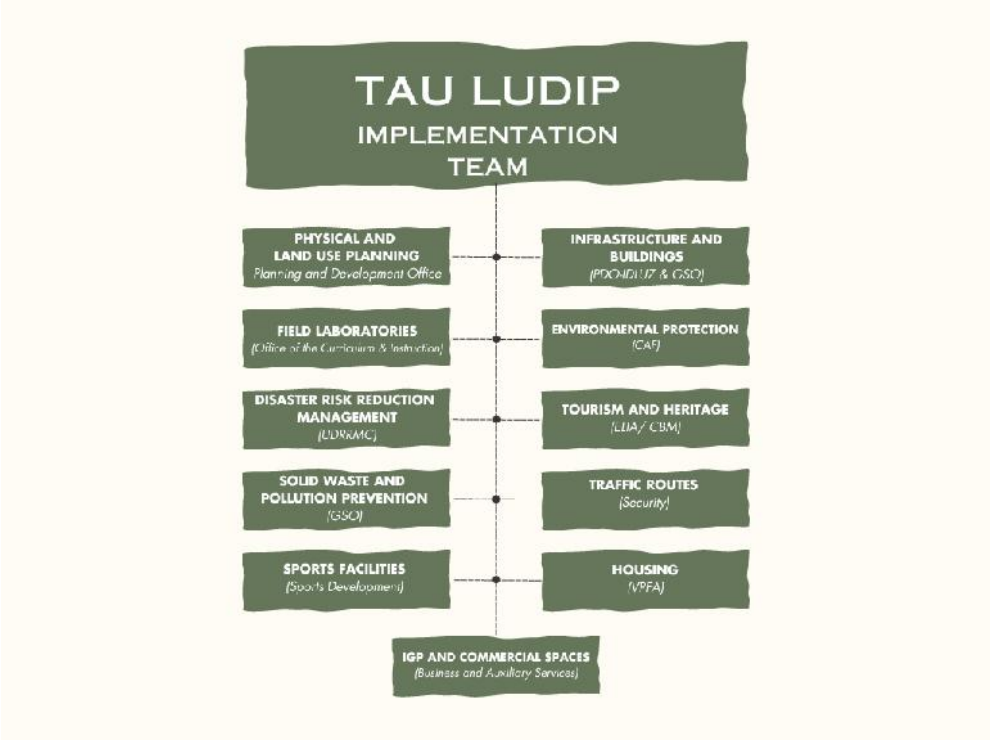
4 INSTITUTIONAL COORDINATION AND MONITORING SET-UP

This chapter will be discussing the plan for the implementation of the TAU Land Use Development and Infrastructure Plan, specifying the departments and offices responsible in the areas of Physical and Land Use Planning, Infrastructure and Buildings, Field Laboratories, Environmental Protection, Disaster Risk Reduction Management, Tourism and Heritage, Solid Waste and Pollution Prevention, Traffic Routes, Sports Facilities, Housing, and IGP and Commercial Spaces, among others.

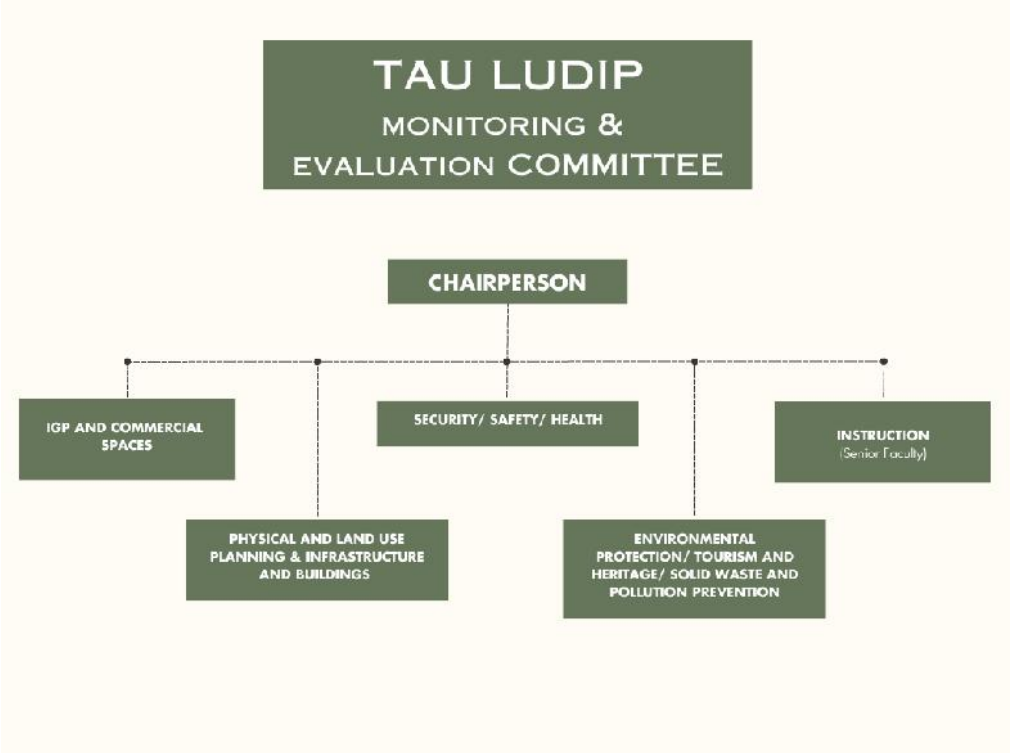
Based on the identified targets, strategies, and PPAs, the role of specific offices of TAU shall be identified in terms of implementation and monitoring shall be identified. The TAU LUDIP TWG is responsible for finalizing the TAU Land Use Development and Infrastructure Plan with consultation to key offices and sectoral groups within the university community. Upon completion, presentation and approval of the University Board of Regents, the LUDIP shall be submitted for approval of CHED.

4.1 Implementation Team Structure

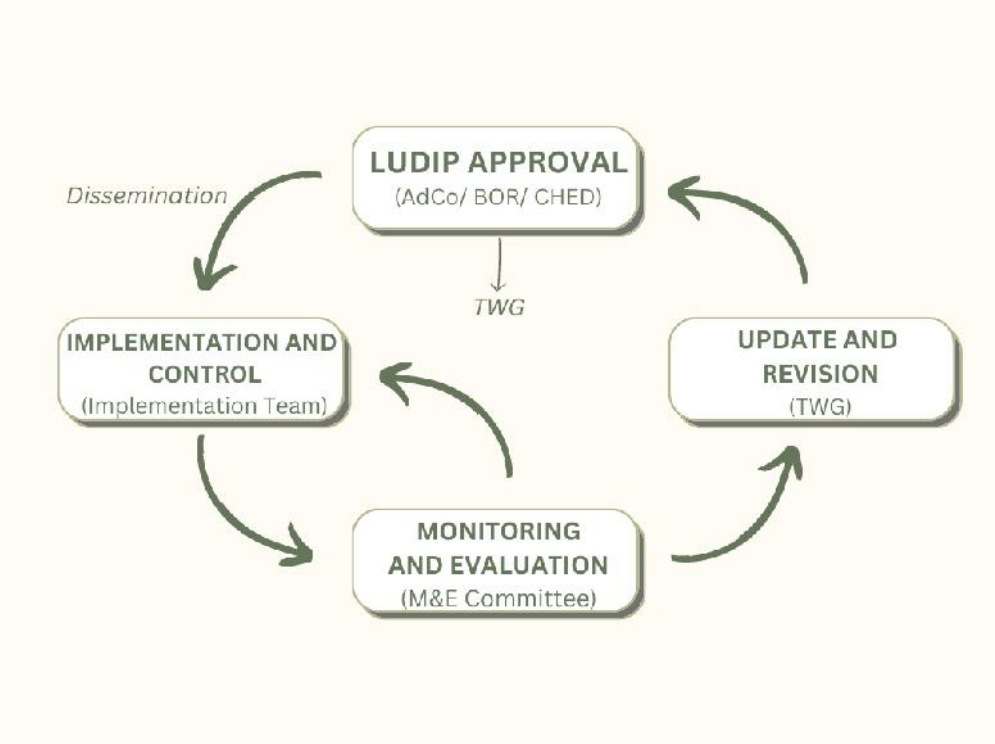
The Tarlac Agricultural University LUDIP Implementation Team is composed of 11 areas, such as the Planning and Development Office (PDO) is responsible for Physical and Land Use Planning, the PDO – Infrastructure Development and Land Use Zoning and General Services Office for the Infrastructure and Buildings, the Office of the Curriculum and Instruction for Field Laboratories, College of Agriculture and Forestry for Environmental Protection, University Disaster Risk Reduction Management Committee for DRRM, College of Business Management or External Linkages and International Affairs for Tourism and Heritage, General Services Office for Solid Waste and Pollution Prevention, Security for Traffic Routes, Sports Development for Sports Facilities, Vice President for Finance and Administration for the Housing, and the Business and Auxiliary Services for Income Generating Program and Commercial Spaces.



4.2 Monitoring and Evaluation Committee



4.3 LUDIP Implementation Guidelines



Implementation and Control

The Implementation Team is tasked to check and maintain if the vision based from the Campus LUDIP is being implemented accordingly. A periodic reporting is compulsory — quarterly or as needed. This report will be forwarded to the Monitoring and Evaluation Committee.

Monitoring and Evaluation

The Monitoring and Evaluation Committee is tasked to submit a report based on the findings of the Implementation Team and a report containing their recommendations. The report will be submitted to the Board of Regents through the Office of the President. The report will be submitted annually/ semi-annually as part of the Annual Performance Review of the University. Yet, if there are areas of concern with the report from the Implementation Team, the M&E Committee will report it back to the IT. However, if there are no issues and concerns, the process will proceed accordingly. Upon the approval of the BOR, M&E Committee will forward their recommendations to the LUDIP TWG Members.

Update and Revision

Every three (3) years, the LUDIP will be revised and updated based on the report, recommendations, and approval of the concern teams and committees. With that, LUDIP TWG Members will then update and revise the Campus LUDIP. The revisions will be approved by the BOR and ADCO. Upon approval, the Revised LUDIP will be checked and evaluated by CHED.

REFERENCES

Municipal Government of Camiling. (2017). *2017-2026 Comprehensive Land Use Plan of Camiling, Tarlac: Mainstreaming Climate Change Adaptation and Disaster Risk Reduction and Management.* Municipality of Camiling, Tarlac: Municipal Government of Camiling.

Presidential Decree No. 609. (1974). *ESTABLISHING THE TARLAC COLLEGE OF AGRICULTURE IN THE MUNICIPALITY OF CAMILING, PROVINCE OF TARLAC.*

Provincial Government of Tarlac. (2019). *Tarlac Provincial Development and Physical Framework Plan (2018- 2028).* Tarlac City: Provincial Government of Tarlac:.

Republic Act No. 10800. (2016). *AN ACT CONVERTING THE TARLAC COLLEGE OF AGRICULTURE (TCA) IN THE MUNICIPALITY OF CAMILING, PROVINCE OF TARLAC INTO A STATE UNIVERSITY TO BE KNOWN AS THE TARLAC AGRICULTURAL UNIVERSITY AND APPROPRIATING FUNDS THEREFOR.*

Republic Act No. 10931. (2017). *Universal Access to Quality Tertiary Education Act.* Manila: Official Gazette.

ANNEX A

Social Sector

Vision Element	Success Indicator	Explanation for the Gap	Implications of Unfilled Gaps	Policy Interventions
produces holistic and globally-competitive individuals	Access to basic health services round-the-clock	Current health facility within the campus is a clinic which only operates from 8:00 am to 5:00 pm	Unable to respond immediately to health emergencies that occur beyond the operating hours	Upgrading of existing clinic to an infirmary
		No available health services beyond operating hours		Construction of a satellite clinic nearer the University Housing District
		Complete fisrt-aid kits are available in all buildings and focal persons are trained for basic first aid		Establishment of a referral system for specific and specialized health service requirements
		Existing clinic is strategically located within campus but relatively far fram University Housing District		
	Complete medical staff for health services facility, and equipment	Ambulance driver is a staff under the motorpool	Ambulance cannot be deployed and is unable to respond immediately	Hiring of emergency medical technician for emergency operator vehicle
		Prior to use of ambulance has to undergo approval from both motorpool and clinic offices	Ambulance is not fully and effectively utilized	Hiring of dedicated driver for emergency operator vehicle

	Available mental health screening program among employees	No existing screening to identify and assist to the mental health needs of TAU employees	Unable to provide appropriate assistance or activities for the mental health and wellness of employees	Integration of Mental Health Screening into Annual Physical Examinations for TAU Employees
	Availability of a conducive facility for mental health and wellness services and activities	All existing mental health and wellness services are provided in the Students Services Office which does not have sufficient space	Unconducive environment may prevent students from availing the support or assistance for mental health that they may need	Construction of a Mental Health and Well-being Center
	Increased availability and participation of students in mental wellness activities	Mental Wellness Activities are often implemented during Mental Health Awareness Month (October) Otherwise, activities are by request of individual students	Mental Wellness Activities and support are less accessible that can affect performance of students	Mental Wellness Activities and support are less accessible that can affect performance of students
	Increased participation of employees in the CSC-prescribed 1-hour daily break	Based on observation, not all employees participate due to workload	May affect performance and overall wellbeing of employees	Implementation of awareness drive on the daily 1-hour break (apart from lunch break) Implementation of a biweekly community work-life balance activities
	Available psychological assessment service for students	Existing psychological assessment services are only limited	More complex circumstances may not be addressed	Expansion of student services office to accommodate more students

	Adequate number of student dorm accommodations	No dedicated dormitory for international students Numerous applicants received every semester	Housing dedicated for staff is reallocated for international students, thus reducing the employees that can be given housing	Construction of new dormitories Construction of dedicated dormitory for international students
	Regularly maintained student dorm accommodations	Some dorm rooms cannot be occupied due to lack of maintenance of some rooms	Facility is not fully utilized and efficiently used	Upgrading and maintenance of existing dormitories
	Adequate number of personnel housing accommodations	Many applicants to avail of the personnel housing	Higher cost of living requirements among employees	Construction of new housing units for personnel
	Regularly maintained personnel housing accommodations	Some units cannot be occupied due to lack of maintenance of some rooms Reported damages in some units	Facility is not fully utilized and efficiently used	Upgrading and maintenance of existing personnel housing facilities
	Adequate number of security force throughout the day	Limited security force given the size of the campus especially at night 24/7 security is not available for all residence areas (specifically Cottages in Barangay Sta. Maria)	Increased vulnerability to security risks	Hiring of additional security force

	All employees are trained in basic life support and CPR	While all colleges and offices have at least a trained employee, the number of trained personnel may not be sufficient given the high student population	Given existing limitations to provision of emergency services, response to emergency situations may not be timely	Expand training program and prioritize departments that have less trained personnel
	All disaster response and management focal persons per college and department trained in drills and simulation for all hazard scenarios	Participation in drills is only for evacuation	In the event of other hazard scenarios, the population is not trained on how to respond and react	Implementation of regular drills for scenarios in contingency plan
	Increased participation in international mobility for students	Various programs offered by the international affairs office	Partnerships may not be fully taken advantage of	Implementation of English language proficiency program to allow more students to participate
	Increased participation in international placement for students	Relevant offices have forged partnerships with international universities, especially for agriculture-related programs Observed limitation is the level of aptitude of students to be able to qualify and participate in these programs Opportunities are often more available for students from the College of Agriculture and Forestry	If partnerships with other universities are not availed of as much, future partnerships may not be pursued or extended Unequal availability of opportunities for international placement and mobility among students especially for other colleges	

	Increased participation in international mobility for employees	Existing support is mainly available only for teaching employees	Unequal availability of international mobility opportunities especially for other colleges	Expansion of financial assistance for international mobility and placement programs
	Increased participation in international placement for employees	Opportunities are often more available for employees in the College of Agriculture and Forestry	Unequal availability of international placement opportunities especially for other colleges	
	Increased participation in international placement for graduates	International placement of some graduates were by their own initiative Observed more widely in agriculture-related courses	Students who would like to seek international opportunities are not well-connected	Establishment of alumni chapters globally
	Increased participation in international fora of faculty and staff	Direct partnership Participation in international fora and conferences are widely disseminated among faculty and staff		Maintain existing programs
	Increased publication in internationally recognized journals of faculty and staff	Journal publication opportunities are widely disseminated across faculty members Submission of research works in publications considered in world rankings is not as active	Lower performance for the research and journal publication indicator for university rankings	Expand training for guidelines for Scopus and Asian Citation Index publication

	Increased faculty-student engagement in research activities	Based on observation, involvement of students across all steps of research activities is limited to proposal development only	Development of research experience of students will not be well-rounded Potential research outputs are not maximized Potential of students in research and development is not fully harnessed	Assessment of existing faculty-student engagements for research and extension activities Implement appropriate program to promote faculty-student engagement for research and extension activities
	Increase in recognition of athletes in national and international sporting competitions	In recent years, representatives of sports teams competing at the national and international levels have been taking home awards, particularly for archery and athletics Placing in tournaments for other sports is limited	Support might be concentrated to specific sports team alone Skills of students are not showcased and developed to its full potential	Training allowance increase for athletes Provision of regular training allowance throughout competition training and preparations Increase incentives for recognition in international competitions
`	Increase in recognition of performers in national and international cultural performance competitions	Participation in competitions has only occurred in recent years and a longer track record is yet to be set	Skills of students are not showcased and developed to its full potential	Hiring of trainers to support in international competitions

				Provision of regular training allowance throughout competition training and preparations

Economic Sector

Vision Element	Success Indicator	Explanation for the Gap	Implications of Unfilled Gaps	Policy Interventions
supported by adequate, diversified and well-utilized financial resources	Increased number of students to the enrollment capacity of the University	TAU's enrollment target is about 10,000 students per year. However, currently, there are only about 6,000 students enrolled in the University.	Less subsidy from the national government Less income from student fees	Improve the guidelines on scholarship grants
			Less income from student fees	Implement regular capacity building programs
			Underutilization of assets (e.g. classroom)	Improve enrollment system
	Increased income from auxiliary services (e.g. hostels, multi-purpose facilities)	Not enough external clients (private organizations)	Underutilization of auxiliary services assets	Continuously improve the quality and capacity of facilities
		Pandemic significantly affected the demand for hostels and multi-purpose facilities	Less income from auxiliary services means more reliance on national government subsidy	Continuously improve the quality of auxiliary services provided
		Not enough marketing and branding initiatives to attract clients		Develop marketing and branding initiatives to attract more clients

	Maximized income from agricultural products produced	Most of the agricultural products produced by the University is currently not commercialized	Lost opportunity for additional funds/income for TAU Less income from agricultural production means more reliance on national government subsidy	Improve the capacity of agricultural production facilities Develop marketing and branding initiatives for agricultural products produced
	Improved collection rate of tuition, student and other fees	Limited mode of payment for tuition fees	Less income from tuition fee means more reliance on national government subsidy	Improve the mode of payment, in accordance with gov't rules Create committee that will study and propose modern payment facilities for the collection of fees
	Increased number of patents that could generate royalties and licensing income for the University	Not enough incentives to faculty, students, and researchers to develop new patents	Underperformance in research and production targets Less income from patents means more reliance on national government subsidy	Increase incentives of faculty, students, and researchers to develop patents, inventions and commercialized products

	Developed agro-edutourism projects	TAU has not yet developed a master plan nor a conceptualized project for agro-edutourism	Lost opportunity for additional funds/income for TAU	Create a committee that will develop a master plan for agro-edutourism projects, programs, and activities Partner with private institutions and other government agencies in the funding and development of agro-edutourism projects
	Increased number of grants and donations from local and international institutions (government, NGOs)	Research activities and priorities may not be aligned with criteria of external institutions in providing grants and donations	Less grants and donations mean more reliance on national government subsidy, especially for research activities	Develop strategic plans on the solicitation of grants and donations
	Established new sources of revenue from investments and private sector partnership	Limited opportunities for private sector to partner with university Lack of budget to create an endowment fund	Less grants and donations mean more reliance on national government subsidy, especially for research activities More reliance on national government subsidy	Establish an endowment fund Undertake joint venture projects with the private sector

	Maintained high-utilization rate of national government subsidy	Complex documentation and disbursement process Lack of e-tracking system of documents	Underutilization of funds/subsidy from the national government could potentially decrease the budget allocated to the University in succeeding years	Strict enforcement of the Ease of Doing Business Law Simplification of the documentation and disbursement process Installation of e-tracking system of documents
	100% of the funds of externally funded projects was utilized efficiently and for its intended purpose	Only about 92% of the funds from external agencies are utilized. The remaining 8% are unutilized.	Higher risk that externally funded projects will have a lower budget	Strict enforcement of the Ease of Doing Business Law Simplification of the documentation and disbursement process Installation of e-tracking system of documents Strengthen the system for monitoring and updating the status of externally funded projects

	100% of the total number of externally funded projects was completed within the agreed timeframe	Only 70% of externally funded projects were completed within the agreed timeframe	Higher risk that TAU's application for funding will not be approved by external agencies	Strict enforcement of contractual obligations as regards timeframe of externally funded projects Strengthen the system for monitoring and updating the status of externally funded projects

Infrastructure Sector

Vision Element	Success Indicator	Explanation for the Gap	Implications of Unfilled Gaps	Policy Interventions
"disaster-resilient and smart infrastructure"	All the facilities and infrastructures on the campus are accessible and have no hazards.	Only 60% of the total facilities and infrastructure were completely renovated to comply with the development design standards of the Philippines in terms of accessibility and These are either newly constructed or renovated buildings that incorporates the needed features, elements, and programming to provide an inclusive and hazard-free campus. There are remaining 40% are existing buildings that are not compliant and outdated in terms of design, safety, and standards.	The remaining 40% are existing facilities that must be retrofitted or renovated as these can cause danger, accidents and hazards to students, faculties and other stakeholders using the Those structures can also exclude differently abled student in using the facilities and infrastructure and this can lead to further social and GAD issues.	The institute's development design must closely adhere to BP 344 (the Accessibility Law). Standards set out by the National Building Code must be followed by all infrastructures (PD 1096). Old and damaged buildings need to be renovated and/or retrofitted based on the campus' need for facilities.
	Generators are available for all the establishments inside the campus that need them during a power outage to function	The existing available generator sets cannot accommodate the required facilities of the campus during power outage in times of disaster, calamities, and emergencies.	More than half of the campus facilities and infrastructure that require generator set cannot function and operate during power outage and occurrence of other power supply problem.	Installation of additional backup power generator sets on facilities that cannot wholly operate when there's a power outage.

			The campus will be restricted to the facilities with back-up generators sets and will be limited in terms of their daily operations and reliability of other systems needing	
	All facilities have backup communication system Well-established data center for backup with cyber threat protection	The radio system coverage is only at the entrances of the campus and cannot reach the other areas of the campus and there is lack of handheld radios for the security officers and With the shift towards, data-driven decision making, TAU has already started different information and management systems which required data centers for back-up. There is a lack of digital and physical infrastructure for emergency back-up for all stored data.	Communications will also be restricted during disaster, calamities, and emergencies. This will result to difficulties and inability to communicate in management, operations, This can result to wastage of resources as all historical data are beneficial for future decision making and developments. For the cloud back-up, unprotected data can result to data breaches, hacks, and exposure to external entities.	Establishment and registration of two-way radio station with backup battery. Procurement of handheld two-way radios with trainings on proper usage and etiquette Building onsite and cloud backup data servers with protection against cyberattacks
	All stakeholders have access to potable water	There are areas in the campus with no access to potable water supply as the distribution networks are limited to the main facilities of the campus.	This can be a potential development constraint as water is a major necessity in a facility used by the faculty and students like quarters, housing, restroom, and other support facilities	Establishment of additional deep well with elevated tank and filtration and improvement of water distribution pipe networks

		The pressure of potable water is also low especially with the existence of mid-rise buildings at the campus as they utilize also deep well water resource.	These can also lead to other health and sanitary issues if not addressed.	
	All stakeholders have access to stable power supply	There is an established power supply for the campus. As more facilities catering education, housing, commerce, and other support services are evident and work in	This can be a potential development constraint as electricity is a major necessity in a facility. This will also cause power concerns and issues as the supply cannot	Upgrading of transformers and power distribution lines
	Established and identified disaster evacuation and emergency operations centers	There is no existing and identified area for disaster evacuation and emergency operations centers that can cater students, faculties and other personnel during disasters, calamities, and	There will be a tendency to reuse of other infrastructure to establish a temporary disaster evacuation and emergency operation centers in times of crisis. Absences of a permanent	Construction of disaster evacuation and emergency operations center
	Converted all overhead electrical and telecommunication cabling system to underground cabling system	The existing electrical lines at the campus are all overhead/flying which are prone to damages during disaster and calamities. There are few telecommunications cabling	This can affect the reliability of power and telecommunication sources of the campus leading disturbance in daily operations and management.	Replacement of all overhead electrical and telecommunication cable with underground cabling system; All electrical and telecommunication of future buildings must be laid
			Downtime in damages of overhead electrical and telecommunication cabling is longer than the underground cabling system	

	Availability of alternative roads and walkways network	The existing road network encompasses almost all the areas of the campus but the there is no other alternative/service road and access which will be needed if the main roads Existing road networks are narrow which can only cater one-way traffic. There are no established covered walkways and protected bike lanes as alternative transportation or mobility Drainage systems, lighting systems and amenities like signages/wayfinding elements along with the existing road and walkways network are either absent or lacking.	This will restrict mobility and accessibility of different areas inside the campus causing delayed outputs, responses, and provision of services. This will also create inconvenience and hazard to students also using the roadways of vehicles as their walkways. Without the proper design and development of the road and walkway networks, safety and security of the users will not be protected and ensured.	Construction of perimeter roads and covered walkway network; Improvement of existing road network
	Availability of centralized alarm and paging system	There is a limitation of the coverage of this system as only half of the campus area is covered by the existing centralized alarm and paging system.	This can cause slow responses and actions to emergencies and disasters which can pose danger and hazard to areas not covered by the alarm and paging system.	Expansion of existing centralized alarm and paging system to cover all areas of the university
	The majority of the campus buildings are energy-efficient	Newly constructed/renovated campus buildings have not considered green building designs and standards except for some purchases of LED bulbs lighting and	This will result in higher resource usage and electricity consumption causing higher budgetary allocation for electricity expenses which can be used to fund other	Establishment of building management and automation system; Future purchase of equipment (aircon and lighting fixtures) should be energy efficient;

		Some of the existing buildings have not yet converted their lighting and air-conditioning systems to energy-efficient fixtures.	Maintenance expense and frequency for the old fixture will be higher as compared to new energy-efficient fixtures.	
	100% Interoperability of systems (operations, security, communications and production)	There are different information and management system per department or units in the campus, but they are not interoperable and interconnected in terms of	This will result to gaps and delays in communications and exchange of information and services among different departments or units of the campus causing red-tape,	Development and installation of “enterprise system” (IT solution)
	Zero-gas emission of the transportation system (Solar powered/electric-powered vehicles)	All existing transportation system at the campus are all fuel transport and gas-powered vehicles like tricycles. There are no programs or initiatives for alternative environment-	Existing gas-powered vehicles inside the campus contributes to greenhouse gas that can harm our environment. Lack of options for transportation	Collaboration with private organization/companies for operations of e-bike/e-trike transport system inside the campus; Establishment of bike lanes along existing road network
	Increase stability and speed of internet connectivity on all areas of the campus	Existing internet connectivity in the campus has low bandwidth compared to other universities and the area coverage are limited to less than half of the campus area	Slow and unstable internet connection affects all information and management systems as well as daily operations causing delayed outputs, responses and actions to This also affects the learning environment of the students, reliability of the infrastructure systems and other support services requiring internet connection	Upgrading of internet connectivity with higher bandwidth in at least two or more different ISP

	Provision of alternative power supply for buildings	There is no alternative power supply for buildings, only on the production areas which utilizes wind and solar energy. Existing buildings have space at the rooftops for alternative	This will also increase electrical consumption as well as the electricity expenses. All facilities dependent solely to the main power supply can cause risk to the stability of	

Environmental Sector

Vision Element	Success Indicator	Explanation for the Gap	Implications of Unfilled Gaps	Policy Interventions
"ecologically balanced and sustainable environment	Reduce of chemical use for animal and crop production	The university is starting to transition from inorganic to organic fertilizers and feeds for the crop and animal production, but it is only for some research or project use `	The use of inorganic chemicals may cause soil and water quality degradation It may also cause air pollution and is a health hazard It may also degrade the quality of life of the animals and planted vegetation	Utilization of vermicompost, biofertilizer, etc. in crop production Utilization of alternative feeds in animal production
	100% implemented waste segregation and reduction of non-biodegradable waste generation	There is an implemented segregation system, but it is not regularly monitored	The university is not compliant with RA 9003	Compliance with RA 9003

		Due to a lack of monitoring, the individuals inside the campus do not fully follow the instructions.	Increase in the waste generation of the university because recyclables may not be recycled anymore due to the combined wastes from non-biodegradable, biodegradable, and recyclables	Placing properly labeled waste bins with examples and descriptions around the campus Strict Implementation of “No Plastic” policy within the University Strict Implementation of “Bring Your Own Baunan” policy in cafeteria

	50% utilization of biodegradable waste	The university has a vermicomposting facility but not all the biodegradable wastes are composted because some of the biodegradable wastes are mixed with the non-biodegradable wastes due to improper segregation	It may cause soil and water quality degradation from the leachate coming from the wastes	Strict implementation of all biodegradable waste to be used in the production of vermicompost Establishment of model facility utilizing biodegradable wastes from food wastes and crop residues
	Centralized wastewater treatment facility	The university has an established septic tank per building but is not regularly dislodged The university has plans for a centralized wastewater treatment facility but it still for discussion	The university will have a harder time monitoring the septic tanks The university must dislodge every month due to the volume of students per building which may cause a long-term cost	Installation of a centralized wastewater treatment facility Creation of a team focused on the operation of the wastewater treatment facility.

			May not be able to reach another success indicator which is "100% of wastewater is treated and utilized as recycled water resources."	Regular monitoring of the wastewater treatment facility Strictly implementing recycled water as an alternative water source for cleaning, drainage, etc.
	100% of wastewater are treated and utilized as recycled water sources	Due to the lack of a centralized wastewater treatment facility, the wastewater is not treated and utilized as a water source for tap water	The university must heavily depend on the current water sources, but it will cost more, and it may be limited due to the growing student body and faculties	
	100% a non-smoking campus	There are signages around the campus but are not properly monitored	It will cause air pollution and the university may not be able to reach another success indicator which is "established as a carbon-neutral university".	Strict enforcement of signages of non-smoking signs around the campus

		Penalties for violators are not implemented due to the lack of monitoring	It is a health hazard to other individuals on the campus	Implementation of penalties for violators
	Established as a carbon neutral university	There are forested and planted vegetation areas that may reduce the carbon emission from polluting the air quality, but it is not enough	It will contribute to the greenhouse gas emissions that cause global warming	Regular monitoring of carbon emission vs. carbon sequestration
		There is no established unit or team for the monitoring of carbon emission	It will also affect the air quality of the campus and the municipality, therefore, affecting the health of the community and the biodiversity in the university	Addition of forested and planted vegetation areas
		No strict implementation of reducing carbon emission		Creation of a team focused on the reduction of carbon emissions at the university

				Strict implementation of reducing carbon footprints of the individuals in the university
	100% compliant as per the Environmental Compliance Certificate (DENR)	The university does not have an existing Environmental Compliance Certificate (ECC)	The university may be penalized by DENR due to the lack of ECC The university may not be able to monitor the environmental aspects the university must consider	Expedite the application of the university's ECC Strict environmental compliance and monitoring of the air quality, water quality, waste management, biodiversity preservation, etc.
	All individuals will be strong environmental advocates	There are trainings and programs on environmental awareness and sustainability but most of these are done for the student council and faculties	Although the campus will be environmentally aware but not all individuals on the campus will become strong environmental advocates	Establishment of regular programs gearing toward environmental sustainability

				Provision of incentives for best implementing unit and classes
	100% Climate Action Awareness of TAU	There are seminars, trainings, and programs for climate action awareness, but the university does not have a manual or researches that the individuals may refer to	Lack of reference materials toward climate action awareness	Creation of climate action awareness manual Crafting of researches addressing the gaps of climate action awareness
	50% utilization of alternative water resources in TAU	The university has reservoirs and groundwater pump, but it is not sufficient to be used by 50% of the university	The university must heavily depend on the current water sources, but it will cost more, and it may be limited due to the growing student body and faculties	Installation of additional alternative water resources

	70% of buildings will be powered by solar and wind renewable energy sources	There are installed solar power panels and windmills as renewable energy sources, but it only powers a few buildings on the campus	The electricity cost of the university will increase due to the increasing number of students. Non-renewable energy sources require high energy, which needs a lot of natural resources such as coal and oil. In return, there will be a depletion of natural resources Non-renewable energy sources emit dangerous gases that may cause a health hazard in the campus	Installation of solar and wind renewable energy sources for priority buildings Consideration of other renewable energy sources such as biomass energy
	100% of the campus have a built-in solar motion sensor			Installation of built-in solar motion sensors in streets, buildings, and research institutions that are little to no light

	100% reduction of vulnerability of TAU against natural disasters	The university has a present fire and earthquake contingency plan but does not have a volcanic eruption contingency plan	TAU will be vulnerable due to the lack of a pre-emptive plan, especially for volcanic eruptions, limited equipment, and lack of regular and proper training during disasters	Improvement of emergency response equipment and team
		There is no regular training for the response team	It may cause major casualties and fatalities	Implementation of regular training for emergency response
		Limited equipment for response in case of disaster		Creation of contingency plans for other natural hazards (volcanic eruptions and etc.)
	100% trained personnel and students for DRRM	No regular DRRM trainings for the students and personnel	Not fully prepared in case of disasters	Implementation of quarterly training for DRRM

			The university will still be vulnerable due to the lack of knowledge of the individuals and the response team. Uncoordinated/ inaccurate reporting and response	
	Increase in partnerships with local and international agencies for the development of environmental sustainability	Most of the partners are from local agencies and a few international agencies, but it needs to be strengthened and be added for the development of environmental sustainability of the university	Missed opportunities to enhance and improve the development of environmental sustainability of the university	Strengthen the partnership locally and internationally for the development of environmental sustainability

Institutional Sector

Vision Element	Success Indicator	Explanation for the Gap	Implications of Unfilled Gaps	Policy Interventions
led by transparent and capable leader	Updating of all open bid opportunities and compliances to oversight agencies at the TAU transparency seal	A very small percentage of bid opportunities are not completed and posted towards agencies that are involved	Missed contractors for open bids of projects that the university requires	Ensure that all posted documents/records are accessible to concerned parties
	Monitoring the availability of programs for transactions and services	Lack of human resource and automation for tracking of transactions and services	Documentations of such services and transactions could be impaired due to lack of monitoring	Development of Document tracking system and strengthening of internal audit system.
	Publicly announced and posted vacant/filled positions for the university	Notification of job positions in the university are announced but are lacking in reach to a broader range of people that may be interested in the position offered	Possible candidates for such positions will not be able to apply for the vacancies in the university	Needing more avenues to disseminate vacant positions (automation)

	Well-communicated and accessible admission results	Communication of admission is not well broadcasted in all platforms of media to the intended party	Issues with students that could have been admitted to the university for quality education will become a missed opportunity for both the university and the student	Clearer message on disclosure of results; online portal on the results; more modality to disclose results (print, online)
	Sustainability of operations	Funding of fixed overhead costs are not sufficient to meet all demands of the operations	Not all operations will be able to function at optimal levels	Regular Monitoring and evaluation on PPAs for sustainability planning and implementation
	Well-implemented programs and projects, completed within time frame	Not all projects are allocated resources to be completed	Programs or projects could be discontinued due to lack of resource	Flexibility on existing policies
	Well-defined recruitment, selection and promotion process	Recruitment and promotion process is lacking in refinement of requirements for achievement	Proper hires can be missed and opportunities for promotions on deserving individuals will be delayed or lost to competitors	Strengthen recruitment, selection and promotion process
	Strict compliance to regulatory and statutory standards	Standards maybe lowered to meet certain objectives	Lower standards overall for the university	Massive info dissemination on the set standards

	100% involvement in quality management system	Human resource is spread out too much due to lack of manpower resulting in the lack of involvement	Focus on certain projects are hindered and derailed due to lack of involvement	Awareness campaign/orientation on the QMS
	Standardized streamlining of services	Some ISO protocols are not followed	Failure in the management system which could threaten the organization's ability to achieve standards	Stricter implementation of ISO protocols
	Data-driven planning and decision making	Lack of data obtained to achieve a definite decision	Different stakeholders may find certain decisions to be an issue or questionable which could impair the credibility of the university	Regular conduct of strategic planning among all stakeholders

ANNEX B

ANNEX B

REPAIR, REHABILITATION, AND MODIFICATION OF THE COLLEGE OF AGRICULTURE AND FORESTRY CLASSROOM BUILDING

Project Brief:

The project will repair, rehabilitate and modify the old two-storey CAF building. The scope of the project includes the replacement of wood truss and roofing of the left and right wing of the CAF building into steel truss with long span roof, construction of hallway and 2nd floor that will connect it to other buildings, replacement of ceilings and wood ceiling joint dilapidated by termites, removal to ensure that the structure withstand the future destruction caused by pests. The project also seeks the upgrading power lines and electrical rewiring to accommodate new equipment to be utilized in the laboratory, provision of fire alarm system of the whole building that being required in approval of our annual renewal of occupancy permit and for safety of the faculty and students.

The project also seeks to modify some classrooms especially those rooms intended for laboratory in accordance with the standard and specification as a requirement for upgrading our College Accreditation level. There will be 12 additional classrooms to accommodate the increasing number of students in the College and site development of the building.

The roof cover is pre-painted long span metal sheets with foam insulator and the building has large window openings and uses LED lamps to minimize electricity consumption. Moreover, the plumbing layout is designed to accommodate the use of water from rain harvesting system. Hence, it ensures conservation of resources.

Furniture, fixtures and equipment are also included in the project to cope up with the fast-changing technology. The rehabilitation of the old building will greatly improve the teaching-learning experience of the intended users to achieve the University's mission of providing quality tertiary education.

The rehabilitation of the old building which is primarily used as classrooms will provide conducive venue for the teaching-learning process for the increasing number of CAF students of TAU. This improvement in the learning environment will improve students' learning experiences and, consequently, their academic performance. This is in support to the University's mission of improving the quality of life through the production of globally competent graduates and relevant technologies in the society. This project will also provide climate change resilient buildings for faculty and students

With the completion of this project, graduates are expected to possess higher skills and competency that are comparable to the workforce in the field of agriculture and forestry around the globe.

ANNEX B

CONSTRUCTION OF DEVELOPMENT AND PROFESSIONAL EDUCATION CLASSROOM BUILDING FOR THE COLLEGE OF EDUCATION

Project Brief:

The University offers Teacher Education Programs from undergraduate to graduate level, namely Bachelor of Elementary Education (BEED), Bachelor of Secondary Education (BSED), Bachelor of Early Childhood Education (BECED), Bachelor of Technology and Livelihood Education (BTLED), Master of Arts in Education (MAED), and Doctor of Philosophy in Development Education. All these programs offer development and professional courses for teacher education. Presently, students enrolled in these programs are occupying the General Education Building which is foreseen to be insufficient in the coming years when there will be complete enrolment in the four programs. Moreover, the enrollees in the graduate programs are also increasing and at present, classes are conducted in various buildings in the University. It would be better if there will be a separate building where graduate classes will be conducted. The said project includes the construction of a 3-storey building which is composed of eleven (11) 21st Century classrooms (equipped with Smart TV, glass board, individual tables and chairs), 2 Offices with Comfort Rooms, 1 Innovation laboratory, 1 Early Childhood Laboratory, and 1 Conference Room.

Providing a conducive, equipped, and sustainably designed infrastructure for the teacher education students of the College of Education (CED) is one of the main purposes of this project. It shall address the lack of facility and classroom for the increasing number of students in CED.

This project will benefit the students with special needs including persons with disabilities.

ANNEX B

ESTABLISHMENT OF AGRICULTURAL AND BIOSYSTEMS LAND AND WATER RESOURCES AND AB PROCESS ENGINEERING LABORATORY

Project Brief:

The University offers a Bachelor of Science in Agricultural and Biosystems Engineering (BSABE) program under CMO No. 94, s. 2017. The program aims to provide students with practical learning experiences which requires laboratories for Hydrometeorology, Irrigation and Drainage Engineering, Land
and Water Conservation Engineering, Aquaculture Engineering, Agricultural and Biosystems Processing and Storage, Food Process Engineering, and Design and Management of Agricultural and Biosystems Processing Systems, thus, special laboratories shall be maintained by the university for these major fields. The said project is composed of the establishment of laboratory facilities and the procurement of tools and equipment for the different subject areas. With this project, the University will be able to offer actual learning programs and produce quality research outputs.

Providing a conducive, equipped, and sustainably designed infrastructure for the agricultural engineering students is one of the many purposes of this project. It aims to provide the necessary facilities and laboratories to help the students acquire practical and skills training in their respective fields/specialization. The laboratory shall also serve as a venue for the students to process their agricultural-based products and projects as culmination for their academic and research training.

This project will benefit the students with special needs including persons with disabilities.

ANNEX B

UPGRADING OF GEODETIC ENGINEERING LABORATORY AND CLASSROOM BUILDING INCLUDING FACILITIES

Project Brief:

TAU offers Bachelor of Science in Geodetic Engineering (BSGE) program under CMO No. 89, s. 2017. The program aims to train the students in the major fields of Geodetic Engineering. It enables students to attain the basic competencies, such as establishment of geodetic control network and collection of ground data using various methodologies and techniques. Based on CMO 86, s. 2017, facilities and resources shall be made available by the
school for the use of students and faculty. The building was previously occupied by the then Institute of Home Science and Technology; it was then given to College of Engineering and Technology for BSGE students after they transferred to other building.

The project includes upgrading of the existing building into a laboratory that will meet the space and design as required by the BS Geodetic Engineering (BSGE) program: replacement of ceiling deteriorated by termites, upgrading and rewiring of electrical lines, replacement of plumbing fixtures, upgrading of
drainage system to incorporate a rainwater harvesting system, replacement of existing jalousie windows into Analok frame awning windows, re-painting, and addition of laboratories to cater the increasing population of students under the BSGE program.

The said project is composed of upgrading of ICT service delivery facilities, which include total station equipment, leveling equipment, computer hardware and audio-visual equipment, software applications such as CAD, GIS, and Remote Sensing, and internet connectivity. It also includes manpower development/capability building, development and utilization of Computer-Aided Instruction Materials, Research, Training, and Partnership Development.

The upgrading of Geodetic Engineering Laboratory will provide both the students and faculty adequate facilities and resources which will eventually result to the increase in the level of students' understanding of the subject matter because of improved learning experience. This project will also provide climate change resilient buildings for faculty and students.

The project will be beneficial to both students and faculty. This will maximize the practical learning experience of the students and the skills they need to acquire to be ready for industry's demands.

ANNEX B

EXPANSION OF MEN'S DORMITORY PHASE I

Project Brief:

Tarlac Agricultural University continues to be recognized as an institution of higher learning. As it continues to grow in many aspects, including the student population, more students seek to be accommodated in its dormitories to avail an affordable, safe and comfortable housing. Many of these students are from
different municipalities in Tarlac; others are from other provinces and even abroad.

The project is an expansion of the existing two-storey reinforced concrete dormitory building. It will provide an additional total floor area of 820 square meters that can accommodate up to 102 students. Each room has 4 double-deck beds and one toilet and bath for every 4 students. Roof cover is pre-painted, long span metal sheets with foam insulator. The plumbing layout is designed to accommodate the use of water from a rainwater harvesting system. The building has large window openings and uses LED lamps to minimize electricity consumption.

This project is primarily aimed to provide more TAU male students with an affordable, comfortable, and safe housing, a housing that is ideal for students.

The expansion of the Men's Dormitory will be particularly beneficial to a larger number of TAU male students who are in need of affordable, comfortable, and safe housing. Many of these students are from different municipalities in Tarlac; others are from other provinces and even abroad.

By extension, the family of the beneficiaries will be guaranteed of the safety and comfort of the dormitory residents.

ANNEX B

REPAIR AND REHABILITATION OF ROAD NETWORKS WITH PROVISION OF WALKABLE PEDESTRIAN PATHWAYS FOR EMPLOYEES AND STUDENTS AND THOSE WITH SPECIAL NEEDS - PHASE 1

Project Brief:

The project aims to repair and rehabilitate existing road with 1.4km length, 8m width and 200mm thickness, (main road from boulevard to academic district) to construct rotunda in the critical intersection of the road for the safety of the pedestrian and motorist, to provide curbs and gutter, to dedicate a sidewalk with handrails for pedestrians that is likewise designed to cater students with additional needs. This project shall also provide a catch basin, box culverts, and drainage canals that will collect rain water going to water impounding reservoir to be used in irrigating the crops likes sweet potato, rice, tomatoes and many more produce under the University's agricultural projects. It also includes installation of LED lamps to minimize electricity consumption.

ANNEX B

EXPANSION AND UPGRADING OF THE INFORMATION TECHNOLOGY CENTER BUILDING INCLUDING LABORATORY FACILITIES

Project Brief:

The University offers a Bachelor of Science in Information Technology program under CMO No. 25, s. 2015. The program includes the study of the utilization of both hardware and software technologies involving planning, installing, customizing, operating, managing, administering and maintaining an information technology infrastructure that provides computing solutions to address the needs of an organization. According to Section 16.3 of the abovementioned CMO, the University is mandated to provide a laboratory facility responsive to such requirements. The project is composed of expansion and upgrading the existing Information Technology center laboratory for service delivery facilities, which are equipped with computer hardware and software that conform to industry standards and are capable of aiding learning and training on multiple platforms. This project specifically includes the provision of audio-visual equipment, computer-aided instruction and internet connectivity, which will be primarily used by students in their classes.

Providing a conducive, equipped, and sustainably designed infrastructure for the IT students is one of the many purposes of this project. It aims to provide the necessary facilities and laboratories to help the students acquire practical and skills training in their respective fields/specialization. The upgrading of the IT Center shall also serve as a venue for the students to process their skills in programming, development of system, and conduct of ICT training and education.

ANNEX B

UPGRADING OF COLLEGE OF AGRICULTURE ANIMAL SCIENCE DEPARTMENT SWINE LABORATORY WITH FACILITIES, FURNITURE AND EQUIPMENT

Project Brief:

The swine laboratory is designed to enhance the knowledge, desirable attitudes and skills of artificial insemination technician (student/learner) in accordance with industry standards. They will learn and develop competencies in confirming the readiness of animals for artificial insemination, collecting boar semen, performing artificial insemination (AI) on sow/gilt, and preparing documentation and reports on sow/gilt activities. The scope of the project is the construction of swine laboratory with modern equipment that will be connected to the existing piggery of the university for easy access in collecting samples from the boar. The roof cover is pre-painted long span metal sheets with foam insulator and the building has large window openings and uses LED lamps to minimize electricity consumption. Moreover, the plumbing layout is designed to accommodate the use of water from rain harvesting system. Hence, it ensures conservation of resources.

The project will develop and enhance students' competencies on Swine Production which includes the conduct of Artificial Insemination. It will serve as a venue for the students to translate theories into practice through hands-on experiences in the laboratory. It will also serve as a way for the University to extend technical assistance to service communities through the conduct of technology demonstration projects in the laboratory relevant to the processes and procedures of swine production. It will also raise work competencies of students in such as teamwork, professionalism, safety in the use of hand tools and equipment, housekeeping, and basic mathematical operations and calculations relevant to swine production. This project will also address the problems of local farmers on swine pest and diseases brought by impacts of climate change, and to ensure sustainability of swine produced for the consumption of the local community.

The project will benefit the students and faculty who need proper and conducive laboratory for swine production.

ANNEX B

EXPANSION OF LADIES' DORMITORY PHASE I

Project Brief:

The University has a growing population of students from distant places. The students need to have a comfortable and secure accommodation which is also affordable and within the University premises. The project is an expansion of the existing one-storey reinforced concrete dormitory building. It will provide an additional total floor area of 1,243 square meters that can accommodate up to 220 students. Each room has 4 double-deck bed and one toilet and bath for every 4 students. Roof cover is pre-painted, long span metal sheets with foam insulator. The plumbing layout is designed to accommodate the use of water from rain harvesting system. The building has large window openings and uses LED lamps to minimize electricity consumption.

This project is primarily aimed to provide more TAU female students with a housing that is ideal for students, an affordable, comfortable, and safe one.

The expansion of the Ladies' Dormitory will be particularly beneficial to a larger number of TAU female students who are in need of affordable, comfortable, and safe housing. Many of these students are from different municipalities in Tarlac; others are from other provinces and even abroad.

By extension, the family of the beneficiaries will be guaranteed of the safety and comfort of the dormitory residents.

ANNEX B

CONSTRUCTION OF TAU EMPLOYEES' HOUSING FACILITY

Project Brief:

With the increasing number of students, additional faculty and staff are also hired to complement the needs and requirements of the University. A number of professionals and skilled workers from distant municipalities and provinces are presently employed and continuously growing, hence sufficient, comfortable and safe accommodations for them is necessary. The project consists of constructing reinforced concrete single detached houses with furniture and utilities.

The said project is expected to be utilized by the succeeding generations of TAU workforce as it is made with durable materials. It would definitely provide not just comfort but also sustainable living to the occupants since the infrastructures are expected to withstand heat and calamities. The roof cover is pre-painted long span metal sheets with foam insulator and the building has large window openings and uses LED lamps to minimize electricity consumption. Moreover, the plumbing layout is designed to accommodate the use of water from rainwater harvesting system.

The project will provide a safe and comfortable accommodation for the faculty and staff and their families while serving the University. Since the staff houses are single detached houses, these also ensure the occupants' privacy and safety.

TAU employees who are residing from distant municipalities and provinces.

ANNEX B

IMPROVEMENT OF CAMPUS DRAINAGES INCLUDING THE ESTABLISHMENT OF SEWAGE TREATMENT PLANTS FOR WATER RE-USE IN THE UNIVERSITY (PHASE 1)

Project Brief:

This project aims to establish a modernized sewage drainage and the treatment system in Tarlac Agricultural University. This involves the laying of sewage pipe networks with manholes, which will be directed to a designated sewage treatment plant. Also included in the project is the establishment of a rainwater harvesting and treatment plant. Collected and treated grey water shall be used in crop irrigation and animal production projects. This project ensures the commitment of the university in helping attain the Sustainable Development Goals, especially Goal 6 (Clean Water and Sanitation), Goal 12
(Responsible Consumption and Production), and Goal 13 (Climate Action).

Included in the main priorities of any institution is the provision of basic health and safety of all stakeholders, the university officials, staff, and community partners. The aforementioned project serves not just to modernize the sewage draining and treatment system of the university, but it shall ensure that the delivery of services of the agency will not be reprimanded. The project may also help the university sustainably collect and treat grey water that can be used in crop irrigation and animal production projects. This project will also aid in providing climate change resilient buildings for the TAU community and its stakeholders.

This project will benefit the students with special needs including persons with disabilities.

ANNEX B

UPGRADING OF THE MATERIAL RECOVERY FACILITY INCLUDING THE PROCUREMENT OF WASTE DIVERSION AND MANAGEMENT SYSTEM

Project Brief:

In line with the university's Sustainable Development Goals, this project shall foster sustainable operations of the university. It aims to procure a biodegradable waste composting machine to facilitate the waste management in the campus, initiate proper and engaging recycling programs, and ensure public health through proper waste treatment and disposal. The installation of such a facility would help the university innovate its waste management system and utilize a circular economy approach that would eventually benefit the institution and the community.

Included in the main priorities of any institution is the provision of basic health and safety of all stakeholders, the university officials, staff, and community partners. The aforementioned project shall ensure that the university will have its own biodegradable waste composting machine to facilitate the waste management in the campus. This project will also aid in providing climate change resilient buildings for the TAU community and its stakeholders.

This project will benefit the students with special needs including persons with disabilities.

ANNEX B

Construction and Development of the Mental Health and Wellbeing Center (Catharsis)

Project Brief:

The project will strengthen services to promote the mental health of the students by providing a safe venue to express their emotions.

The RA111036 or the Philippine Mental Health Act stipulates that educational institutions such as schools, colleges, universities, and technical schools shall develop policies and programs for students, educators, and other employees designed to raise awareness on mental health issues, identity and provide support and services for individual at risk, and facility access, including referral mechanisms of individuals with mental health conditions to treatment and psychosocial support Specifically, the educational institutions are task to: promote mental health; provide basic support services for individual at risk or already have a mental health condition; and establish efficient linkages with other agencies and organizations that provide or make arrangements to provide support treatment and continuing care.

UPGRADING OF EXISTING BS AGRICULTURAL AND BIOSYSTEMS ENGINEERING LABORATORY BUILDING INCLUDING FACILITIES

Project Brief:

The University offers a Bachelor of Science in Agricultural and Biosystems Engineering (BSABE) program under CMO No. 94, s. 2017. The program aims to provide students with practical learning experiences in which they can observe, verify and reflect on and experience different components of the teaching-learning processes in an actual school and industry setting. Based on Section 18.2 of the abovementioned CMO, required laboratories shall be maintained by the university for this program. The said project is composed of upgrading of laboratory facilities which include agricultural and biosystems machineries, tools and equipment, electrification and control systems, renewable energy sources facilities, waste management facilities, wood and metal works equipment, computer hardware and audio-visual equipment, software applications, and internet connectivity which are necessary in the provision of quality education to students. The project will foster human resource development, capability building, development and utilization of research and trainings, and partnership developments. With this project, the University may be able to offer actual learning programs and researches output utilization. Also, the projects may serve as a venue for National Certification training courses under TESDA

ANNEX B

EXPANSION AND UPGRADING OF THE COLLEGE OF EDUCATION SCIENCE, MATH AND TECHNOLOGY EDUCATION BUILDING WITH TLE-INDUSTRIAL ARTS LABORATORY AND FACILITIES
Project Brief: The University offers a Bachelor of Technology and Livelihood Education (BTLEd) program with majors in Information and Communications Technology, Home Economics, and AgriFishery Arts under CMO No. 78, s. 2017. The Junior and Senior High School programs under K-12 also offer specializations in Technology and Livelihood Education, which requires laboratory for Industrial Arts subjects such as Electricity, Electronics, Carpentry, Masonry, and Plumbing. Based on the abovementioned CMO and K-12 Curriculum, special laboratories shall be maintained by the university for these major fields. The said project is composed of renovation and upgrading of the existing covered hall in the Agri-home Building to establish a TLE-Industrial Arts Laboratory, including the procurement of tools and equipment for the different subject areas of Industrial Arts.

REPAIR AND REHABILITATION OF EXISTING STAFF HOUSES

Project Brief: With the increasing number of students, additional faculty and staff are hired to complement the needs and requirements of the growing University. A number of professionals and skilled workers from distant municipalities and provinces are presently employed; the population is continuously growing, hence sufficient, comfortable, and safe accommodations for them are necessary. The project consists of the repair and rehabilitation of the existing old staff houses to ensure a safe, comfortable, resilient, and sustainable housing facility for personnel. The housing facility is designed to utilize renewable energy and rainwater-harvesting systems to ensure sustainability in university operations.

CONSTRUCTION OF TAU SOIL AND CROP LABORATORIES WITH FURNITURE AND EQUIPMENT
Project Brief:

ANNEX B

A functional Soils and Crop Laboratory must be established for educational, research, and agricultural purposes, primarily for a noticeable effect on the productivity of the soil, eventually serving not just for academic necessity but for individual farmers, researchers, agricultural extension providers, as well to escalate crop production towards a higher income, food security and probably global competency.

RENOVATION OF THE REGIONAL ROOTCROPS RESEARCH AND TRAINING CENTER BUILDING

Project Brief:

The project involves the renovation of the existing building to enhance its capacity to support the research, training, and production activities for root crops and to maximize the research and study of the banner commodity of the University, which is sweet potato. The renovation will also expand the center of mass-produced tissue-cultured sweet potato clean planting materials (SP-CPM) to be distributed to farmers as an alternative source for income and food.

REPAIR, REHABILITATION AND MODIFICATION OF THE DEPARTMENT OF FOOD TECHNOLOGY BUILDING

Project Brief:

The university offers a BS Food Technology (BSFT) program under CMO 7, s. 2019. The program requires specific laboratory rooms for physico-chemical treatments, microbiology, sensory evaluation, product development, food pilot plant, and food processing. With the annual increase of enrollees in the BS Food Technology program, there is a great need to repair and modify the current BS Food Technology Building. The project will repair and rehabilitate the existing classroom building and will be complemented with the required equipment for the Level II re-accredited program.

EXPANSION OF LADIES' DORMITORY PHASE 2

Project Brief:

Tarlac Agricultural University continues to be recognized as an institution of higher learning. As it continues to grow in many aspects, including the student population, more students seek to be accommodated in its dormitories to avail an affordable, safe and comfortable housing. Many of these students are from different municipalities in Tarlac; others are from other provinces and even abroad. The project is an expansion of the existing one-storey reinforced concrete dormitory building. It will provide an additional floor area of 820 square meters that can accommodate up to 102 students.

ANNEX B

Each room has 4 double-deck beds and one toilet and bath for every 4 students. Roof cover is pre-painted, long span metal sheets with foam insulator. The plumbing layout is designed to accommodate the use of water from a rainwater harvesting system. The building has large window openings and uses LED lamps to minimize electricity consumption.

EXPANSION OF MEN'S DORMITORY PHASE 2

Project Brief:

Tarlac Agricultural University continues to be recognized as an institution of higher learning. As it continues to grow in many aspects, including the student population, more students seek to be accommodated in its dormitories to avail an affordable, safe and comfortable housing. Many of these students are from different municipalities in Tarlac; others are from other provinces and even abroad. The project is an expansion of the existing two-storey reinforced concrete dormitory building. It will provide an additional total floor area of 820 square meters that can accommodate up to 102 students. Each room has 4 double-deck beds and one toilet and bath for every 4 students. Roof cover is pre-painted, long span metal sheets with foam insulator. The plumbing layout is designed to accommodate the use of water from a rainwater harvesting system. The building has large window openings and uses LED lamps to minimize electricity consumption.

CONSTRUCTION OF COLLEGE OF EDUCATION CHILD RESEARCH AND DEVELOPMENT LABORATORY OF EXPERIENCES (CRADLE)

Project Brief:

Tarlac Agricultural University - College of Education (CEd), as a Center of Excellence in Teacher Education, is mindful of its relevant mission to provide training, conduct research, innovate methods and practices and most of all serve as a model and service provider in the community. The technical as well as the symbolic nature of CRADLE projects the relevance of societal ideas of caring, nurturing, and learning that still pervade today. These are critical links to facilitating and enhancing early childhood teacher education efforts. As an educational resource, CRADLE will serve as an ideal environment to bring into reality visual as well as experiential representations of how programs and models in child development are practiced, allows students to put theory into test and provides the community a model facility for early childhood development and education

ANNEX B

CONSTRUCTION OF ELECTRONIC MEDIA LABORATORY FOR DEVELOPMENT COMMUNICATION STUDENTS INCLUDING EQUIPMENT AND FACILITIES
Project Brief: In accordance with the University's thrust to be one of the top 500 universities in Asia, as well as to produce competent graduates and relevant technologies in the service of society, the College of Arts and Sciences has been offering the course BS Development Communication, wherein communication via the different forms of media (print, broadcast and online) can be utilized in improving the socio-economic condition of the countryside. One of the requirements of the program is to have a radio station where students can practice their field and where stakeholders can easily get information and deliver the message which they need to share with people in order to inform and educate the community easily. Hence, to meet the said requirement, this proposal is made for the construction of the laboratory including the necessary peripheral facilities for its operations.

CONSTRUCTION OF INTERNATIONAL ACADEMIC AND RESEARCH COOPERATION CENTER (PHASE 1)
Project Brief: The building consists of a library that consists of resource materials on war and world peace, an auditorium for lectures and film showing, a peace museum that exhibits war experiences and accommodation rooms for international students. The project will benefit the local and international students, scholars and researchers studying for peace, cultural, and international studies. It will also benefit indigenous people of the region and rebel returnees as a venue for livelihood trainings and workshops.

NTEGRATION OF RENEWABLE ENERGY COLLECTION SYSTEMS IN EXISTING ACADEMIC, ADMINISTRATIVE, AND SUPPORT SERVICES BUILDINGS IN THE UNIVERSITY (PHASE 1)
Project Brief: To respond to the increasing demand for power source and increasing inflation, this project aims to integrate a renewable energy collection system to provide back-up power source for the university. This project may harness the continuity of the university operations while economizing the expenses of the institution.

REHABILITATION AND MODIFICATION OF OLD ACADEMIC BUILDINGS
Project Brief: The project will repair and expand the four Colleges' existing academic buildings (College of Education, College of Engineering and Technology, College of Agriculture and Forestry, and the College of Veterinary Medicine) incorporating the elements of Green Building like natural ventilations, lightings and green wall. Rehabilitation of old academic and laboratory buildings will improve the teaching-learning experience of the students and teachers that will contribute in achieving the vision, mission and objectives of the University. Furthermore, it will address the lack of academic buildings with the continuous increase of enrolment in the University.

CONSTRUCTION OF SEED LABORATORY AND COLD STORAGE BUILDING
Project Brief: The building is a reinforced concrete building that will house the seed laboratory and a cold storage for various seeds and harvested crops to ensure supply of needed seeds for forestry & agriculture purposes. This will be effective in reducing the amount of waste and in lengthening the timeframe for marketing these seeds. This will also spur innovation, research, and extension aligned with the university strategic objectives. Services of the building would be offered to university stakeholders and the community.

ANNEX B

IMPROVEMENT OF TAU HOSTEL FACILITIES
Project Brief: The University Agritourism Hostel houses local and international researchers, students and visitors who have engagements with the University. To maximize their experiences during their stay in the University, necessary recreational and physical fitness facilities that they may be needing to relax their minds and bodies are essential as part of the hostel services are to be provided. The project consists of establishing physical fitness gym, wellness room, a pool including furniture. The Agritourism Hostel also serves as the simulation laboratory of Agritourism students. The enhancement of the existing hostel will ensure that they learn through real-life experiences in their respective industries.

CONSTRUCTION OF 4-DOOR STUDIO TYPE APARTMENT FOR TAU EMPLOYEES (PHASE 1)
Project Brief: With the increasing number of students, additional faculty and staff are also hired to complement the needs and requirements of the University. A number of professionals and skilled workers form distant municipalities and provinces are presently employed and continuously growing, hence sufficient, comfortable and safe accommodations for them is necessary. The project consists of 4-door reinforced concrete studio-type apartment with complete amenities that can accommodate a family of 4 members per unit.

ESTABLISHMENT OF COLLEGE OF EDUCATION STUDENT CENTER
Project Brief: The College of Education offers various programs from secondary, undergraduate, to graduate programs. It is now located on its new location based on the master development plan of the University which is far from the library and assembly area for students. Students occupy the various buildings for their classes. However, there is no conducive area for them to read or study, or where they can conduct outside classroom activities. With the increasing population in the secondary, undergraduate, and graduate programs, there is a dire need to put- a up student center for College of Education students. The said project includes the construction of a covered hall with a reading center, student lounge, and cafeteria for students.

REHABILITATION OF EXISTING LADIES' AND MEN'S DORMITORIES
Project Brief: The University has a growing population of students from distant places. The students need to have a comfortable and secure accommodation which is also affordable and within the University premises. The project consists of rehabilitating the existing dormitories building including the updating of its architectural, structural, and electrical systems compliant to prevailing industry standards and building laws. The rehabilitation of the dormitories will also integrate green building and tropical design principles to ensure resilience and sustainability. Roof covers will use pre-painted, long span metal sheets with foam insulator. The plumbing layouts are designed to accommodate the use of water from rain harvesting system. The building will be provided with large window openings and uses LED lamps to minimize electricity consumption.

REPAIR/REHABILITATION OF EXISTING 6-DOOR APARTMENT (PHASE 1)
Project Brief: With the increasing number of students, additional faculty and staff are also hired to complement the needs and requirements of the University. A number of professionals and skilled workers form distant municipalities and provinces are presently employed and continuously growing, hence sufficient, comfortable and safe accommodations for them is necessary. The project consists of the repair and rehabilitation of the existing 6-door apartment building to ensure a safe, comfortable, resilient, and sustainable housing facility for personnel. The housing facility is designed to utilize renewable energy and rainwater-harvesting systems to ensure sustainability in university operations.

ANNEX B

CONSTRUCTION OF THREE-STOREY COLLEGE OF BUSINESS AND MANAGEMENT BUSINESS EDUCATION CENTER
Project Brief: The proposed construction of CBM-Business Education Center will be used by four programs: the BS Business Administration, BS Entrepreneurship, BS Agribusiness and BS Tourism Management. This is in response to the growing population of the College. Currently, there are 30 classes across four programs, with over 400 first year students. The University's enrolment campaign among senior high schools in Tarlac and Pangasinan; coupled with the College's effort of marketing the programs have been proven to be effective as reflected with the influx of the number of first year students enrolling under the College of Business and Management. The Business Education Center aims to help students and business start-ups/ entrepreneurs in commercializing their ideas, products and technology. The envisioned laboratory rooms will be equipped with facilities needed for skills enhancement training for business administration, bs agribusiness and bs entrepreneurship students. The building will also serve as classroom since CBM's population is rapidly increasing each semester. The College of Business and Management, in cooperation with the Provincial Government of Tarlac and Department of Trade and Industry, continuously conducts series of Skills Enhancement workshop for budding entrepreneurs using existing laboratory equipment. It will also help budding entrepreneurs in the community to develop their business ideas, products and services under the mentoring of the CBM faculty. The students and other stakeholders will be empowered with workrelated office equipment, spacious classroom, simulated training rooms, and product development facilities. The Business Education Center will provide TAU stakeholders the opportunity to develop ideas and products that will be translated into commercial businesses.

CONSTRUCTION OF NATIONAL SERVICE TRAINING PROGRAM (NSTP) INSTRUCTION BUILDING WITH STUDENT QUARTERS
Project Brief: Included in the mandate of the state universities is to train the students to provide service to the community. Hence, the National Service Training Program has been developed to hone the students' values and skills to provide efficient services to their peers and to the community. In this regard, TAU aims to strengthen its NSTP by providing instruction building with student quarters. Equipped with large flexible classrooms, the proposed facility aims to provide conducive learning environment for the students and faculty. The student quarters for ROTC cadets are also included to house the student-trainees and provide support for their after-school activities.

IMPROVEMENT OF PERIMETER FENCES AND PEDESTRIAN WALKWAYS (PHASE 2)
Project Brief: With the resumption of face-to-face classes, the university incessantly prepares the facilities and structures in the campus to efficiently deliver the demands of the students, faculty, and the non-teaching personnel. Aside from the buildings and other installed facilities, it is also imperative that the pathways/walkways going to these facilities are accessible to all clientele. Hence, the project is proposed. It aims to improve the perimeter fences and pedestrian walkways to improve accessibility and mobility in the campus. The second phase of the project aims to secure the perimeter of the housing district.

EXPANSION OF THE COLLEGE OF BUSINESS AND MANAGEMENT MAIN AND ANNEX BUILDINGS
Project Brief: The rapid increase of enrolment at the College of Business & Management in the next three (3) years poses a great need to put up a new annex building at the CBM Complex. With enough classrooms to hold and other academic activities, learning and exchange of ideas will be fruitful for teachers and students. The three (3) storey building will house classrooms and other laboratories that are not accommodated at the existing CBM building and with the addition of new programs. Additional classrooms and laboratories will be needed as a requirement for the courses as recommended by the CHED. The project will address the deficiency of classrooms due the increase of enrollment as

a result of the implementation of RA 10931 or the "Universal Access to Quality Tertiary Education Act".

CONSTRUCTION OF TAU STUDENT DEVELOPMENT BAMBOO PARK

Project Brief:

The Tarlac Agricultural University's Vision to be become one of the top 500 universities in Asia through, among others, the production of globally competent graduates in the service of society. As an educational institution, TAU seeks to form individuals who can later become productive citizens of the country as well as the rest of the world. Thus, its responsibility is not only confined to the academic, nor does it end only in job acquisition, but extends towards the development of life skills and values, as laid out in CMO no. 9, s. 2013. Such an objective is the mandate addressed by university's Office of Student Services and Development (OSSD). Under the OSSD is the Student Development Unit (SDU) which provides for programs and activities designed for the enhancement and deepening of leadership skills and social responsibility among the studentry. As a Higher Educational Institution (HEI), one such institutional support that TAU can provide is adequate space for accredited student organizations for them to conduct their meetings as well as to socialize (CMO. No.9, section 19.2). At present, the SD has accredited over 40 student organizations, which are categorized according to their organizational objectives: academic, socio-civic, fraternities/sororities, religious, and special interest. One of the recurring issues particular to SOs is the lack of office space or gathering area, a place for them. As bamboo is one of the flagship products of the university, the proposed project aims to educate and immerse students and the community in bamboo cultivation and product development.

REHABILITATION OF THE TAU WATER SPORTS FACILITIES

Project Brief:

The project will rehabilitate the existing Olympic-sized pool that can be a setting for aquatic and water sports such as swimming, diving and water polo. It can also be used as training ground for rescue swimming and swimming lessons for the students and other clients. The repair and modification of the water sports facility will respond to the necessity of providing a more convenient venue to conduct sports and other activities to encourage more participation and involvement of faculty and students to sports, recreation, and other forms of physical enrichment. The wide space that surrounds the facility will house additional accompaniments that will be more welcoming to all users who could conduct activities with ease of motion.

CONSTRUCTION OF COLLEGE OF ARTS AND SCIENCES ANNEX BUILDING

Project Brief:

The rapid increase of enrolment at the College of Arts & Sciences in the next three (3) years poses a great need to put up a new annex building in the CAS Complex. With enough classrooms to hold academic activities and other extracurricular activities, learning and exchange of ideas will be fruitful for teachers and students. The proposed building will house additional classrooms and special laboratories for general education, arts, natural science and social science subjects

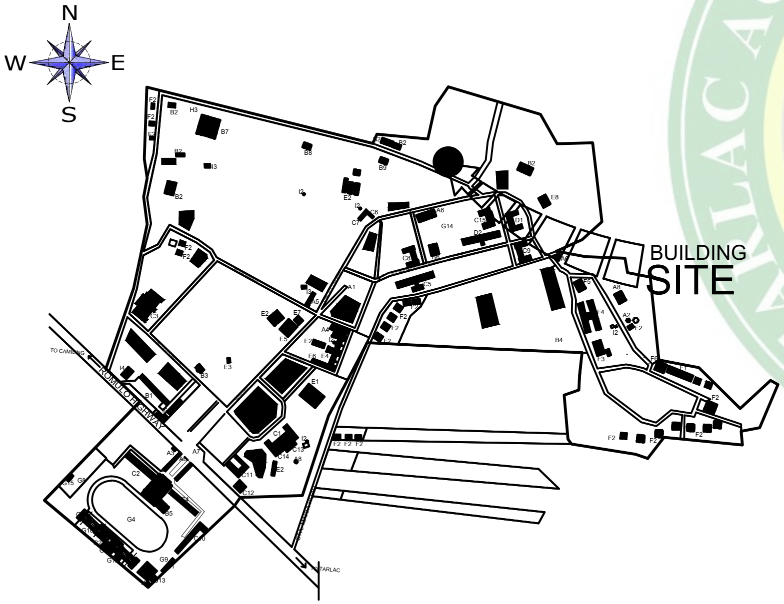
ANNEX B

UPGRADING OF UNIVERSITY LIBRARY SERVICES BUILDING INCLUDING THE ESTABLISHMENT OF ERESOURCES LEARNING CENTER AND RETROFITTING OF THE UNIVERSITY ARCHIVE AND MUSEUM WITH IMPROVEMENT OF USER ACCESSIBILITY
Project brief: With the resumption of face-to-face classes, students are thrilled to utilize the library services and learning centers for their group activities, reading assignments, and research projects. To integrate the principles of the Education 4.0 and the 4th Industrial Revolution, the delivery of learning and research services must also undergo major innovation to efficiently equip the students with informed and sophisticated knowledge. Hence, the upgrading of the existing library services building and establishment of e-resources learning center, university archive, and museum are hereby proposed. Such improvement and new installations would help the TAU community in preserving the culture and heritage of Tarlaqueños.

UPGRADING OF EXISTING UNIVERSITY SUPPLY OFFICE AND WAREHOUSE (PHASE 1)
Project Brief: With the increasing demands of TAU's clientele and stakeholders, the university aims to revamp its services and systems. Central to the university operational system is the procurement and delivery of supplies needed by various offices and colleges. Hence, the upgrading of existing university supply office and warehouse is imperative in efficiently delivering the institution's services to the public.

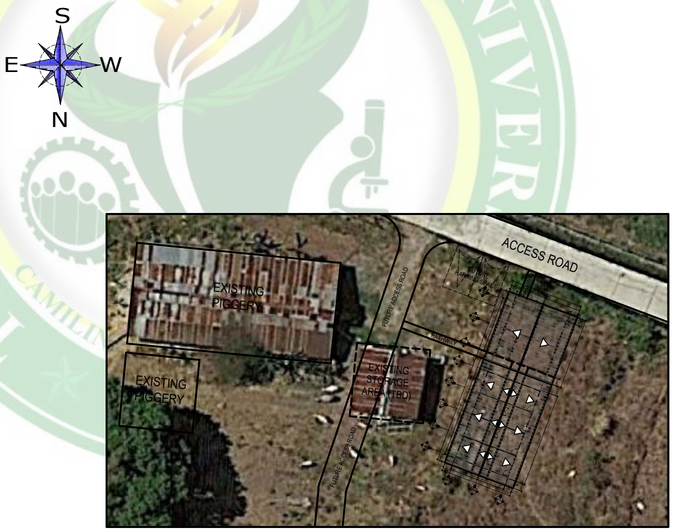
UPGRADING AND IMPROVEMENT OF OLD GOAT SHED
Project Brief: Dubbed as one of the agricultural universities in Central Luzon, TAU incessantly innovates agricultural technology and craft agri-business plans to help the poor families and farmers acquire the necessary skills and knowledge to establish their own agro-based products and business. Relative to this mandate, TAU aims to upgrade and improve its animal production facilities especially the old goat shed. Part of the sustainable goals is the initiative to ensure food security. Hence, this project is proposed. It is expected to provide students venue to acquire practical skills and hands-on experience in rearing goats. Such facility has a central importance in the university's mission to help alleviate the quality of lives of many Filipinos.

UPGRADING OF TAU AGRIBUSINESS CENTER WITH INTEGRATED TAU TECHNOLOGY AND BUSINESS INCUBATOR CENTER
Project Brief: Aside from innovating technologies in ensuring food security and livelihood of many Filipinos, TAU's ultimate goal is to help its stakeholders acquire skills in promoting their products and contribute to the agro-food industries. Hence, the upgrading of TAU Agribusiness Center with integrated Technology and Business Incubator Center is hereby proposed to serve as central platform to showcase the stateof-the-art research-based technologies and agri-food products developed by the faculty-experts of the institution.



LOCATION MAP

N. T. S.



SITE DEVELOPMENT PLAN

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ARCHITECTURAL

STRUCTURAL

SANITARY

ELECTRICAL

MECHANICAL

REPUBLIC OF THE PHILIPPINES
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CAMILING TARLAC

PLANNING AND DEVELOPMENT OFFICE

INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT

ARCHITECT:	
IAPOA NO:	
PRC NO:	PTR NO:
TIN NO:	DATE:
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PLACE :	

PROJECT TITLE :
ESTABLISHMENT OF COLLEGE OF AGRICULTURE ANIMAL SCIENCE DEPARTMENT SWINE LABORATORY

LOCATION :
TARLAC AGRICULTURAL UNIVERSITY (MALACAMPA, CAMILING, TARLAC)

SHEET CONTENTS :
AS SHOWN

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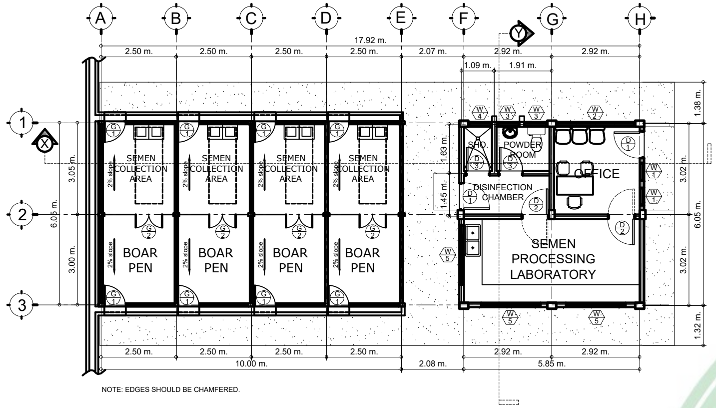
REMARKS:

SHEET NO :



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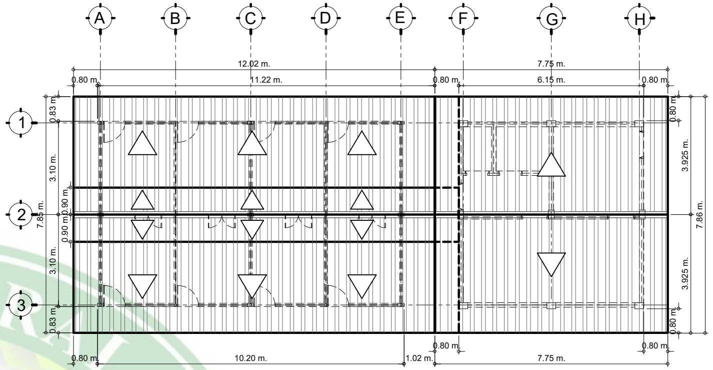

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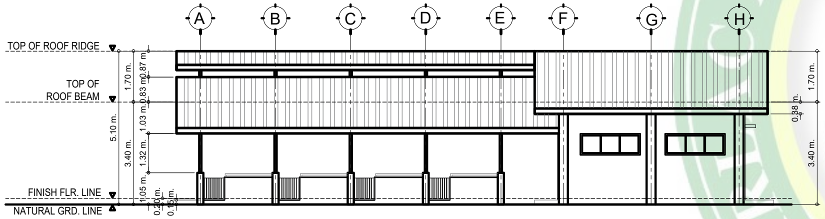

FRONT ELEVATION
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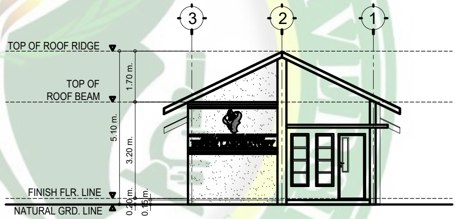

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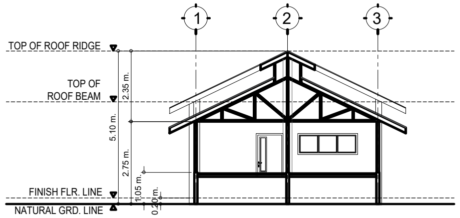

LEFT SIDE ELEVATION
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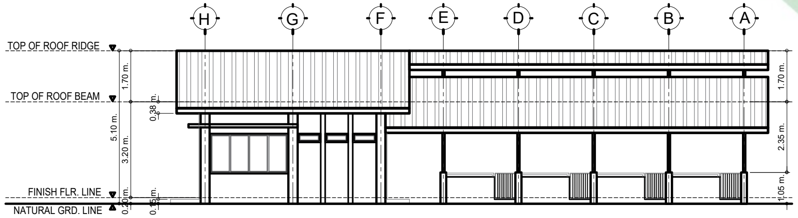

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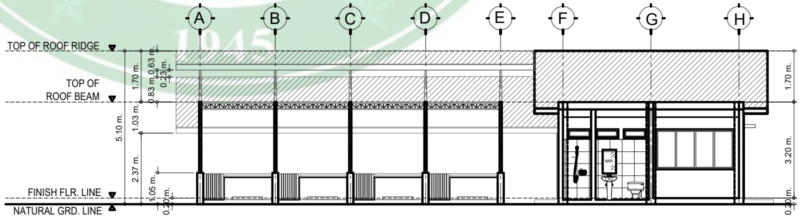

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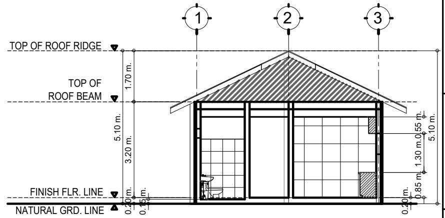

CROSS SECTION
SCALE 1:100M

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DRAWINGS & SPECIFICATION AND OTHER CONTRACT DOCUMENTS DULY SIGNED,STAMPED OR SEALED,AS INSTRUMENTS OF SERVICE ARE THE INTELLECTUAL PROPERTY & DOCUMENTS OF ARCHITECT, WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. IT SHALL BE UNLAWFUL FOR ANY PERSON TO DUPLICATE OR TO MAKE COPIES OF SAID DOCUMENTS FOR USE IN THE REPETITION OF AND FOR OTHER PROJECTS OR BUILDINGS,WHETHER EXECUTED PARTLY OR IN WHOLE,W/ OUT THE WRITTEN CONSENT OF ARCHITECT OR AUTHOR OF SAID DOCUMENTS

ENGINEER:
PRC NO: PTR NO:
TIN NO: DATE:
PLACE :

PROJECT TITLE :
ESTABLISHMENT OF COLLEGE OF AGRICULTURE ANIMAL SCIENCE DEPARTMENT SWINE LABORATORY

LOCATION :
TARLAC AGRICULTURAL UNIVERSITY (MALACAMPA, CAMILING, TARLAC)

SHEET CONTENTS :
AS SHOWN

PREPARED BY : ARCH. FAHD B. IBARRA, YOANA ALEXIS F. JUAN
CHECKED BY : ENGR. ROCHEL E. VIBAR
DATE :

APPROVED:

ARNOLD R. LORENZO, Ed. D.
DIRECTOR, PLANNING AND DEVELOPMENT

MAX P. GUILLERMO, Ph. D
PRESIDENT

NOEL J. PETERO, Ph.D
VICE PRESIDENT, FINANCE AND ADMINISTRATION

REMARKS:

SHEET NO :

Form Code: TAU-PDO-QF-48 | Revision No. 00 | Effectivity Date: June 18, 2019 | Page: of

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OFFICE OF THE BUILDING OFFICIALS

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STRUCTURAL

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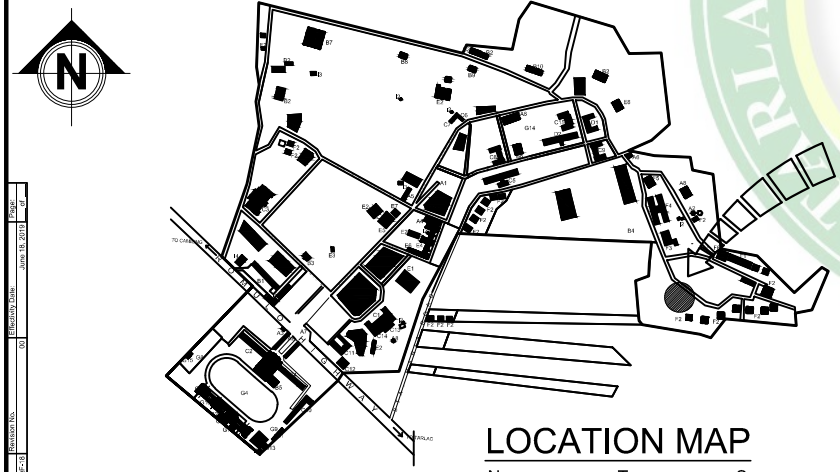
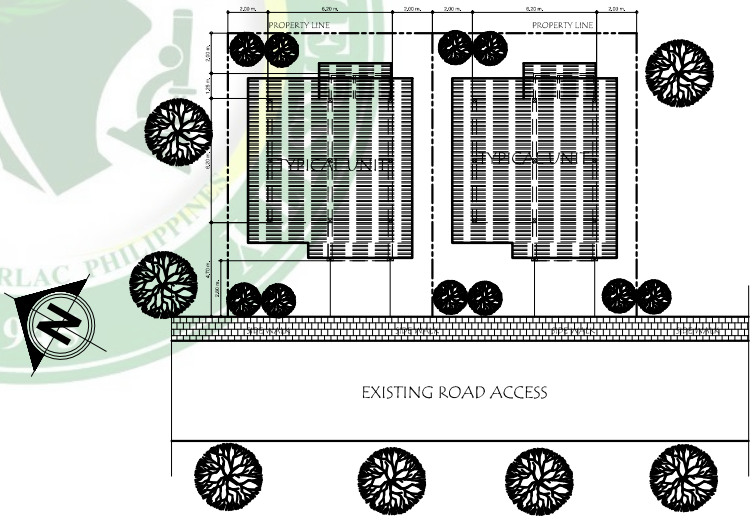
ELECTRICAL

MECHANICAL



LOCATION MAP
N. T. S.



SITE DEVELOPMENT PLAN
SCALE 1:150M

Form Code: TAU-PDO-QF-03 | Revision No.: 00 | Effectivity Date: June 18, 2018 | Page: of

REPUBLIC OF THE PHILIPPINES
TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC

PLANNING AND DEVELOPMENT OFFICE

INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT

ARCHITECT:
IAPOA NO:
PRC NO: PTR NO:
TIN NO: DATE:
PLACE :

R.A 9266 SECTION 33

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ENGINEER:
PRC NO: PTR NO:
TIN NO: DATE:
PLACE :

PROJECT TITLE :
CONSTRUCTION OF TAU EMPLOYEES HOUSING FACILITY

LOCATION :
TARLAC AGRICULTURAL UNIVERSITY
MALACAMPA, CAMILING TARLAC

SHEET CONTENTS :
AS SHOWN

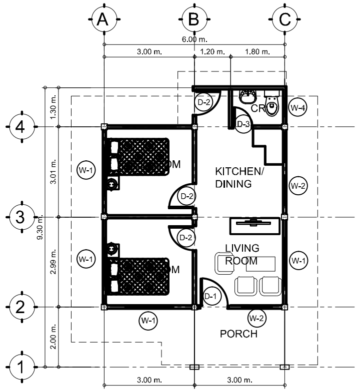
PREPARED BY :
CHECKED BY : ENGR. ROCHEL F. VIBAR, CHIEF DEVZ
DATE :

APPROVED:

	MAX P. GUILLERMO, Ph. D	
ARNOLD R. LORENZO, Ed.D	PRESIDENT	**NOEL J. PETERO, Ph.D**
DIRECTOR, PLANNING & DEVELOPMENT		VP FOR FINANCE AND ADMIN.

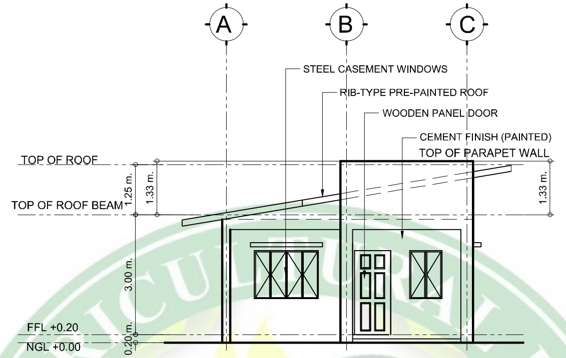
REMARKS:

SHEET NO :



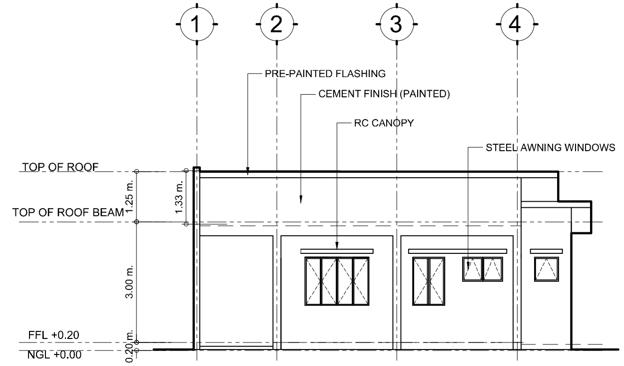
TYPICAL FLOOR PLAN PER UNIT

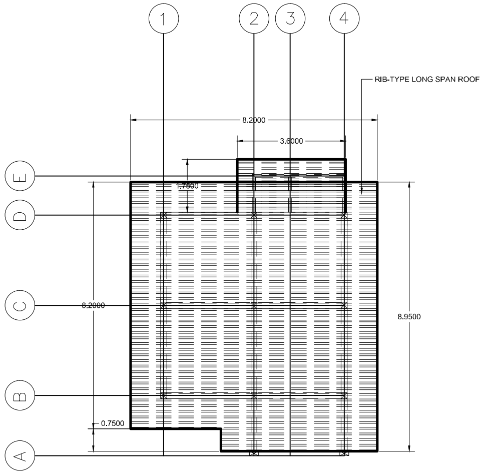
SCALE 1:50M



TYPICAL FRONT ELEVATION

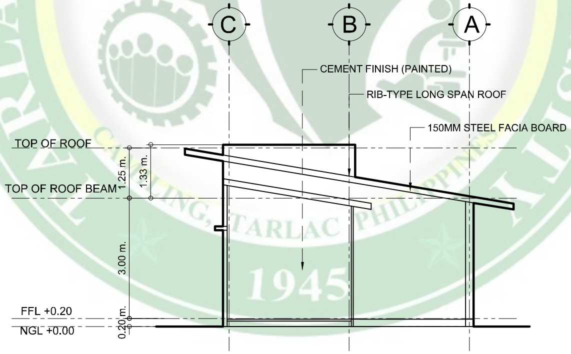
SCALE 1:75M

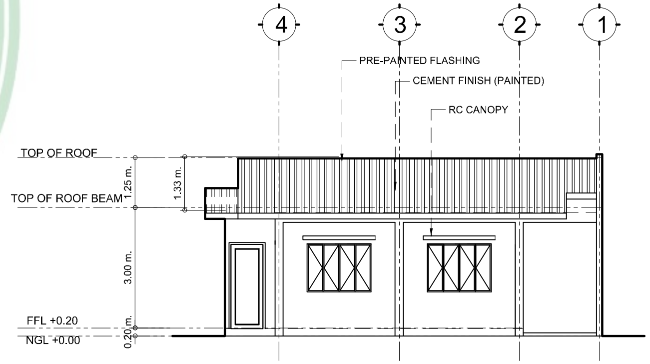




TYPICAL ROOF PLAN PER UNIT

SCALE 1:50M





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TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC

PLANNING AND DEVELOPMENT OFFICE

INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT

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PRC NO: | PTR NO:
TIN NO: | DATE:
PLACE :

PROJECT TITLE :
CONSTRUCTION OF TAU EMPLOYEES HOUSING FACILITY

LOCATION :
TARLAC AGRICULTURAL UNIVERSITY
MALACAMPA, CAMILING TARLAC

SHEET CONTENTS :
AS SHOWN

PREPARED BY : | CHECKED BY : ENGR. ROCHEL E. VIBAR | DATE :

APPROVED:

ARNOLD R. LORENZO, Ed.D DIRECTOR, PLANNING & DEVELOPMENT

MAX P. GUILLERMO, Ph. D PRESIDENT

NOEL J. PETERO, Ph.D VP FOR FINANCE AND ADMIN.

REMARKS:

SHEET NO :

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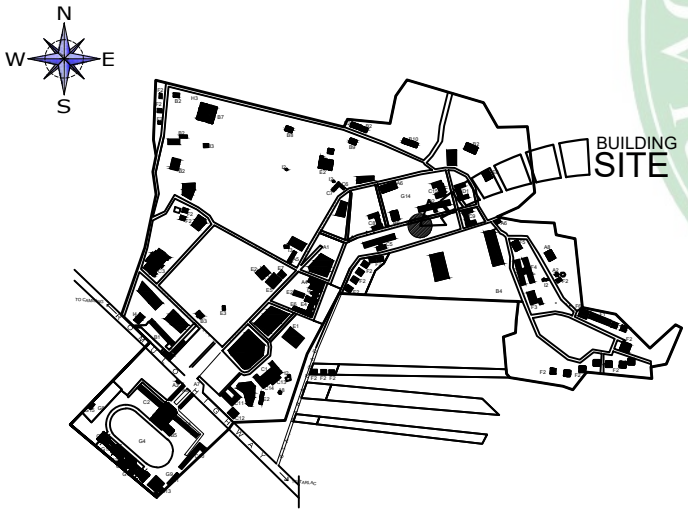
STRUCTURAL

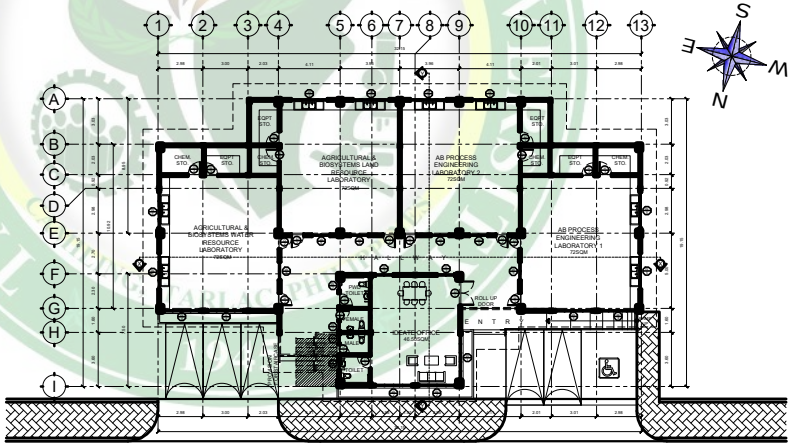
SANITARY

ELECTRICAL

MECHANICAL

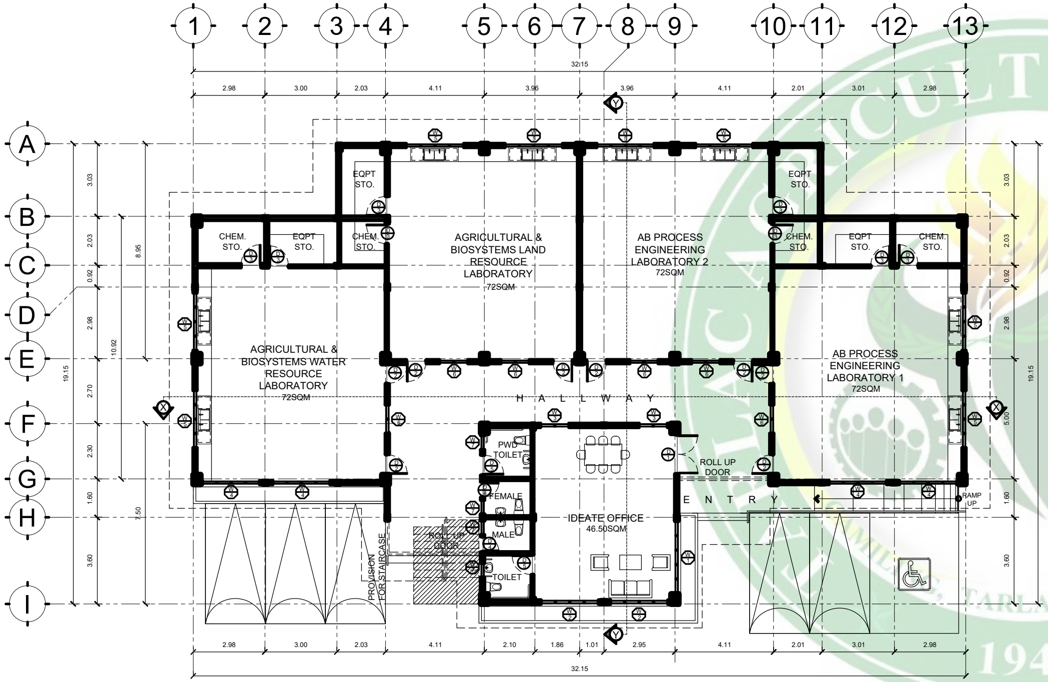


2 A1 **LOCATION MAP**
SCALE NTS

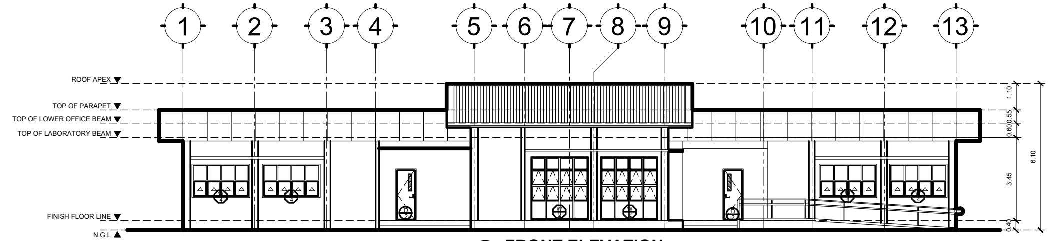


3 A1 **SITE DEVELOPMENT PLAN**
SCALE 1:200MTS

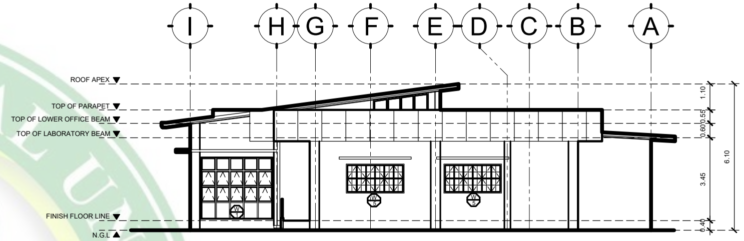
REPUBLIC OF THE PHILIPPINES **TARLAC AGRICULTURAL UNIVERSITY** CAMILING TARLAC **PLANNING AND DEVELOPMENT OFFICE** **INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT**	ARCHITECT: IAPOA NO: PRC NO: / PTR NO: TIN NO: / DATE: PLACE :	**R.A 9266 SECTION 33** DRAWINGS & SPECIFICATION AND OTHER CONTRACT DOCUMENTS DULY SIGNED,STAMPED OR SEALED,AS INSTRUMENTS OF SERVICE ARE THE INTELLECTUAL PROPERTY & DOCUMENTS OF ARCHITECT, WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT, IT SHALL BE UNLAWFUL FOR ANY PERSON TO DUPLICATE OR TO MAKE COPIES OF SAID DOCUMENTS FOR USE IN THE REPETITION OF AND FOR OTHER PROJECTS OR BUILDINGS,WHETHER EXECUTED PARTLY OR IN WHOLE,W/ OUT THE WRITTEN CONSENT OF ARCHITECT OR AUTHOR OF SAID DOCUMENTS	ENGINEER: PRC NO: / PTR NO: TIN NO: / DATE: PLACE :	PROJECT TITLE : **ESTABLISHMENT OF AGRICULTURAL AND BIOSYSTEMS LAND AND WATER RESOURCES AND AB PROCESS ENGINEERING LABORATORY** LOCATION : **TARLAC AGRICULTURAL UNIVERSITY (MALACAMPA, CAMILING, TARLAC)**	SHEET CONTENTS : **AS SHOWN** PREPARED BY : / CHECKED BY : / DATE : AB FAUSTO IBARRA / ALVIN S. DELA VEGA / ENGR. ROCHEL E. VIBAR CHIEF DIVUZ	APPROVED: **ARNOLD R. LORENZO, Ed.D** DIRECTOR, PLANNING & DEVELOPMENT **MAX P. GUILLERMO, Ph. D** PRESIDENT **NOEL J. PETERO, Ph.D** VP FOR FINANCE AND ADMIN.	REMARKS:	SHEET NO :



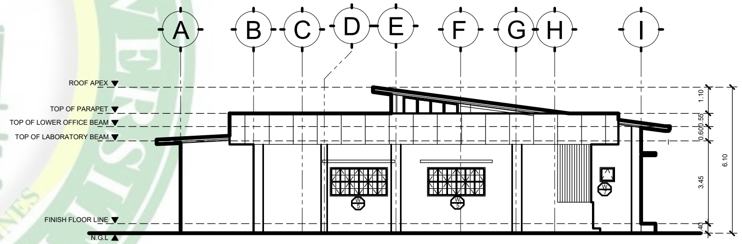
FLOOR PLAN
SCALE 1:125MTS



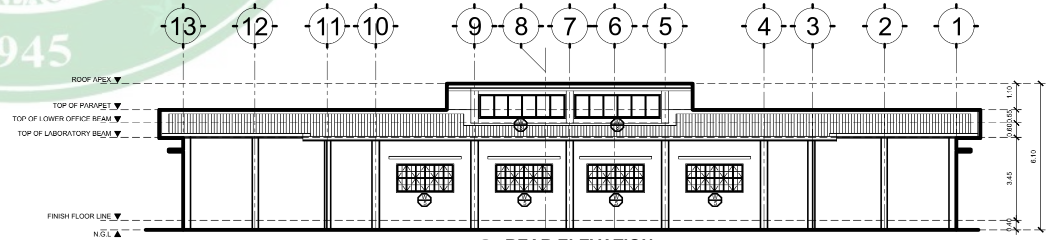
FRONT ELEVATION
SCALE 1:125MTS



RIGHT SIDE ELEVATION
SCALE 1:125MTS



LEFT SIDE ELEVATION
SCALE 1:125MTS



REAR ELEVATION
SCALE 1:125MTS

REPUBLIC OF THE PHILIPPINES
TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC

PLANNING AND DEVELOPMENT OFFICE

INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT

ARCHITECT:
IAPOA NO:
PRC NO: PTR NO:
TIN NO: DATE:
PLACE :

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ENGINEER:
PRC NO: PTR NO:
TIN NO: DATE:
PLACE :

PROJECT TITLE :
ESTABLISHMENT OF AGRICULTURAL AND BIOSYSTEMS LAND AND WATER RESOURCES AND AB PROCESS ENGINEERING LABORATORY

LOCATION :
TARLAC AGRICULTURAL UNIVERSITY
(MALACAMPA, CAMILING, TARLAC)

SHEET CONTENTS :
AS SHOWN

PREPARED BY :
AR. FAHD B. IBARRA — ARCHITECT - PDO/IDLUZ
ALVIN R. DELA VEGA — ARCHITECT / DRAFTSPERSON

CHECKED BY :
ENGR. ROCHEL E. VIBAR
CHIEF IDLUZ

DATE :

APPROVED:

ARNOLD R. LORENZO, Ed.D
DIRECTOR, PLANNING & DEVELOPMENT

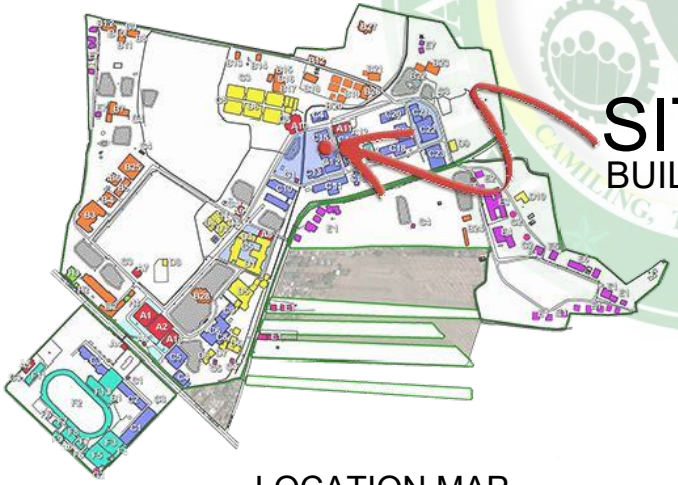
MAX P. GUILLERMO, Ph. D
PRESIDENT

NOEL J. PETERO, Ph.D
VP FOR FINANCE AND ADMIN.

REMARKS:

SHEET NO :

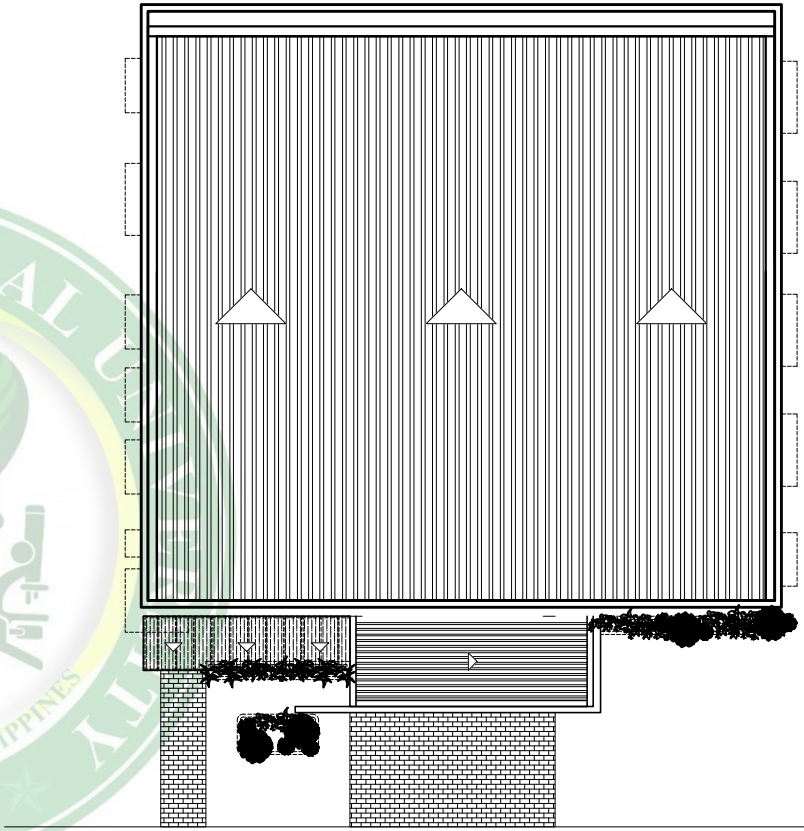
PERSPECTIVE VIEW



SITE
BUILDING

LOCATION MAP

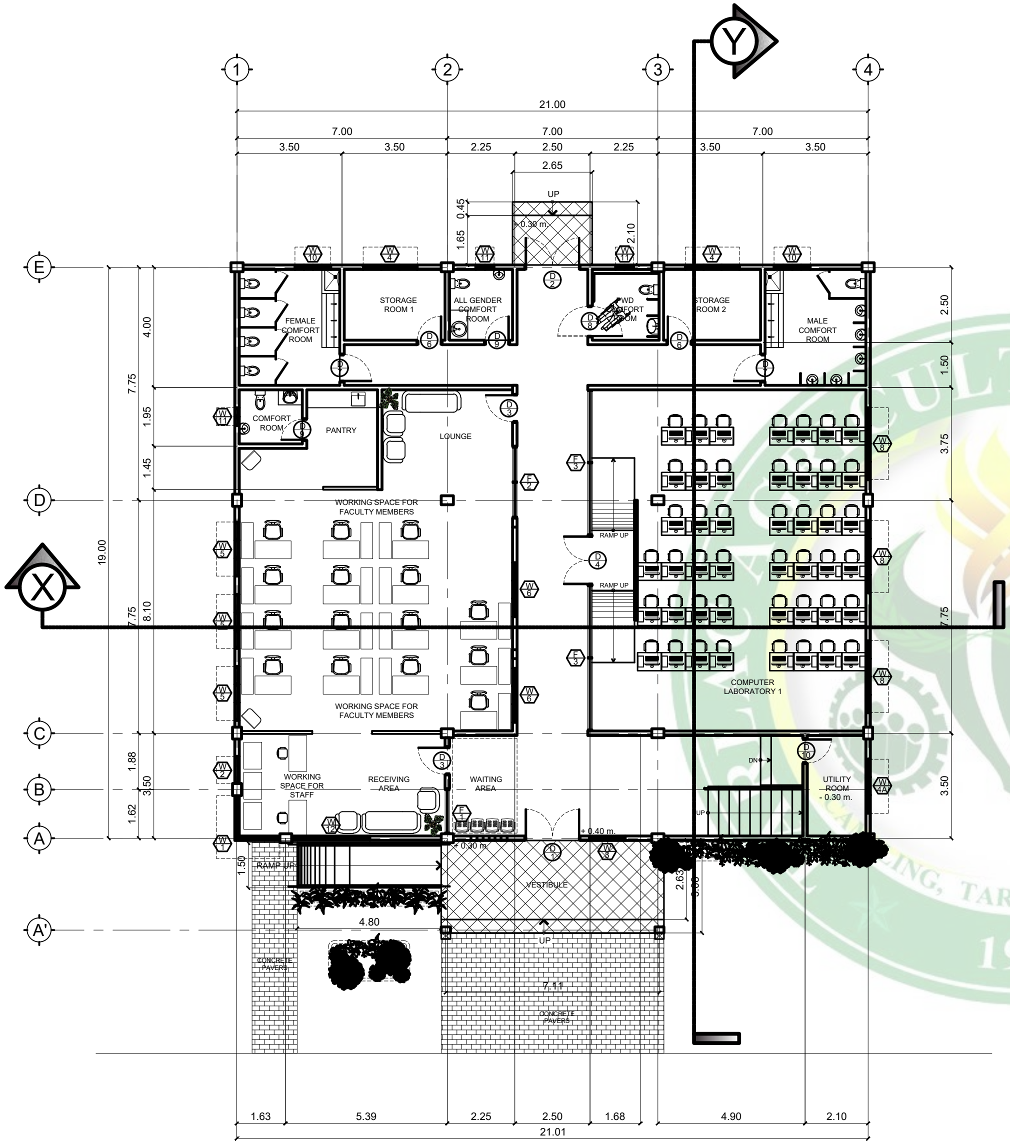
NOT TO SCALE



SITE DEVELOPMENT PLAN

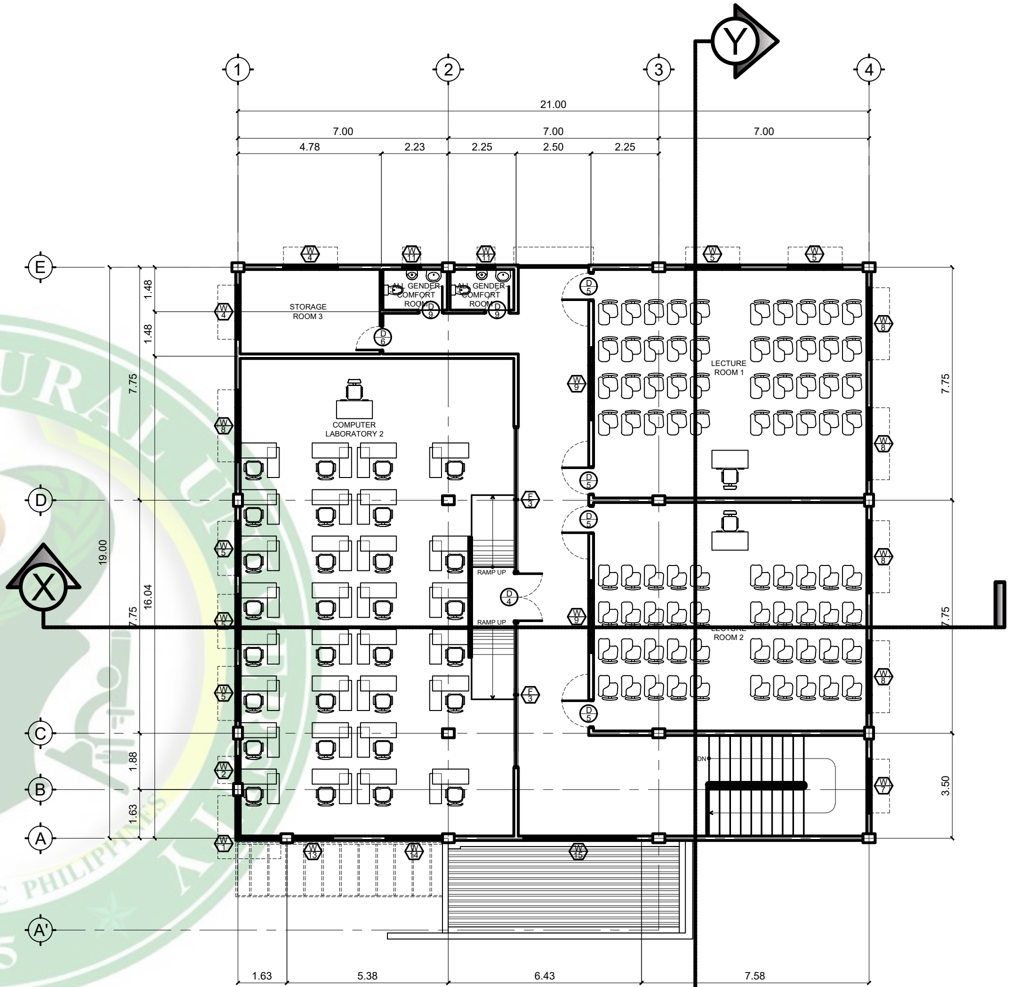
SCALE 1:150M

REPUBLIC OF THE PHILIPPINES TARLAC AGRICULTURAL UNIVERSITY CAMILING TARLAC PLANNING AND DEVELOPMENT OFFICE INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT	ARCHITECT: IAPOA NO: PRC NO: / PTR NO: TIN NO: / DATE: PLACE :	R.A 9266 SECTION 33 DRAWINGS & SPECIFICATION AND OTHER CONTRACT DOCUMENTS DULY SIGNED,STAMPED OR SEALED,AS INSTRUMENTS OF SERVICE ARE THE INTELLECTUAL PROPERTY & DOCUMENTS OF ARCHITECT, WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT, IT SHALL BE UNLAWFUL FOR ANY PERSON TO DUPLICATE OR TO MAKE COPIES OF SAID DOCUMENTS FOR USE IN THE REPETITION OF AND FOR OTHER PROJECTS OR BUILDINGS,WHETHER EXECUTED PARTLY OR IN WHOLE,W/ OUT THE WRITTEN CONSENT OF ARCHITECT OR AUTHOR OF SAID DOCUMENTS	ENGINEER: PRC NO: / PTR NO: TIN NO: / DATE: PLACE :	PROJECT TITLE : EXPANSION AND UPGRADING OF THE INFORMATION TECHNOLOGY CENTER BUILDING INCLUDING LABORATORY FACILITIES LOCATION : TARLAC AGRICULTURAL UNIVERSITY (MALACAMPA, CAMILING, TARLAC)	SHEET CONTENTS : AS SHOWN PREPARED BY : AR. FAUD B. IBARRA CHECKED BY : ENGR. ROCHEL E. VIBAR, CHIEF DPDUZ DATE :	APPROVED: ARNOLD R. LORENZO, Ed.D DIRECTOR, PLANNING & DEVELOPMENT MAX P. GUILLERMO, Ph. D PRESIDENT NOEL J. PETERO, Ph.D VP FOR FINANCE AND ADMIN.	REMARKS:	SHEET NO :



GROUND FLOOR PLAN

SCALE 1:100



SECOND FLOOR PLAN

SCALE 1:100

REPUBLIC OF THE PHILIPPINES
TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC

PLANNING AND DEVELOPMENT OFFICE

INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT

ARCHITECT:	
IAPOA NO:	
PRC NO:	PTR NO:
TIN NO:	DATE:
PLACE :	

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ENGINEER:	
PRC NO:	PTR NO:
TIN NO:	DATE:
PLACE :	

PROJECT TITLE :
EXPANSION AND UPGRADING OF THE INFORMATION TECHNOLOGY CENTER BUILDING INCLUDING LABORATORY FACILITIES

LOCATION :
TARLAC AGRICULTURAL UNIVERSITY (MALACAMPA, CAMILING, TARLAC)

SHEET CONTENTS :
AS SHOWN

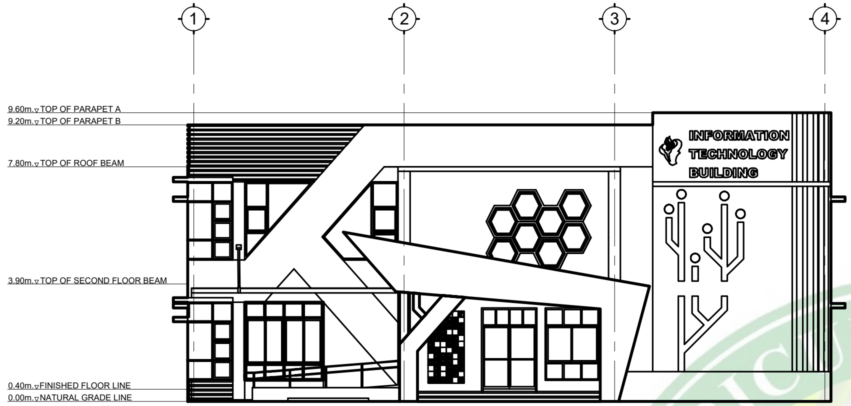
PREPARED BY :		CHECKED BY :	DATE :
AR. FAHD B. IBARRA ARCHITECT - PDO/IDLUZ	PRECIOUS JOY M. CORPUZ ARCHITECT / DRAFTSPERSON	ENGR. ROCHEL E. VIBAR CHIEF IDLUZ	

APPROVED:

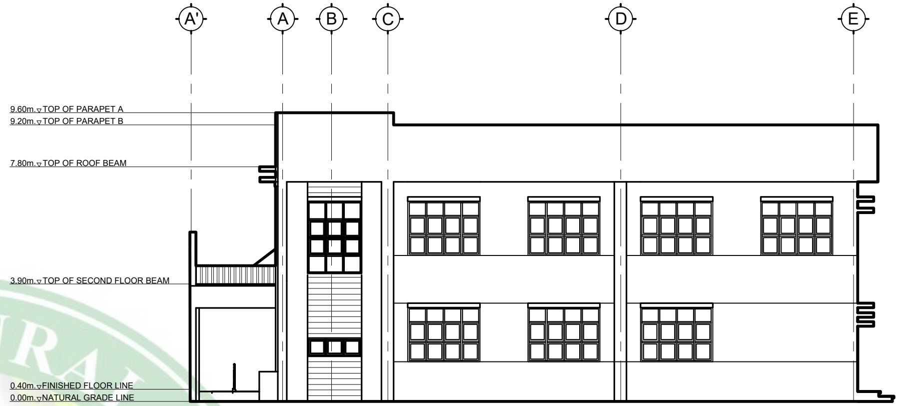
	MAX P. GUILLERMO, Ph. D	
ARNOLD R. LORENZO, Ed.D	PRESIDENT	**NOEL J. PETERO, Ph.D**
DIRECTOR, PLANNING & DEVELOPMENT		VP FOR FINANCE AND ADMIN.

REMARKS:

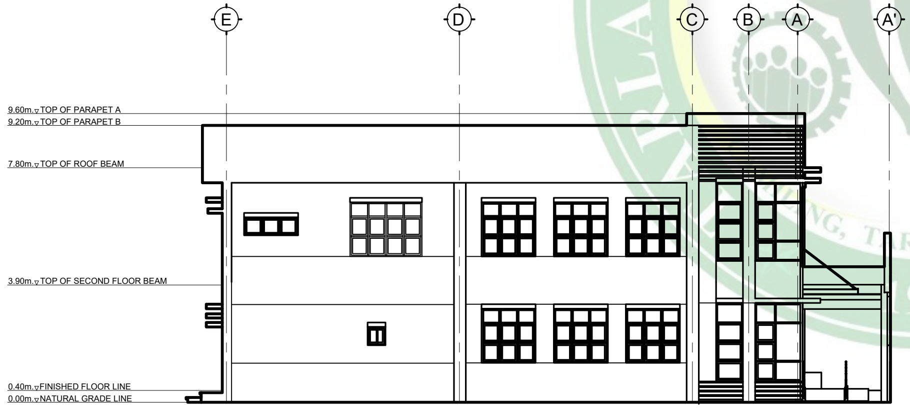
SHEET NO :



FRONT ELEVATION
SCALE 1:100M



RIGHT SIDE ELEVATION
SCALE 1:100M



LEFT SIDE ELEVATION
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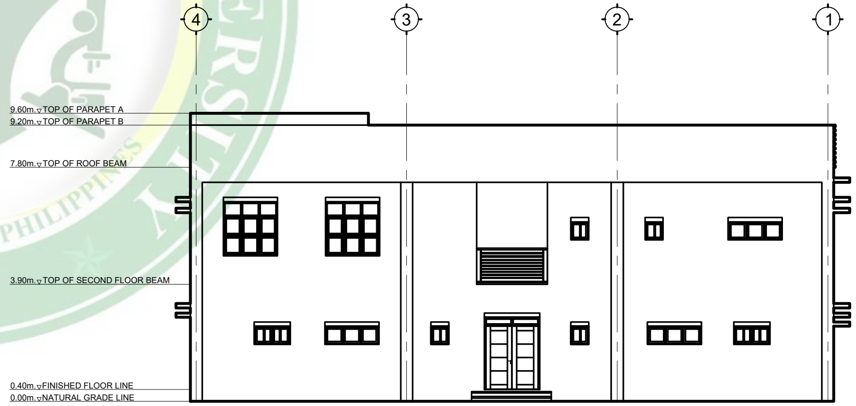

REAR ELEVATION
SCALE 1:100M

REPUBLIC OF THE PHILIPPINES
TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC

PLANNING AND DEVELOPMENT OFFICE

INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT

ARCHITECT:	
IAPOA NO:	
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PLACE :	

R.A 9266 SECTION 33

ENGINEER:	
PRC NO:	PTR NO:
TIN NO:	DATE:
PLACE :	

PROJECT TITLE :
EXPANSION AND UPGRADING OF THE INFORMATION TECHNOLOGY CENTER BUILDING INCLUDING LABORATORY FACILITIES

LOCATION :
TARLAC AGRICULTURAL UNIVERSITY
(MALACAMPA, CAMILING, TARLAC)

SHEET CONTENTS :
AS SHOWN

PREPARED BY :	CHECKED BY :	DATE :
AR. FAHD B. IBARRA (ARCHITECT - PDO/IDLUZ); PRECIOUS JOY M. CORPUZ (ARCHITECT / DRAFTSPERSON)	ENGR. ROCHEL E. VIBAR, CHIEF IDLUZ	

APPROVED:

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ARNOLD R. LORENZO, Ed.D	PRESIDENT	**NOEL J. PETERO, Ph.D**
DIRECTOR, PLANNING & DEVELOPMENT		VP FOR FINANCE AND ADMIN.

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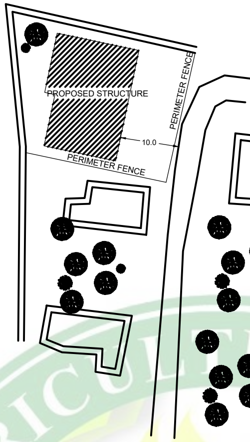
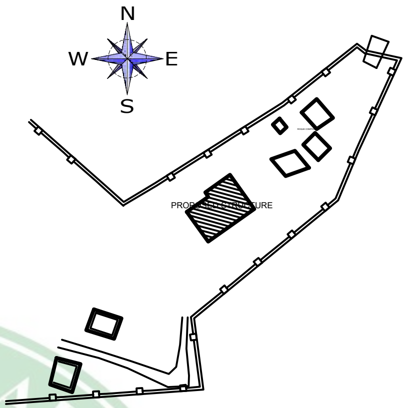
SHEET NO :



AGRO-ECOTOURISM DISTRICT

3 VICINITY MAP

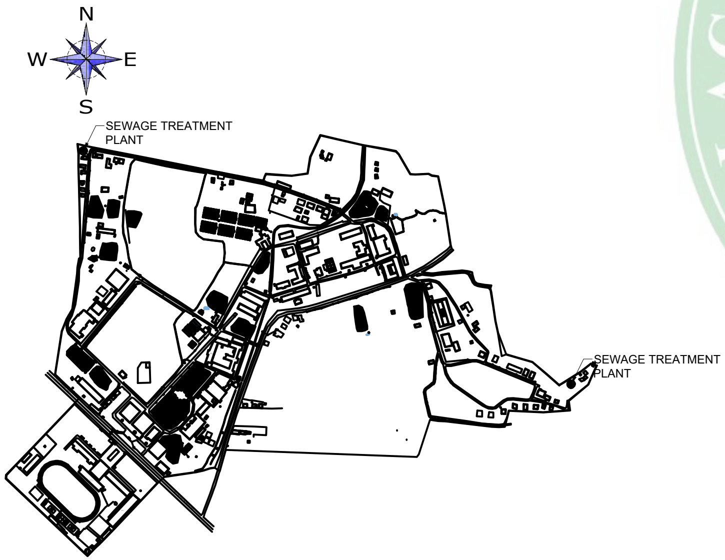
A1 SCALE NTS



HOUSING DISTRICT

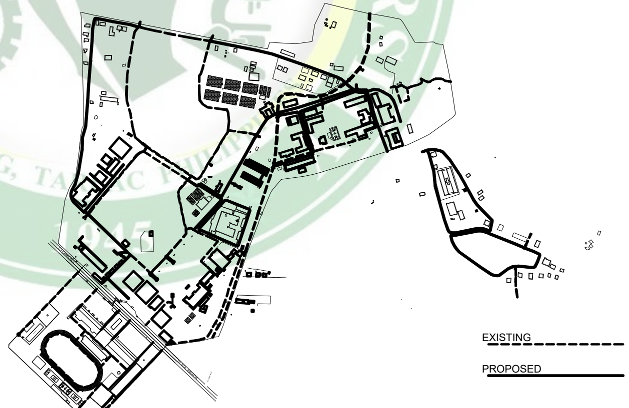
4 VICINITY MAP

A1 SCALE NTS



2 LOCATION MAP

A1 SCALE NTS



EXISTING - - - - - - - -

PROPOSED ————

5 DRAINAGE MAP

A1 SCALE NTS

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STRUCTURAL

SANITARY

ELECTRICAL

MECHANICAL

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REPUBLIC OF THE PHILIPPINES
TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC

PLANNING AND DEVELOPMENT OFFICE

INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT

ARCHITECT:	
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PLACE :	

PROJECT TITLE :

IMPROVEMENT OF CAMPUS DRAINAGE SYSTEM INCLUDING THE ESTABLISHMENT OF SEWAGE TREATMENT PLANTS FOR WATER RE-USE IN THE UNIVERSITY

LOCATION :

TARLAC AGRICULTURAL UNIVERSITY (MALACAMPA, CAMILING, TARLAC)

SHEET CONTENTS :

AS SHOWN

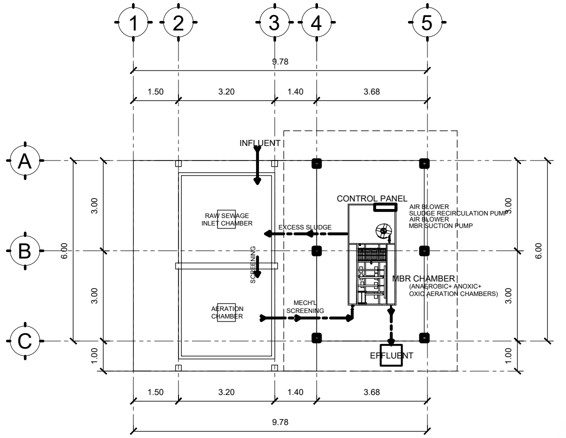
PREPARED BY :	CHECKED BY :	DATE :
AR. FAHD B. IBARRA, ARCHITECT - PDO/IDLUZ; ALVIN R. DELA VEGA, ARCHITECT / DRAFTSPERSON	ENGR. ROCHEL E. VIBAR, CHIEF IDLUZ	

APPROVED:

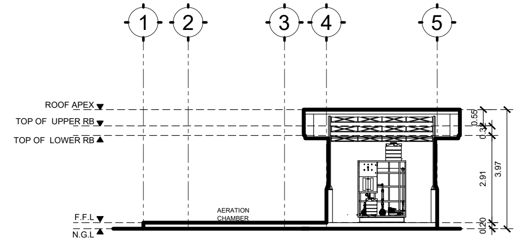
	MAX P. GUILLERMO, Ph. D	
ARNOLD R. LORENZO, Ed.D	PRESIDENT	**NOEL J. PETERO, Ph.D**
DIRECTOR, PLANNING & DEVELOPMENT		VP FOR FINANCE AND ADMIN.

REMARKS:

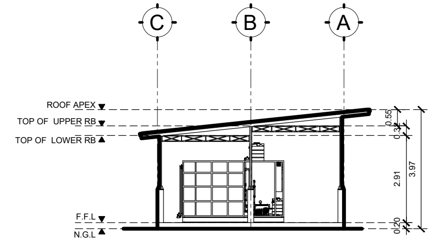
SHEET NO :



1 A2 **TYPICAL FLOOR PLAN**
SCALE 1:100MTS



2 A2 **FRONT ELEVATION**
SCALE 1:100MTS



3 A2 **LEFT SIDE ELEVATION**
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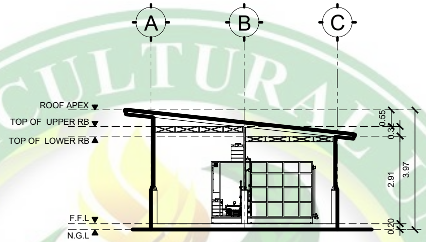

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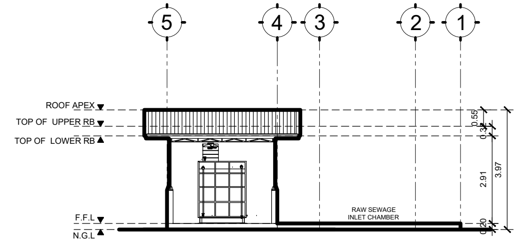

5 A1 **REAR ELEVATION**
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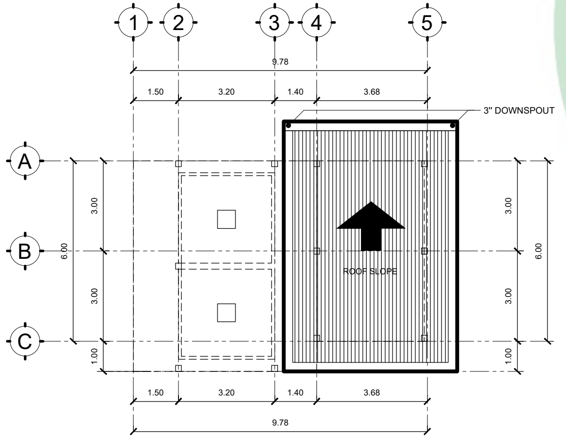

6 A1 **TYPICAL ROOF PLAN**
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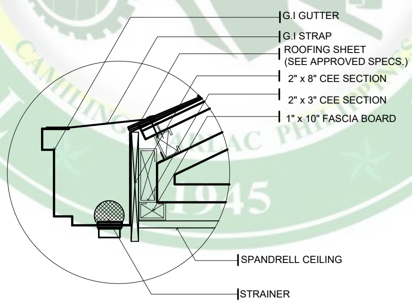
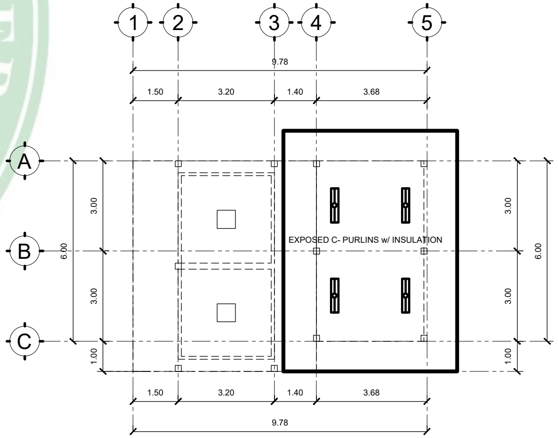


7 A1 **ROOF GUTTER SPOT DETAIL**
SCALE 1:20MTS



8 A1 **REFELCTED CEILING PLAN**
SCALE 1:100MTS

REPUBLIC OF THE PHILIPPINES
TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC

PLANNING AND DEVELOPMENT OFFICE

INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT

ARCHITECT:
IAPOA NO:
PRC NO: PTR NO:
TIN NO: DATE:
PLACE :

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ENGINEER:
PRC NO: PTR NO:
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PLACE :

PROJECT TITLE :
IMPROVEMENT OF CAMPUS DRAINAGE SYSTEM INCLUDING THE ESTABLISHMENT OF SEWAGE TREATMENT PLANTS FOR WATER RE-USE IN THE UNIVERSITY

LOCATION :
TARLAC AGRICULTURAL UNIVERSITY (MALACAMPA, CAMILING, TARLAC)

SHEET CONTENTS :
AS SHOWN

PREPARED BY :
AR. FAHD B. IBARRA — ARCHITECT - PDO/IDLUZ
ALVIN R. DELA VEGA — ARCHITECT / DRAFTSPERSON

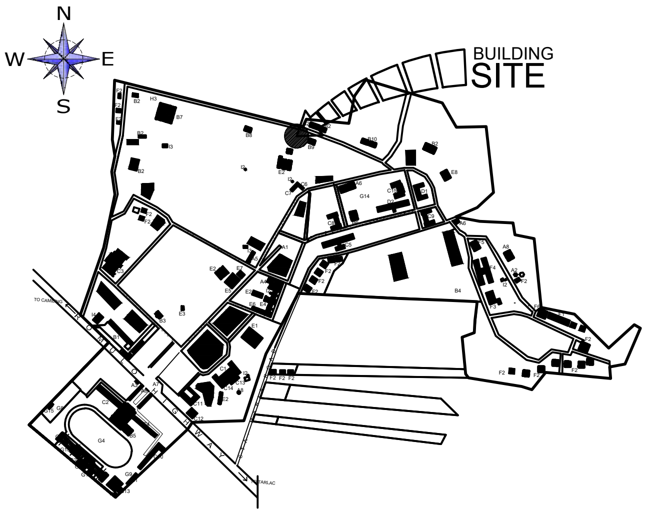
CHECKED BY :
ENGR. ROCHEL E. VIBAR — CHIEF IDLUZ

DATE :

APPROVED:
ARNOLD R. LORENZO, Ed.D — DIRECTOR, PLANNING & DEVELOPMENT
MAX P. GUILLERMO, Ph. D — PRESIDENT
NOEL J. PETERO, Ph.D — VP FOR FINANCE AND ADMIN.

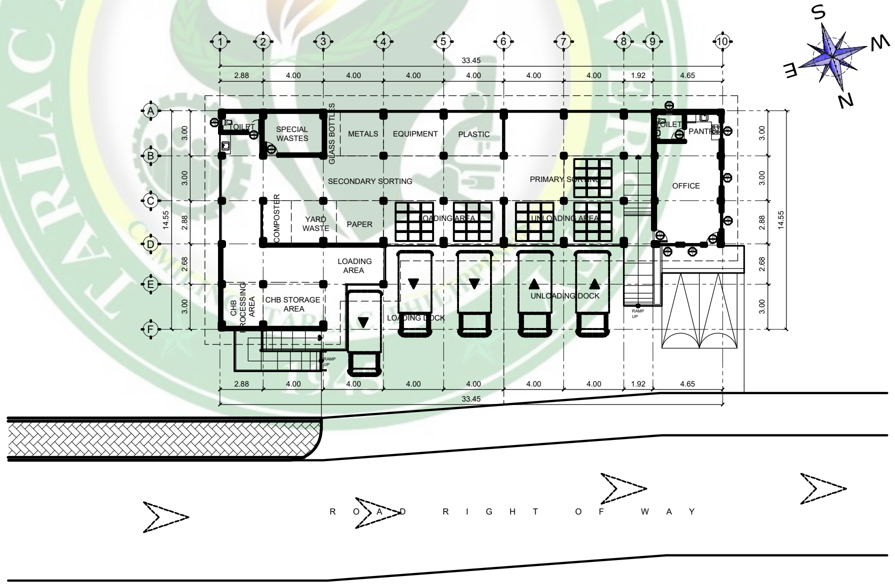
REMARKS:

SHEET NO :



LOCATION MAP

2 A1 SCALE NTS



SITE DEVELOPMENT PLAN

3 A1 SCALE 1:200MTS

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LINE & GRADE

ARCHITECTURAL

STRUCTURAL

SANITARY

ELECTRICAL

MECHANICAL

REPUBLIC OF THE PHILIPPINES
TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC

PLANNING AND DEVELOPMENT OFFICE

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ENGINEER:
PRC NO: PTR NO:
TIN NO: DATE:
PLACE :

PROJECT TITLE :
UPGRADING OF THE MATERIAL RECOVERY FACILITY INCLUDING THE PROCUREMENT OF WASTE DIVERSION AND MANAGEMENT SYSTEM

LOCATION :
TARLAC AGRICULTURAL UNIVERSITY (MALACAMPA, CAMILING, TARLAC)

SHEET CONTENTS :
AS SHOWN

PREPARED BY :
AR. FAHD B. IBARRA — ARCHITECT - PDO/IDLUZ
ALVIN R. DELA VEGA — ARCHITECT / DRAFTSPERSON

CHECKED BY :
ENGR. ROCHEL E. VIBAR — CHIEF IDLUZ

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APPROVED:

ARNOLD R. LORENZO, Ed.D — DIRECTOR, PLANNING & DEVELOPMENT

MAX P. GUILLERMO, Ph. D — PRESIDENT

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REMARKS:

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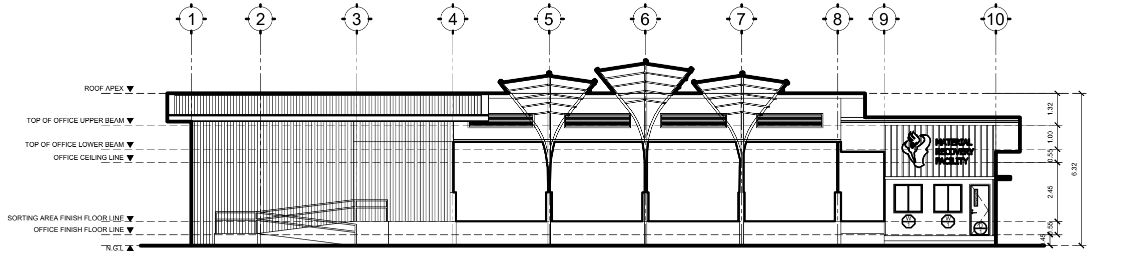
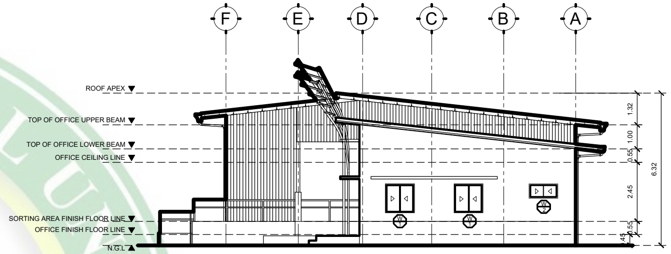
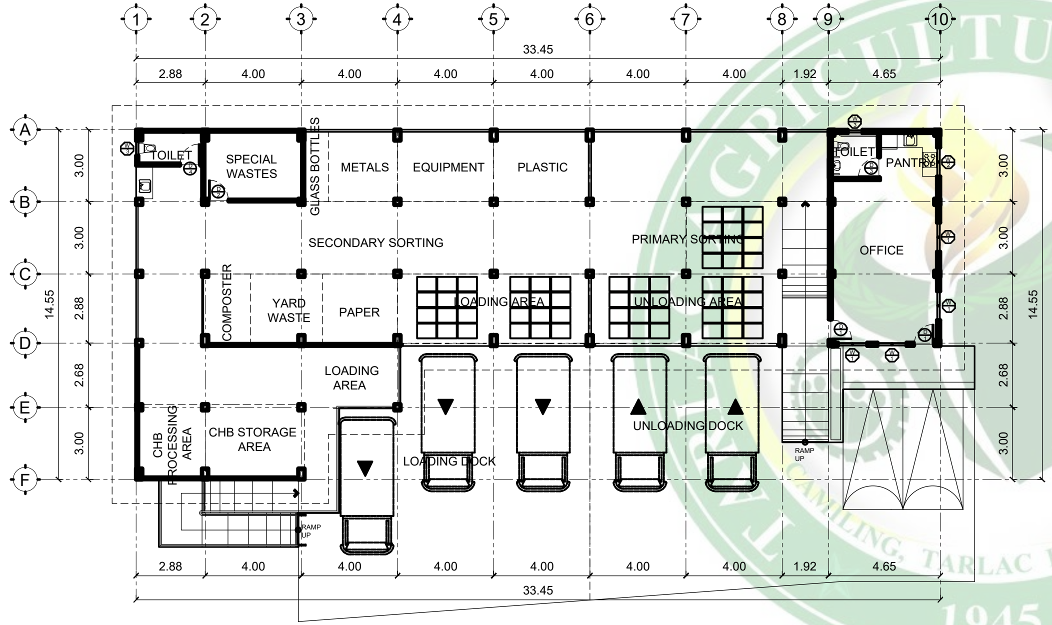


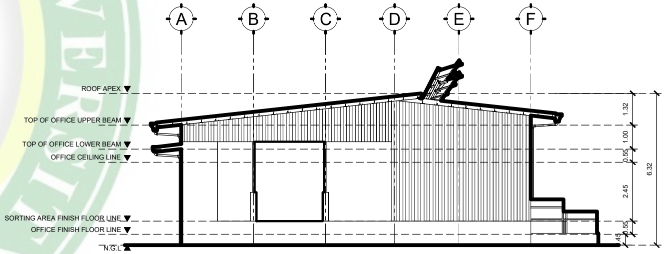
2 A2 **FRONT ELEVATION**
SCALE 1:125MTS



3 A2 **RIGHT SIDE ELEVATION**
SCALE 1:125MTS



1 A2 **FLOOR PLAN**
SCALE 1:125MTS



4 A2 **LEFT SIDE ELEVATION**
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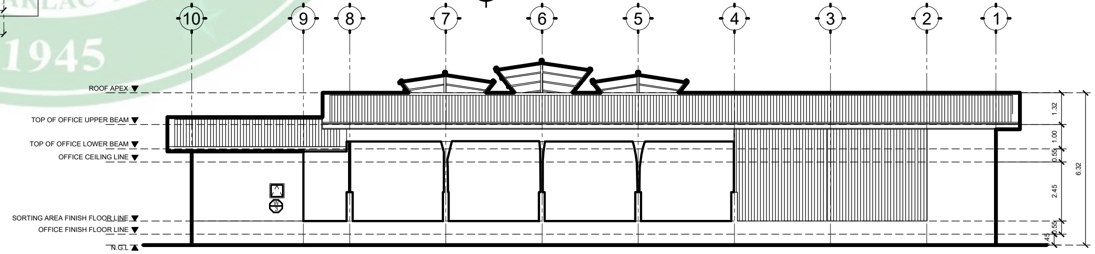

5 A2 **REAR ELEVATION**
SCALE 1:125MTS

REPUBLIC OF THE PHILIPPINES
TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC

PLANNING AND DEVELOPMENT OFFICE

INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT

ARCHITECT:
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PLACE :

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UPGRADING OF THE MATERIAL RECOVERY FACILITY INCLUDING THE PROCUREMENT OF WASTE DIVERSION AND MANAGEMENT SYSTEM

LOCATION :
TARLAC AGRICULTURAL UNIVERSITY (MALACAMPA, CAMILING, TARLAC)

SHEET CONTENTS :
AS SHOWN

PREPARED BY :
AR. FAHD B. IBARRA — ARCHITECT - PDO/IDLUZ
ALVIN R. DELA VEGA — ARCHITECT / DRAFTSPERSON

CHECKED BY :
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DATE :

APPROVED:
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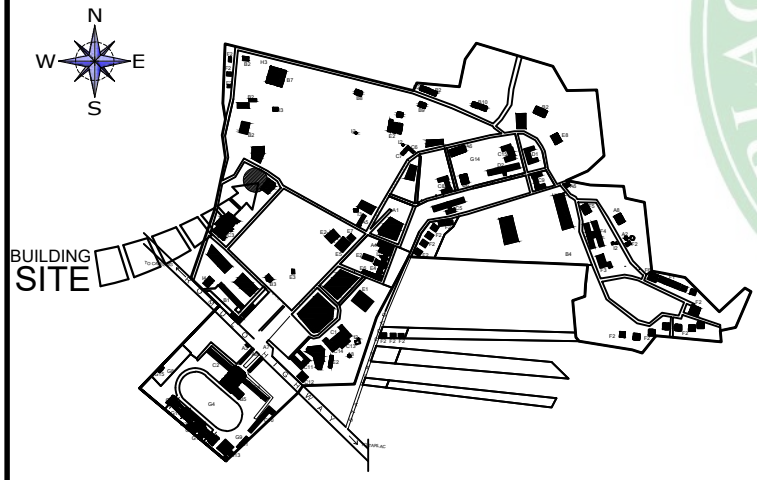
MAX P. GUILLERMO, Ph. D — PRESIDENT
NOEL J. PETERO, Ph.D — VP FOR FINANCE AND ADMIN.

REMARKS:

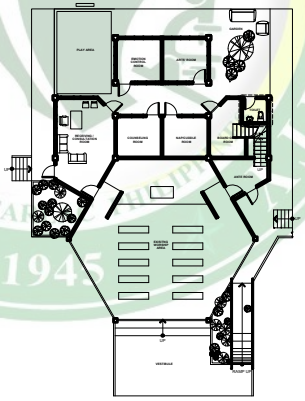
SHEET NO :

PERSPECTIVE VIEWS



LOCATION MAP

N. T. S.



SITE DEVELOPMENT PLAN

SCALE 1:200M

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ENGINEER:
PRC NO: PTR NO:
TIN NO: DATE:
PLACE :

PROJECT TITLE :
CONSTRUCTION OF CATHARSIS CENTER WITH UNIVERSITY CHAPEL

LOCATION :
TARLAC AGRICULTURAL UNIVERSITY (MALACAMPA, CAMILING, TARLAC)

SHEET CONTENTS :
AS SHOWN

PREPARED BY : AB. FAYE IBARRA, PRECIOUS JOY M. CORPUS
CHECKED BY : ENGR. ROCHEL E. VIBAR, CHIEF DRAFTSMAN
DATE :

APPROVED:

ARNOLD R. LORENZO, Ed.D
DIRECTOR, PLANNING & DEVELOPMENT

MAX P. GUILLERMO, Ph. D
PRESIDENT

NOEL J. PETERO, Ph.D
VP FOR FINANCE AND ADMIN.

REMARKS:

SHEET NO :
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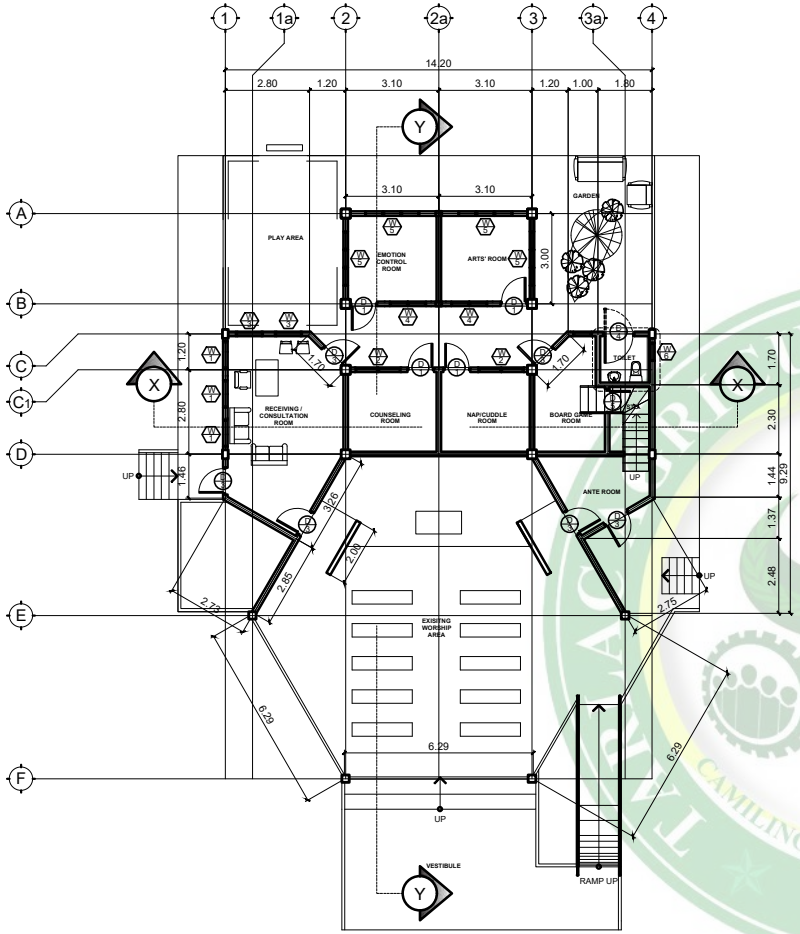

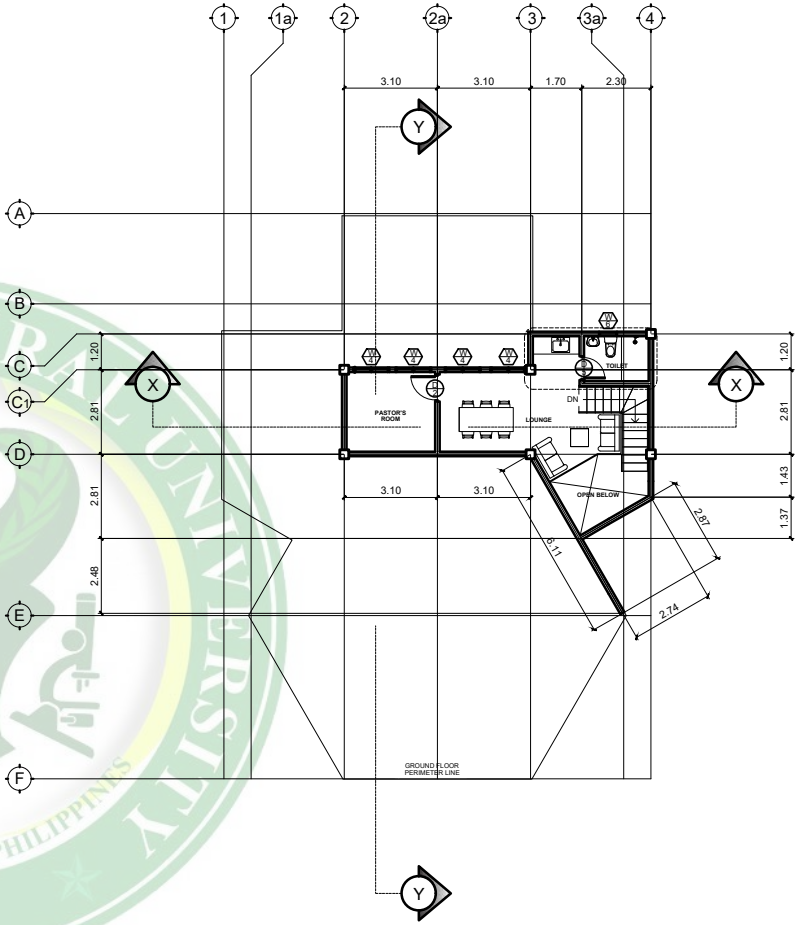

SECOND FLOOR PLAN

SCALE 1:100M

GROUND FLOOR PLAN

SCALE 1:100M

REPUBLIC OF THE PHILIPPINES
TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC

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ARCHITECT:	R.A 9266 SECTION 33	ENGINEER:
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PRC NO: / PTR NO:		PRC NO: / PTR NO:
TIN NO: / DATE:		TIN NO: / DATE:
PLACE :		PLACE :

PROJECT TITLE : CONSTRUCTION OF CATHARSIS CENTER WITH UNIVERSITY CHAPEL	SHEET CONTENTS : AS SHOWN	APPROVED:	REMARKS:
LOCATION : TARLAC AGRICULTURAL UNIVERSITY (MALACAMPA, CAMILING, TARLAC)	PREPARED BY : AR. FAHD IBARRA, ARCHITECT - REGENT	CHECKED BY : ENGR. ROCHEL E. VIBAR, CHIEF DILDZ	DATE :

ARNOLD R. LORENZO, Ed.D DIRECTOR, PLANNING & DEVELOPMENT	MAX P. GUILLERMO, Ph. D PRESIDENT	NOEL J. PETERO, Ph.D VP FOR FINANCE AND ADMIN.

SHEET NO : A-2

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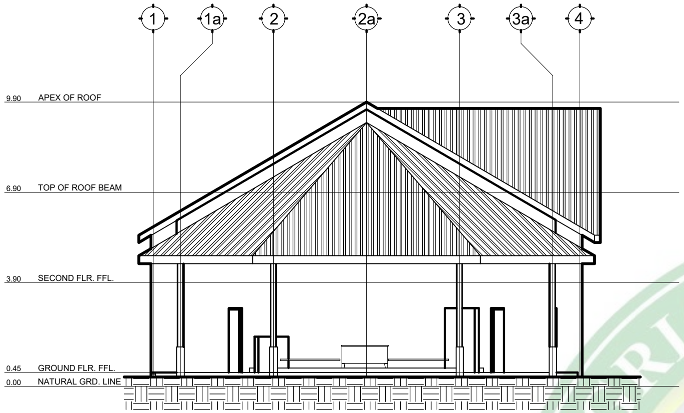
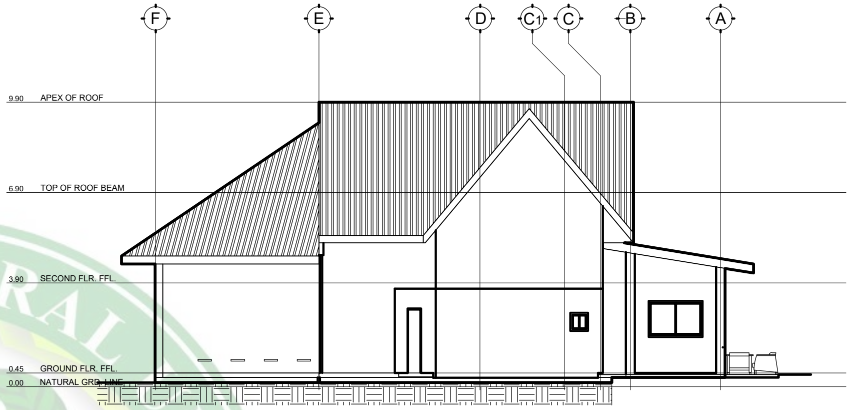


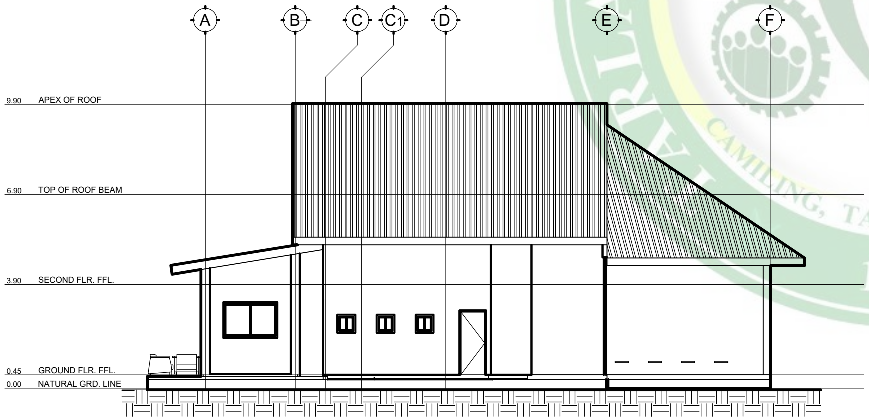
FRONT ELEVATION

SCALE 1:100M



LEFT SIDE ELEVATION

SCALE 1:100M



RIGHT SIDE ELEVATION

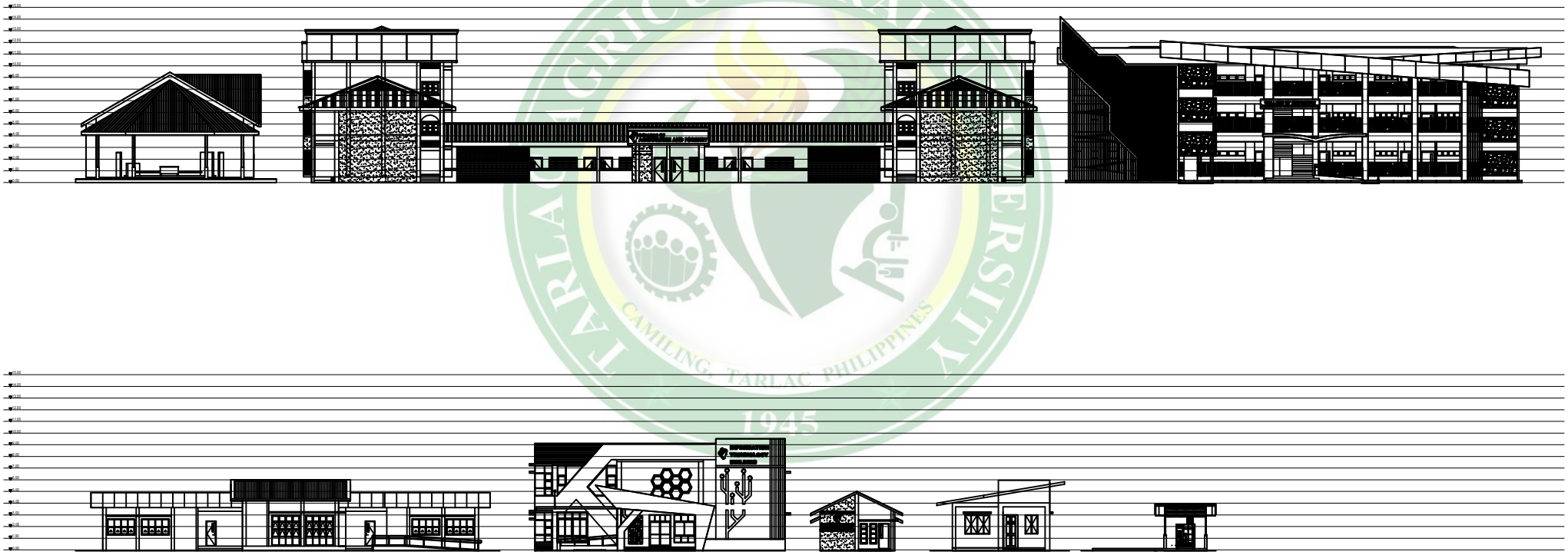
SCALE 1:100M

REAR ELEVATION

SCALE 1:100M

REPUBLIC OF THE PHILIPPINES TARLAC AGRICULTURAL UNIVERSITY CAMILING TARLAC PLANNING AND DEVELOPMENT OFFICE INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT	ARCHITECT: IAPOA NO: PRC NO: PTR NO: TIN NO: DATE: PLACE :	R.A 9266 SECTION 33 DRAWINGS & SPECIFICATION AND OTHER CONTRACT DOCUMENTS DULY SIGNED,STAMPED OR SEALED,AS INSTRUMENTS OF SERVICE ARE THE INTELLECTUAL PROPERTY & DOCUMENTS OF ARCHITECT. WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. IT SHALL BE UNLAWFUL FOR ANY PERSON TO DUPLICATE OR TO MAKE COPIES OF SAID DOCUMENTS FOR USE IN THE REPETITION OF AND FOR OTHER PROJECTS OR BUILDINGS,WHETHER EXECUTED PARTLY OR IN WHOLE,W/ OUT THE WRITTEN CONSENT OF ARCHITECT OR AUTHOR OF SAID DOCUMENTS	ENGINEER: PRC NO: PTR NO: TIN NO: DATE: PLACE :	PROJECT TITLE : CONSTRUCTION OF CATHARSIS CENTER WITH UNIVERSITY CHAPEL LOCATION : TARLAC AGRICULTURAL UNIVERSITY (MALACAMPA, CAMILING, TARLAC)	SHEET CONTENTS : AS SHOWN PREPARED BY : AR. FAHD IBARRA (ARCHITECT - PDO/IDLUZ), PRECIOUS JOY M. CORPUZ (ARCHITECT / DRAFTSPERSON) CHECKED BY : ENGR. ROCHEL E. VIBAR, CHIEF IDLUZ DATE :	APPROVED: ARNOLD R. LORENZO, Ed.D — DIRECTOR, PLANNING & DEVELOPMENT MAX P. GUILLERMO, Ph. D — PRESIDENT NOEL J. PETERO, Ph.D — VP FOR FINANCE AND ADMIN. REMARKS: SHEET NO : A-3 3 / 26

BUILDING HEIGHT LIMIT



Ranked List of Programs, Projects and Activities

Rank	Ave. Score	Program Title	Project Components	Sector	Proposed Year of Implementation	Target Year of Implementation	Project Cost ('000)			Fund Source	Maintenance Cost per annum
1	2.28	**Development of the Regional Rootcrop Research and Training Center**	Renovation of the Regional Rootcrops Research and Training Center Building	Social/ Infrastructure	2024-2026	2025	22,000.00	44,300.00	44,300.00	GAA	4000
			Upgrading, development, and acquisition of reseach equipment and facilities				6,200.00				
			Capacity building program for researches, faculty members, and graduate students				3,700.00				
			Provision of grants for projects and research activities				6,200.00				
			Provision of technical and financial assistance for commercializing projects and research activities				6,200.00				
2	2.18	**Development of the Department of Food Technology**	Construction of the Department of Food Technology Building	Social/ Infrastructure	2024-2026	2025	43,000.00	70,100.00	114,400.00	GAA	4000
			Upgrading, development, and acquisition of equipment for the Department of Food Technology				8,600.00				
			Capacity building program for faculty members of the Department of Food Technology				6,200.00				
			Repair and Rehabilitation of the College of Agriculture and Forestry Annex Building		2030-2032	2030	12,300.00			Income	
3	2.17	**Expansion and Upgrading of the College of Agriculture and Forestry**	Repair, Rehabilitation and Modification of the College of Agriculture and Forestry Classroom Building	Social/ Infrastructure	2024-2026	2024	65,000.00	157,300.00	271,700.00	GAA	5000
			Upgrading Animal Science Department Swine Laboratory			2024	15,000.00			GAA	5000
			Upgrading of the Soil and Crop Laboratory Facilities			2025	68,000.00			GAA	4000
			Acquisition and installment of instruments and equipment for the laboratory facilities of the College of Agriculture and Forestry				6,200.00				
			Capacity building program for faculty members of the College of Agriculture and Forestry				3,100.00				

4	2.12	**Development of Mental Health and Wellbeing Program**	Construction and Development of the Mental Health and Wellbeing Center (Catharsis)	Social	2024-2026	2024	20,000.00	25,000.00	296,700.00	MOOE	4000
			Development of mental health capacity building activities for employees				5,000.00				
5	2.07	**Expansion and Upgrading of the University Housing District**	Rehabilitation and Upgrading of Existing Men's and Ladies' Dormitory Buildings Programs	Social/ Economic/ Infrastructure	2024-2026 2027-2030	2026	60,000.00	399,200.00	695,900.00		2000
			Expansion of Men's Dormitory Phase 1			2024	30,000.00			GAA	5000
			Expansion of Men's Dormitory Phase 2			2025	32,000.00			MOOE	4000
			Expansion of Ladies' Dormitory Phase 1			2024	30,000.00			GAA	4000
			Expansion of Ladies' Dormitory Phase 2			2025	32,000.00			GAA	5000
			Construction of TAU Employees' Housing Facility			2024	15,000.00			GAA	5000
			Construction of 4-Door Studio Type Apartment for TAU Employees Phases 1-3			2026	54,000.00			GAA	3000
			Development of parks and open space facilities adjacent to the dormitories (Construction of Gazebo)			2032	6,200.00			Income	
			Construction of commercial stalls (TAU Mall) Construction of Agri-technohub Building A			2027	28,000.00			GAA	1500
			Construction of commercial stalls (TAU Mall) Construction of Agri-technohub Building B			2030	35,000.00			Income	1000
			Construction of commercial stalls (TAU Mall) Construction of Agri-technohub Building C			2032	40,000.00			Income	
			Establishment of Multi-level Parking Area for Vehicles			2030	37,000.00				1000
			Construction of Development and Professional Education Classroom Building for the College of Education			2024	50,000.00			GAA	5000
			Expansion and Upgrading of the College of Education Science, Math and Technology Education Building with TLE - Industrial Arts Laboratory and Facilities			2025	18,400.00			GAA	4000

6	2.03	**Expansion and Upgrading of the College of Education**	Construction of College of Education Child Research and Development Laboratory of Experience (CRADLE)	Social/ Infrastructure	2024-2027	2025	20,000.00	128,400.00	824,300.00	GAA	4000
			Construction of Teachers Training Center			2027	20,000.00			GAA	2500
			Establishment of the College of Education Student Center			2026	20,000.00			Income	3000
6	2.03	**Upgrading of TAU Health Facilities**	Upgrading of the TAU Medical Clinic	Social	2027-2029	2027	10,000.00	28,500.00	852,800.00	GAA	2500
			Upgrading of the TAU Medical Clinic				3,500.00				
			Acquisition of medical equipment, medicines, and supplies				10,000.00				
			Provision of ambulance/ transport vehicle				5,000.00				
8	2.02	**Repair and Rehabilitation of Road Networks, Pedestrians, Walkways and Perimeter Fences Program**	Repair and Rehabilitation of Road Networks with Provision of Walkable Pedestrian Pathways for Employees and Students and those with Special Needs - Phase 1	Infrastructure	2024-2027	2024	40,000.00	190,000.00	1,042,800.00	GAA	500
			Improvement of Perimeter Fences and Walkways - Phase 1			2025	50,000.00				
			Improvement of Perimeter Fences and Walkways - Phase 2			2026	50,000.00			MOOE	500
			Improvement of Perimeter Fences and Walkways - Phase 3			2027	50,000.00			Income	500
8	2.02	**Integration of Renewable Enery Systems in Existing Academic, Administrative and Support Services Buildings in the University (Phase 1)**		Environmental/ Infrastructure	2025-2027	2025	70,000.00	70,000.00	1,112,800.00	GAA	5000
10	1.98	**Expansion and Upgrading of the College of Engineering and Technology**	Upgrading of Geodetic Engineering Laboratory and Classroom Building including Facilities	Social/ Infrastructure	2024-2026	2024	20,000.00	60,000.00	1,172,800.00	GAA	5000
			Establishment of of Agricultural and Biosystems Land and Water Resources and AB Process Engineering Laboratory			2024	10,000.00			GAA	5000
			Upgrading of the Existing BS Agricultural and Biosystems Engineering Laboratory Building including facilities			2025	20,000.00			MOOE	5000

			Capacity building program for faculty members of the College of Engineering and Technology				10,000.00				
10	1.98	**Expansion and Upgrading of the College of Arts and Sciences**	Construction and Upgrading of College of Arts and Sciences Main Building	Social/ Infrastructure	2025-2027	2027	65,500.00	119,200.00	1,292,000.00	GAA	3000
			Construction and Upgrading of College of Arts and Sciences Annex Building			2026	24,500.00			GAA	3000
			Construction of Electronic Media Laboratory for Development Communications Students including equipment and facilities			2025	23,000.00			Income	3000
			Capacity building program for faculty members of the College of Arts and Sciences				6,200.00				
12	1.94	**Drainage Development Program**	Improvement of Campus Drainages Establishment of Sewage Treatment Plants for water reuse	Infrastructure	2024-2026	2024	30,000.00	30,000.00	1,322,000.00	Income	1000
13		**Development of the Information Technology Center**	Expansion and Upgrading of the Information Technology Center Building	Social/ Infrastructure	2024-2026	2024	20,000.00	32,500.00	1,354,500.00	GAA	6000
			Expansion and Upgrading of Laboratory facilities in the Information Technology Center Building			2026	12,500.00				
14	1.91	**Development of Integrated ICT System**	Development of automated online service delivery system	Institutional	2030-2032	2030	16,000.00	80,000.00	1,434,500.00	GAA	3000
			Upgrading and expansion of the existing paging systems around the campus				16,000.00				
			Development of WiFi posts and signal boosters				16,000.00				
			Acquisition of CCTVs				16,000.00				
			Acquisition of back-up communication systems				16,000.00				
14	1.91	**Improvement of TAU Bamboo Park (Phase 2)**		Environmental/ Infrastructure	2026-2029	2026	6,200.00	6,200.00	1,440,700.00	Income	3000
14	1.91	**Establishment of Monitoring System for Air, Soil, and Water Quality**		Environmental	2030-2032	2030	16,000.00	16,000.00	1,456,700.00	Income	2000

17	1.9	**Improvement of TAU Hostel Facility**	Construction of Eco-lodging Villas w/ Pinic Areas	Economic/ Infrastructure	2026-2028	2026	61,300.00	61,300.00	1,518,000.00	Income	3000
			Construction of Function Hall 2							Income	3000
18	1.86	**Development of the College of Veterinary Medicine**	Construction of College of Veterinary Medicine Laboratory Building	Social/ Infrastructure	2027-2029	2028	28,000.00	91,000.00	1,609,000.00	GAA	3000
			Expansion of the College of Veterinary Medicine Classroom Building			2028	42,000.00			Income	3000
			Acquisition of new equipment for laboratory facilities				14,000.00				
			Capacity building program for faculty members of the College of Veterinary Medicine				7,000.00				
18	1.86	**Expansion of Smart Greenhouse Facilities**		Enivronmental/ Infrastructure	2030-2032	2031	17,000.00	17,000.00	1,626,000.00	Income	1000
20	1.84	**Development of the College of Business and Management**	Expansion of the College of Business and Management Main Building	Social/ Infrastructure	2026-2028	2026	37,000.00	159,000.00	1,785,000.00	GAA	3000
			Expansion of the College of Business and Management Annex Building			2026				GAA	3000
			Rehabilitation and Upgrading of the TAU Agribusiness Center and Integration of TAU Technology and Business Incubator Center			2026	61,000.00			GAA	3000
			Construction of Three-Storey CBM Business Education Center			2026	61,000.00			GAA	3000
21	1.76	**Development of TAU's National Service Training Program (NSTP)**	Construction of NSTP Instruction Building	Social/ Infrastructure	2026-2028	2026	24,500.00	24,500.00	1,809,500.00	GAA	3000
			Construction of Student Quarters							GAA	
22	1.71	**Development of Bamboo Forest Park**		Environmental	2030-2032	2032	25,000.00	25,000.00	1,834,500.00	Income	1000

23	1.68	**Retrofitting of the University Library, Archive and Museum**		Infrastructure	2026-2028	2026	75,000.00	75,000.00	1,909,500.00	GAA	1500
24		**Development and Upgrading of Sports and Sociocultural Facilities and Athlete and Guild Development Programs**	Development and upgrading sports facilities, including the TAU water sports facility	Social/ Infrastructure	2026-2028	2026	18,000.00	33,000.00	1,942,500.00	GAA	3000
			Implementation of Athlete Development Program				5,000.00				
			Development and upgrading of sociocultural facilities			2028	5,000.00				
			Implementation of Guild Development Program				5,000.00				
25	1.66	**Construction of International Academic and Research Cooperation Center Convention Center)**		Economic/ Infrastructure	2025-2027	2025	100,000.00	100,000.00	2,042,500.00	GAA	4000
25	1.66	**Improvement of Shed for Small Ruminants**		Infrastructure	2028-20230	2028	28,000.00	28,000.00	2,070,500.00	MOOE	1000
25	1.66	**Integration of rainwater harvesting and filtration systems on buildings**		Infrastructure	2028-2030	2028	20,000.00	20,000.00	2,090,500.00	Income	1000
28	1.6	**Construction of TESDA Training Center**		Infrastructure	2029-2031	2029	22,500.00	22,500.00	2,113,000.00	Income	2000
29	1.59	**Waste Management Program**	Upgrading of the material recovery facility Procurement of waste diversion and management system	Infrastructure	2024-2026	2024	20,000.00	20,000.00	2,133,000.00	GAA	2000
30	1.54	**Construction of Disaster Evacuation and Emergency Operations Center**		Social/ Infrastructure	2029-2031	2029	22,500.00	22,500.00	2,155,500.00	Income	5000
31	1.49	**Rehabilitation and construction of new deep well systems with water tank for potable water**		Infrastructure	2029-2031	2029	25,000.00	25,000.00	2,180,500.00	Income	3000
32	1.37	**Construction of Centralized Cold Storage Building**		Infrastructure	2026-2028	2026	36,800.00	36,800.00	2,217,300.00	GAA	1000

32	1.37	**Transfer of aerial electrical cables and ICT cables to undeground cabling system (Phase 1)**		Infrastructure	2029-2032	2029	75,000.00	75,000.00	2,292,300.00	GAA	5000
34	1.31	**Repair/ Rehabilitation of Existing Staff Houses and Apartment**		Social/ Infrastructure	2025-2027	2025	31,000.00	31,000.00	2,323,300.00	GAA	6000
35	1.1	**Expansion of University Storage and Supply Warehouse**	Expansion of the General Services Office and Supply and Property Management Office	Institutional/ Infrastructure	2026-2028	2026	24,500.00	24,500.00	2,347,800.00	Income	3000
36	1.09	**Upgrading of existing power generator sets on lifeline and core facilities (Phase 1)**		Infrastructure	2029-2031	2029	22,500.00	22,500.00	2,370,300.00	Income	3000
37	0.95	**Establishment of multi-level parking area for vehicles at a strategic plan**		Infrastructure	2029-2031	2029	40,000.00	40,000.00	2,410,300.00	Income	2000
38		**Repair and Rehabiliation of Old Academic Buildings**		Infrastructure	2029-2031	2029	100,000.00	100,000.00	2,510,300.00	Income	2000

ANNEX C

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Climate and Disaster Risk Assessment: Tarlac Agricultural University

1. Introduction

There are tremendous incidents that tested the situation of every region, some of which left the place devastated and helpless. In the Province of Tarlac, specifically the Municipality of Camiling, exposure to typhoons causes flooding in the town.

Camiling is known as a first-class municipality in Tarlac. It is home to 87, 319 people according to the 2020 census. It consists of 61 barangays, and two are where TAU is located. Tarlac Agricultural University (main campus) lies in the southern portion of the municipality within the boundary of Barangay Malacampa and Santa Maria. As of 2022, the population of TAU, teaching and non-teaching staff, and students is 7754.

2. Hazard Profile

Flooding. Flooding in the campus is caused by the storm water run-off from the higher portion of the campus which will then be stored and collected in low-lying areas. The most affected areas are within the southeast portion of the campus and the Research and Production District.

Liquefaction. The university is built on clay and peat soil. These soil types are prone to liquefaction due to their characteristic of absorbing water.

3. Hazard Maps

a. *Hydrometereological Hazard*

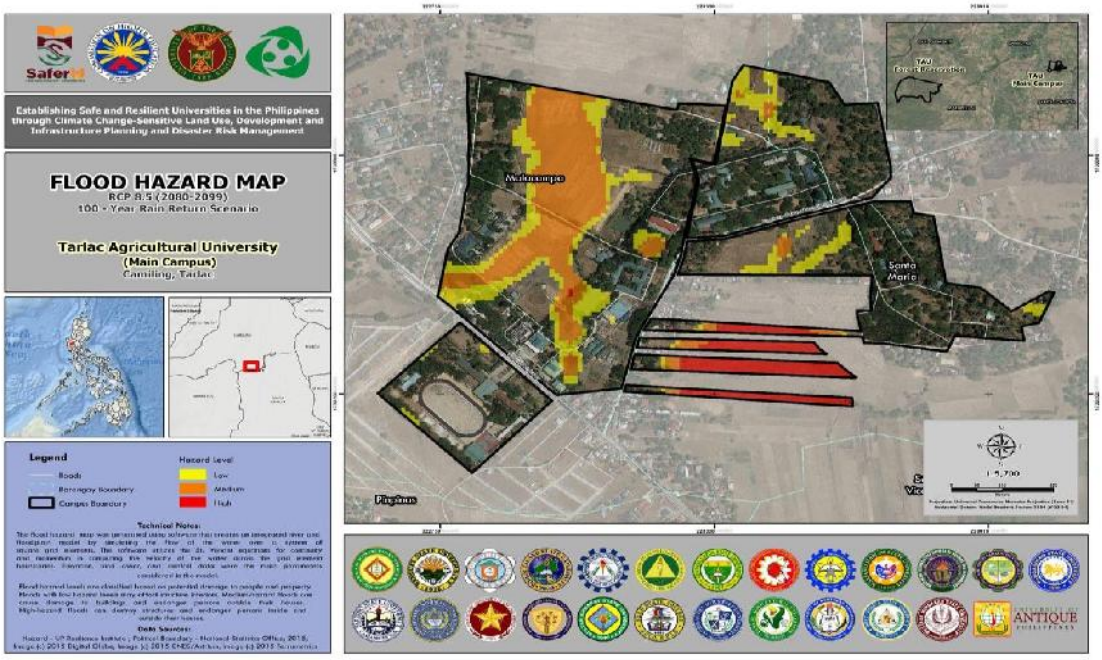

Image: From UPRI Presentation (during the Joint Risk Assessment conducted by TAU LUDIP TWG and UPRI)

Based on the Flood Prone Areas Map of Camiling, Malacampa, and Santa Maria are safe from flooding. However, based on the microanalysis done by the Institution, the image above shows that there are areas within the campus that are susceptible to flooding due to storm water runoff. However, flooding subsides overnight or half a day. The areas are agricultural lands and are the lowest part of the campus.

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b. Seismic Hazard

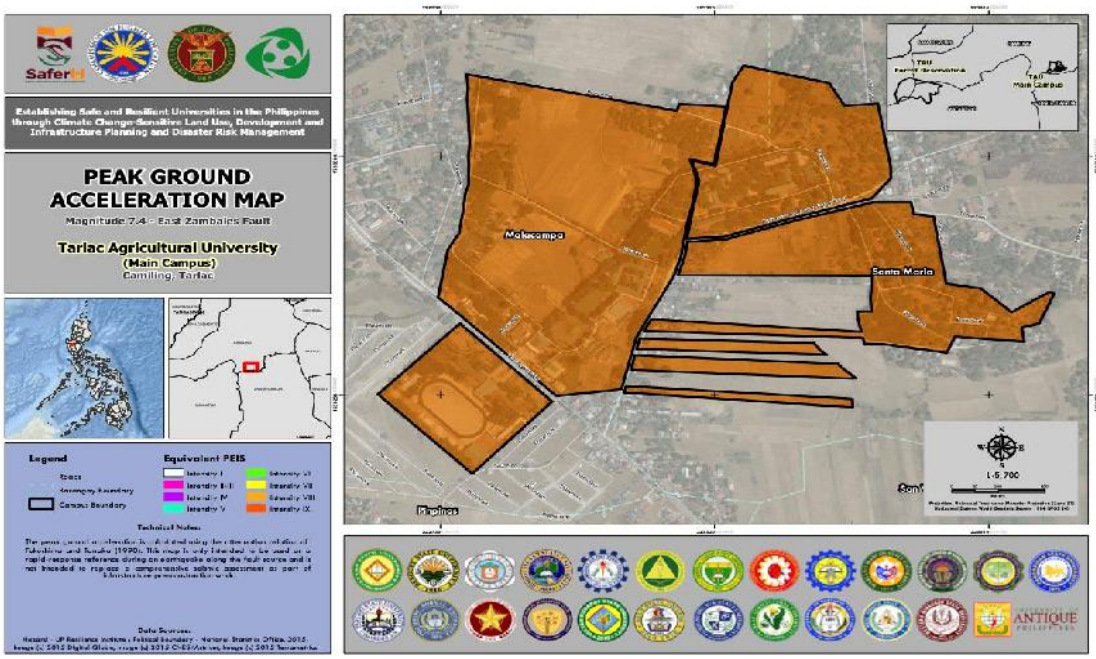

Image: From UPRI Presentation (during the Joint Risk Assessment conducted by TAU LUDIP TWG and UPRI)

The image above shows that TAU is prone to ground shaking due to earthquake. However, data from the DRRM Plan of Camiling shows that Malacampa and Santa Maria (barangays where TAU is situated) are approximately 7km. away from the nearest fault line. In addition, TAU Campus is not prone to earthquake-triggered landslide.

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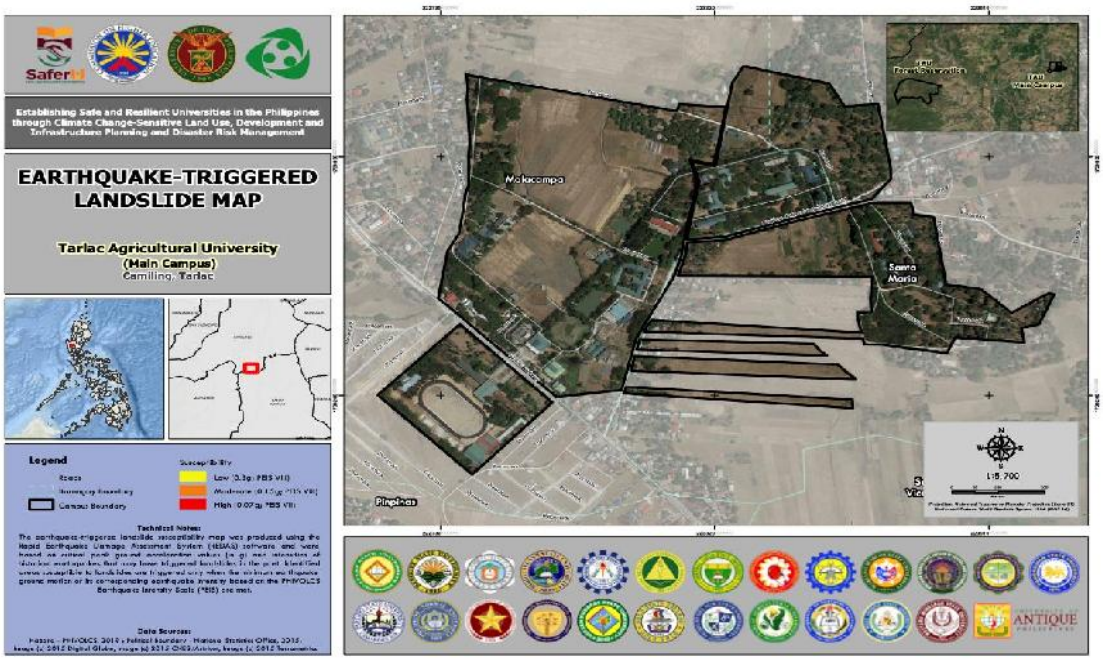


Image: From UPRI Presentation (during the Joint Risk Assessment conducted by TAU LUDIP TWG and UPRI)

4. Disaster Historical Data (Flooding due to typhoon)

These are the disasters that struck the municipality of Camiling that almost made the constituents homeless. Most of the damaged parts are in the barangays near the town proper. It means that Malacampa and Santa Maria were not affected by floods. However, in times like this, TAU considers suspension of classes to those who were affected by flooding

ANNEX C

FLOODING DUE TO TYPHOON

DISASTER TIMELINE

ADOPTED FROM CONTINGENCY PLAN OF CAMILING

ANNEX C

Risk Analysis Assessment

Severe Wind (Typhoon). The table shows the Risk Analysis Assessment for Severe Wind due to typhoon

Severe Wind (typhoon)	People (employees, students, other stakeholders)	- Fatalities and/or injuries might be experience in the occurence of severe wind - Affects mental health and emotional health	4	Likely	3	Moderate	12	Moderate	Non-Infra	- uses different media (SMS, Facebook, messenger, etc) in desseminating informations and advisorics	3	With fairly effective controls in place but needs improvement	conduct relavant orientations, emergecy drills and information dissemination
	Facility	- damage to facility infrastructure/equipment. - Restricted access to facilities due to debris and damage to roads, impassable	4	Likely	3	Moderate	12	Moderate	Infra	- Maintenance team and pool of engineers conduct periodic surveys and maintenance work to ensure integrity od structures	3	With fairly effective controls in place but needs improvement	Design and/or renovate buildings according to the provisions of the National Building Codes
	Public		4	Likely									
	Process	- operations may paralyze due to the damaged power transmission lines caused by severe wind	4	Likely	2	Minor	8	Low	Non-Infra	- backup generator sets are put in place	3	With fairly effective controls in place but needs improvement	Establishment of power backup system
	Supply Chain	- delays in the delivery of supplies needed for the operational functions	4	Likely	2	Minor	8	Low	Non-Infra	-buffer stocks are available in the supply office every each quarter of the year	3	With fairly effective controls in place but needs improvement	maintain a database of alternate suppliers
	ICT												

Earthquake (ground shaking). The table shows the Risk Analysis Assessment for ground shaking due to earthquake

Earthquake (Ground Shaking)	People (employees, students, other stakeholders)	- Fatalities and/or injuries might be experience in the occurence of high intensity earthquake - Affects mental health and emotional health	4	Likely	4	Major	16	High	Non-Infra	- Annual earthquake drills facilitated by UDRRMC in coordination with Tarlac PDRRMO, BFP, OCD Region III	4	With highly effective controls in place with little room for improvement	- Frequent surprise/un-announced earthquake drills to possibly imitate real scenario; - Improvement of the warning systems with the use of latest and available technology. -Strengthen the capability of Local (University) responders.
	Facility	- Structural damage to facility infrastructure/equipment - Restricted access to facilities due to debris and damage to roads, impassable	4	Likely	4	Major	16	High	Non-Infra	- Compliance to Building Code of the Philippines	3	With fairly effective controls in place but needs improvement	- Strengthen the capability of structural designers and construction implementors of future projects
	Public	- can cause panic to the public resulting to unrest and chaos	4	Likely	4	Major	16	High	Non-Infra	- Annual earthquake drills facilitated by UDRRMC in coordination with Tarlac PDRRMO, BFP, OCD Region III	3	With fairly effective controls in place but needs improvement	- Development of an Awareness of the Potential for Earthquake Events
	Process	- operations may paralyze due to blackout occurrences after a strong earthquake event	4	Likely	3	Moderate	12	Moderate	Infra	provision of back-up power generator sets	3	With fairly effective controls in place but needs improvement	- Development of an Effective Plan for Response and Recovery
	Supply Chain	- Shortage of material requirement use for delivery of services	4	Likely	3	Moderate	12	Moderate			1	No control in place	
	ICT	- Internet and telecommunication lines may affected	4	Likely	3	Moderate	12	Moderate			1	No control in place	

Pandemic/ Epidemic	People (employees, students other stakeholders)	- People may get infected and become sick that can result to death	4	Likely	4	Major	16	High	Non-Infra	Implementation of health and safety protocol	3	With fairly effective controls in place but needs improvement	Establish a year-round haelth and safety protocol inside the university
	Public	- can cause panic to the public resulting to unrest and chaos	4	Likely	3	Moderate	12	Moderate			1	No control in place	
	Process	- limited/restricted operations due to health safety issues	4	Likely	3	Moderate	12	Moderate	Non-Infra	- implementation of Work-from-home scheme	3	With fairly effective controls in place but needs improvement	
	Supply Chain	- limited supplies due to stricter border controls and movement of people and products	4	Likely	3	Moderate	12	Moderate			1	No control in place	
	ICT												

ANNEX C

TAU Disaster Risk Reduction Management Plan

TAU Disaster Risk Reduction Management Plan through the Public Service Continuity Plan is a document that provides proactive operational actions to be undertaken by the University in response to various disruptive incidents which will be encountered in the locality where the University is located and to ensure the continuity of operations through the restoration of mission essential functions.

1. **OBJECTIVES**

The TAU commits to the attainment of the following public service continuity objectives:

a. To safeguard human lives;

b. To establish effective and sound decision-making and communication actions during incidents;

c. To reduce dependency on a specific critical function-holder;

d. To carry on organizational dependability by ensuring quick recovery from disruption and immediate resumption of critical services to the public and other stake holders; and

e. To ensure continual improvement of the organization through public service continuity management.

2. **SCOPE**

a. This shall apply to the whole community of the Tarlac Agricultural University, including its employees, students, stakeholders, and external service providers.

3. **INSTITUTIONAL STRUCTURE**

a. **Incident Commander: The incident Commander is responsible for managing** he incident by establishing objectives, planning strategies, and implementing tactics.

b. **Command Staff:** Public information officer serves as the channel for information to internal and external stakeholders, including the media or parents.

c. Safety Officers: Monitors safety conditions and develops measures for ensuring the safety of all response personnel.

d. Liaison Officer: monitors safety conditions and develops measures for ensuring the safety of all response personnel.

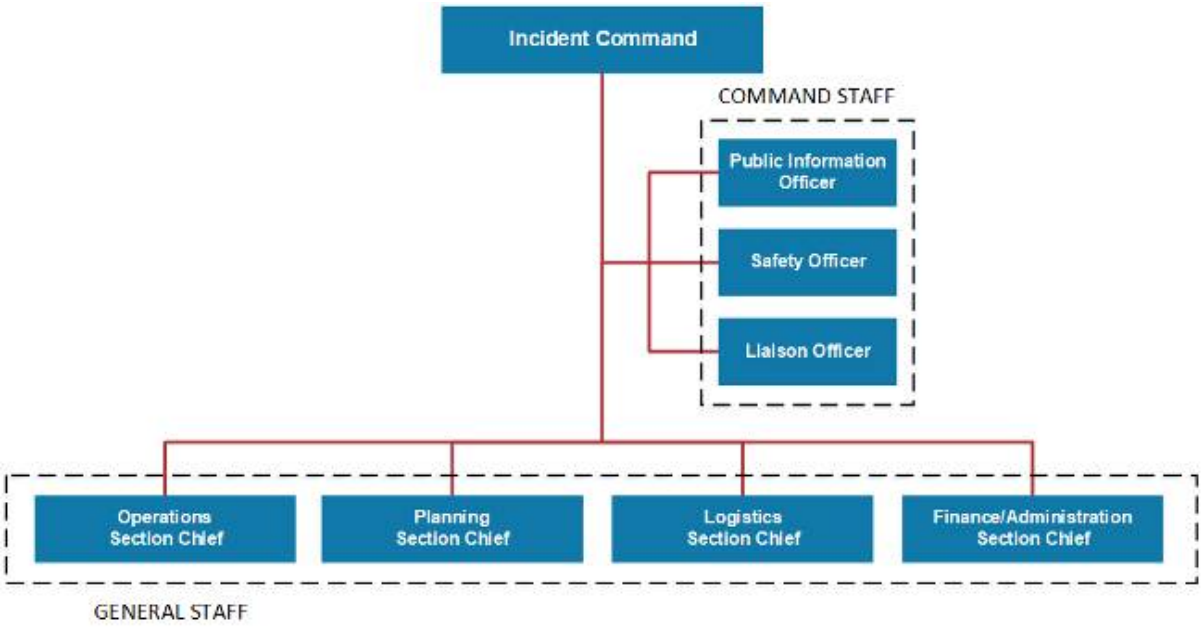
e. General Staff

i. ***Operations Section:*** The Operations Section chief is the person with the greatest technical and tactical expertise in dealing with the problem at hand. The primary functions are the following: develops and implements strategy and tactics to carry out the incident objectives; organizes, assigns, and supervises the response resources; manages staging areas and special organizations; and organizes mental health and medical support for crisis victims.

ii. ***Planning Section Chief:*** The primary functions are the following: collecting, evaluating, and displaying incident intelligence and information; preparing and documenting Incident Action Plans; tracking resources assigned to the incident; maintaining incident documentation; and developing plans for demobilization.

iii. ***Logistics Section***: The primary functions are the following: ordering, obtaining, maintaining, and accounting for essential personnel, equipment, and supplies; providing communication planning and resources; setting up food services; setting up and maintaining incident facilities; providing support transportation; and providing medical services to incident personnel (not injured students).

iv. ***Finance Section:*** The primary functions are the following: contract negotiation and monitoring; timekeeping; cost analysis; and compensation for injury or damage to property.



4. THEMATIC AREA PLAN

a. Disaster Prevention and Mitigation

i. Conduct of risk assessments in various areas in the campus.
ii. Development and establishment of several early warning systems
iii. Development of tools on risk assessment
iv. Increase the involvement of students, staffs, faculty members, and stakeholders in disaster risk management through participation on emergency drills (Simultaneous University-wide Earthquake and Fire Drill)

b. Disaster Preparedness

i. Contingency Plan Mechanism

Preparedness is a must to survive. It gives somebody to have a higher likelihood to live on. However, this needs information dissemination which requires established and functional systems. This permits someone to have a clear view on what to do, where to go, and whom to contact in case of disaster.

As a University, aside from education and academic trainings of the students, their security is a priority. With this, the University created different mechanisms to provide students clear view on this.

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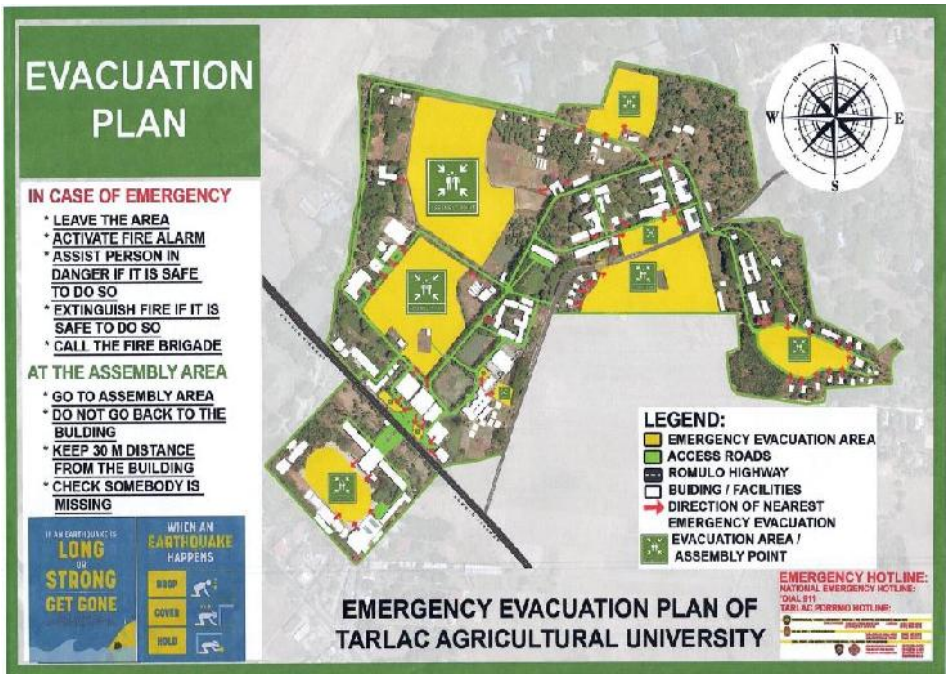
ii. Evacuation Plan and/or Early Warning System



As its name suggests, existence of this plan is vital as it gives the students, faculty, and staff of the University a clear view of safe places in case of disaster (fire and earthquake). This is posted in different buildings that displays the numbers to be contacted. Furthermore, this also shows quick instructions to follow in case of emergency.

Warning systems are also vital in every institution for it gives immediate signal for evacuation in case of disaster. At present, fire alarms are installed in every building. With thousands of students and employees, installation of early warning system helps the University in this manner.

iii. Emergency Response Team

A good institution, putting the safety of every individual is essential. It must pinpoint individuals to respond in case of a disaster. Hence, the University Disaster Risk Reduction Management Council is created, which is primarily responsible for dealing with emergencies and disasters within the University.

iv. Trainings

Due to the untiring effort of the UDRRMC and the GAD Chief, the number of personnel trained dramatically increased in the last three years. To date, there are 118 capacitated personnel from both the academic and non-teaching staff who can serve during emergencies. This amounts to around 38% of the total number of personnel in the University.

v. Safety Inspections

vi. Maintenance of the Installations/ Facilities

c. Disaster Response

In anticipation of an emergency or a disaster, the University President will release a Memorandum Order on who will be the primary responsible and accountable person in case of a specific disaster or an emergency.

Also, as part of the preparation phase, the University Disaster and Risk Reduction Management Committee members will continually perform their functions and responsibilities religiously.

In adherence to Incidence Command System (ICS) features and guidelines, the Incident Commander should act promptly and objectively.

Activation and Mobilization

In the occurrence of any emergency/disaster, the Emergency Operation Center and Incident Management Team will be activated and mobilized.

Command and Control

Command and control shall be exercised by the responsible officer (RO), the designated Command Post, or any other pre-determined alternate sites.

Communications and Signals

The signal for the activation of ICS will be coordinated in the Emergency Operation Center. It is also advisable to use the Public Information System if necessary.

In case of the barring systems breakdown due to earthquake, the existing means of communications such as portable radio, cellular phones, and megaphones shall be utilized.

For the previous conducted face-to-face National Simultaneous Earthquake Drill conducted in the University, the observed flow of communication used is as follows:

1. The siren will be played for one minute.
2. When the siren is off, the Incident Command Post will be activated. Moreover, the committees established per site and college will be activated.
3. The Over-all Communication team will call the PDRRMO, MDRRMO, PNP, BFP and Hospital and ask for technical assistance.
4. Upon the arrival of the personnel from the agencies involved, they will proceed to Staging Area located in front of the TAU Gymnasium and will wait for the possible deployment to the various sites.
5. The Command Post will control and coordinate the whole incident.
6. When the incident is stabilized, the incident commander will inform the PDRRMO and will demobilize the incident command post.

Supplies and Logistics

The Logistics Section Chief, in coordination with the Property and Supply Office (PSMO), shall establish the supplies, equipment, paraphernalia or logistical requirements of the Emergency Response Team and program their procurement as a matter of priority to ensure that the employees, students and other stakeholders are protected in times of emergencies.

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The resources of the university shall be mobilized and committed to emergency operations in the event of a disaster or emergency.
The continuing requirements in the operations that may be identified later form part of the items to be included in the budget.

Deactivation

The deactivation of the incident shall be announced by the Incident Commander or the duly authorized representative when the emergency has been lifted and all emergency response activities has been turned over to the proper government or private emergency response units.

d. Disaster Rehabilitation and Recovery

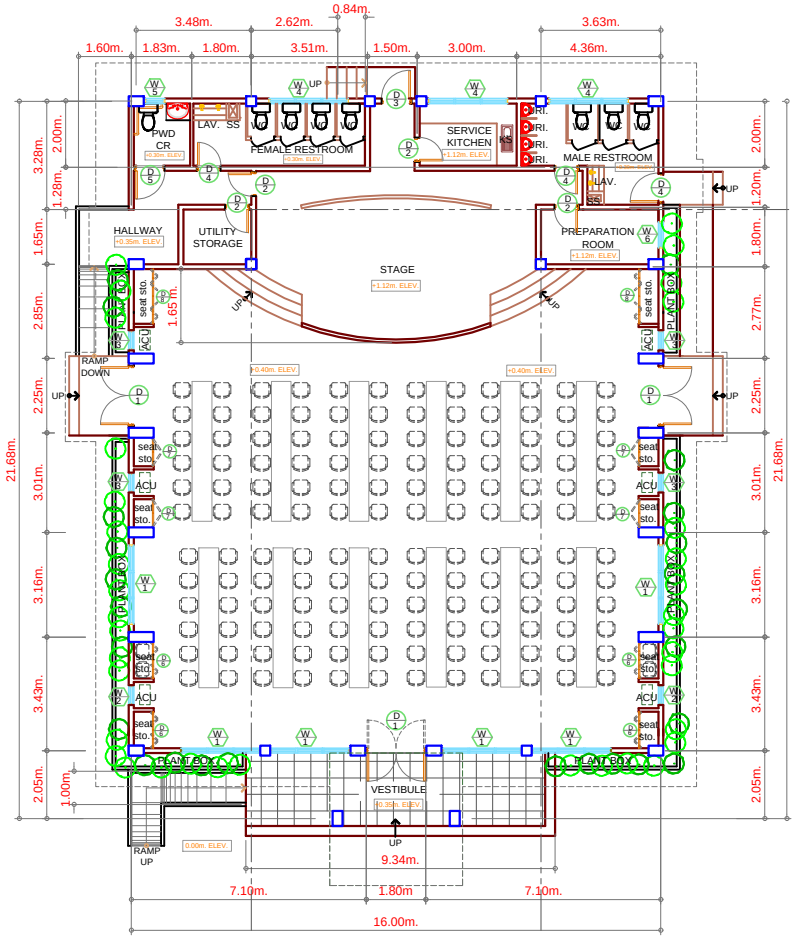
The table below shows the disaster rehabilitation and recovery strategies of the university.

DETERMINING RECOVERY STRATEGIES	
MEF	**RECOVERY STRATEGIES**
Academic Instruction	• Notify the parents of the students • Conduct structural inspection to all building • Transfer to temporary and safe office • Alternative mode of teaching (e.g. via online meeting/conference) • Secure computer assets • Restoration of server
Delivery of Student Services	• Transfer to temporary/alternate and safe office • Secure computer assets • Secure the essential records • Information dissemination on the process of delivery of student services • The Contingency Plan of the University pertaining to cross-registration of students and admissions of student-transferees were stipulated in the University Code of the University which was approved by the Board of Regents in 2018. The in-charge of Admission and Registration Office strictly implement the provisions religiously.
Delivery of Financial and Administrative Services	• Transfer to temporary/alternate and safe office • Secure the cash on-hand, checks and other pertinent documents • Provide backup/alternate sites/location to secure critical data and essential records of the offices • Provide temporary/alternate area for computer equipment/materials to restore facilitation of work • Restoration of the services of the following: ▪ TARELCO 1

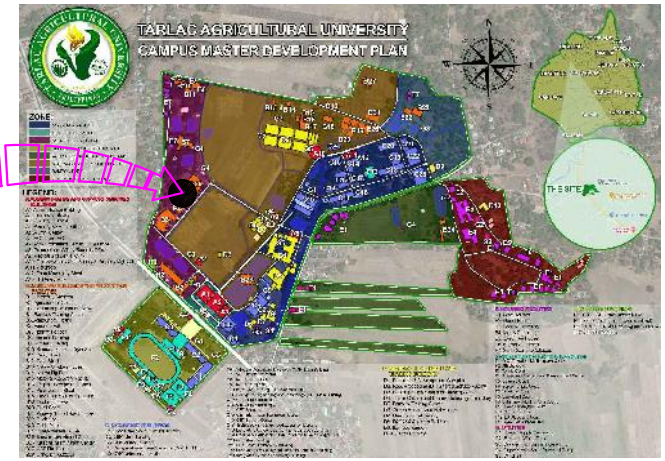
ANNEX C

	▪ Prime Water.INC ▪ Telephone line (PLDT) ▪ Internet connectivity • The General Services Unit is tasked to facilitate upkeep, maintenance and repair of the facilities in the University. In the event of fire or earthquake and there are damages to said facilities, the General Services is expected to follow an established chain of command to effect repairs and/or rehabilitation.
Delivery of Medical and Dental Services	• Transfer to temporary/alternate and safe office • Put up a temporary triage for first aid • Secure medical and dental equipment and medicines
Research	• Transfer to temporary/alternate and safe office • Secure the essential records
Extension	• Transfer to temporary/alternate and safe office
Training	• Transfer to temporary/ alternate and safe office • Trainings may be conducted temporarily using alternative mode like video conferencing
Production	• Evacuate the livestock and other farm produce (when necessary) to safe area

ANNEX D



FLOOR PLAN

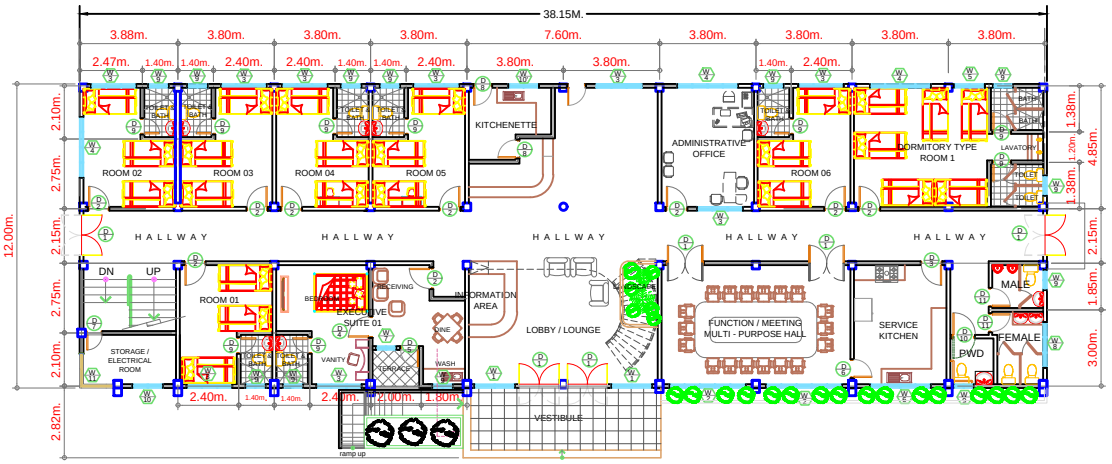


LOCATION MAP

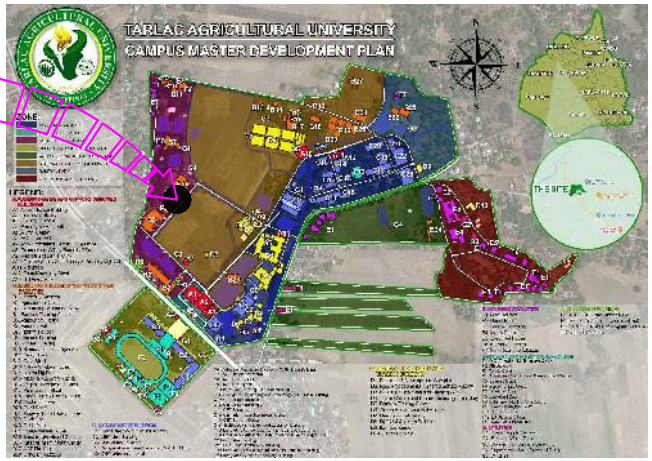
N. T. S.

PERSPECTIVE VIEW

REPUBLIC OF THE PHILIPPINES **TARLAC AGRICULTURAL UNIVERSITY** CAMILING TARLAC **PLANNING AND DEVELOPMENT OFFICE** **INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT**	ARCHITECT: FAHD B. IBARRA IAPOA NO: PRC NO: 0024199 PTR NO: 45010981 TIN NO: DATE: 01/12/2023 PLACE : TARLAC CITY	**R.A 9266 SECTION 33** DRAWINGS & SPECIFICATION AND OTHER CONTRACT DOCUMENTS DULY SIGNED,STAMPED OR SEALED,AS INSTRUMENTS OF SERVICE ARE THE INTELLECTUAL PROPERTY & DOCUMENTS OF ARCHITECT, WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. IT SHALL BE UNLAWFUL FOR ANY PERSON TO DUPLICATE OR TO MAKE COPIES OF SAID DOCUMENTS FOR USE IN THE REPETITION OF AND FOR OTHER PROJECTS OR BUILDINGS,WHETHER EXECUTED PARTLY OR IN WHOLE,W/ OUT THE WRITTEN CONSENT OF ARCHITECT OR AUTHOR OF SAID DOCUMENTS	ENGINEER: ROCHEL E. VIBAR PRC NO: 086643 PTR NO: 4500940 TIN NO: 206-804-447 DATE: 01/10/2023 PLACE : TARLAC CITY	PROJECT TITLE : FUNCTION HALL LOCATION : TARLAC AGRICULTURAL UNIVERSITY CAMILING, TARLAC	SHEET CONTENTS : **AS SHOWN** PREPARED BY : CHECKED BY : DATE : ENGR. ROCHEL E. VIBAR CHIEF DILG	APPROVED: ARNOLD R. LORENZO, Ed. D DIRECTOR, PLANNING & DEVELOPMENT MAX P. GUILLERMO, Ph.D PRESIDENT NOEL J. PETERO, Ph.D VP FOR FINANCE AND ADMIN.	REMARKS: **AS BUILT PLAN**	SHEET NO : **B6**

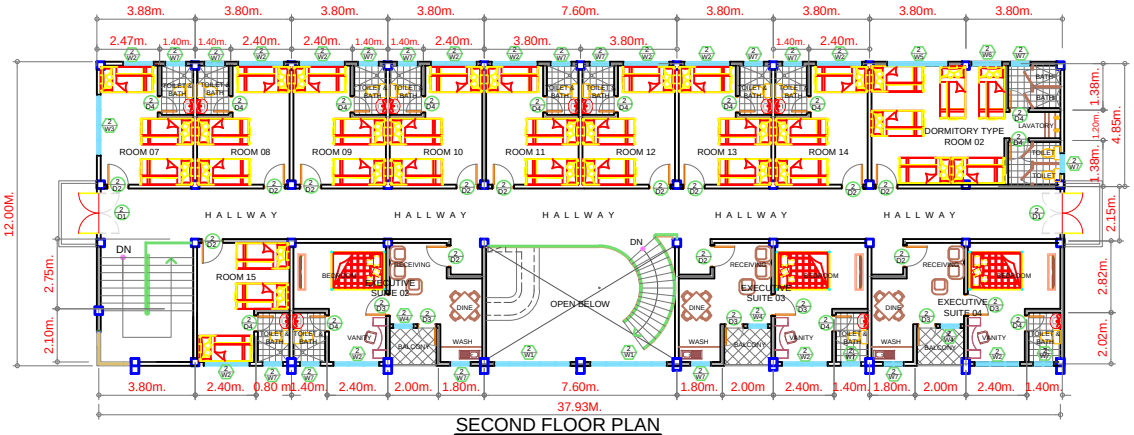


GROUND FLOOR PLAN



LOCATION MAP

N. T. S.



SECOND FLOOR PLAN

PERSPECTIVE VIEW

REPUBLIC OF THE PHILIPPINES
TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC
PLANNING AND DEVELOPMENT OFFICE
INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT

ARCHITECT: FAHD B. IBARRA
IAPOA NO:
PRC NO: 086643 | PTR NO: 4500940
TIN NO: | DATE: 01/10/2023
PLACE : TARLAC CITY

R.A 9266 SECTION 33

DRAWINGS & SPECIFICATION AND OTHER CONTRACT DOCUMENTS DULY SIGNED,STAMPED OR SEALED,AS INSTRUMENTS OF SERVICE ARE THE INTELLECTUAL PROPERTY & DOCUMENTS OF ARCHITECT, WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. IT SHALL BE UNLAWFUL FOR ANY PERSON TO DUPLICATE OR TO MAKE COPIES OF SAID DOCUMENTS FOR USE IN THE REPETITION OF AND FOR OTHER PROJECTS OR BUILDINGS, WHETHER EXECUTED PARTLY OR IN WHOLE,W/ OUT THE WRITTEN CONSENT OF ARCHITECT OR AUTHOR OF SAID DOCUMENTS

ENGINEER: ROCHEL E. VIBAR
PRC NO: 086643 | PTR NO: 4500940
TIN NO: 206-804-447 | DATE: 01/10/2023
PLACE : TARLAC CITY

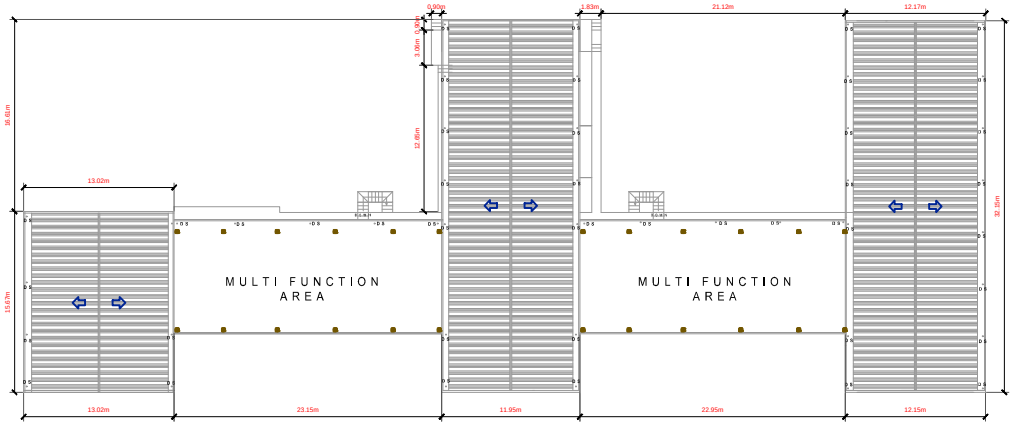
PROJECT TITLE : **AGRI-TOURISM HOSTEL**
LOCATION : TARLAC AGRICULTURAL UNIVERSITY CAMILING, TARLAC

SHEET CONTENTS : **AS SHOWN**
PREPARED BY : | CHECKED BY : ENGR. ROCHEL E. VIBAR, CHIEF, DLUZ | DATE :

APPROVED:
ARNOLD R. LORENZO, M.S.D — DIRECTOR, PLANNING & DEVELOPMENT
MAX P. GUILLERMO, Ph. D — PRESIDENT
JOEL J. PETERO, Ph. D — VP FOR FINANCE AND ADMIN.

REMARKS: **AS BUILT PLAN**

SHEET NO : **B5**



SECOND FLOOR PLAN

LOCATION MAP

N. T. S.

PERSPECTIVE VIEW

REPUBLIC OF THE PHILIPPINES
TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC
PLANNING AND DEVELOPMENT OFFICE
INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT

ARCHITECT: FAHD B. IBARRA
IAPOA NO:
PRC NO: 0024199 PTR NO: 45010981
TIN NO: DATE: 01/12/2023
PLACE : TARLAC CITY

R.A 9266 SECTION 33

DRAWINGS & SPECIFICATION AND OTHER CONTRACT DOCUMENTS DULY SIGNED,STAMPED OR SEALED,AS INSTRUMENTS OF SERVICE ARE THE INTELLECTUAL PROPERTY & DOCUMENTS OF ARCHITECT. WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. IT SHALL BE UNLAWFUL FOR ANY PERSON TO DUPLICATE OR TO MAKE COPIES OF SAID DOCUMENTS FOR USE IN THE REPETITION OF AND FOR OTHER PROJECTS OR BUILDINGS,WHETHER EXECUTED PARTLY OR IN WHOLE W/ OUT THE WRITTEN CONSENT OF ARCHITECT OR AUTHOR OF SAID DOCUMENTS

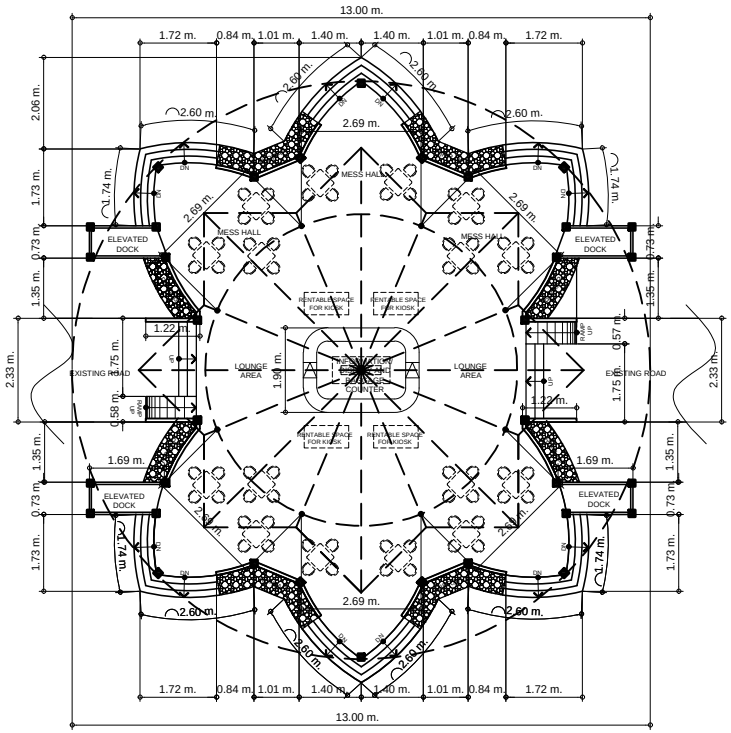
ENGINEER: ROCHEL E. VIBAR
PRC NO: 086643 PTR NO: 4500940
TIN NO: 206-804-447 DATE: 01/10/2023
PLACE : TARLAC CITY

PROJECT TITLE : **RESEARCH AND DEVELOPMENT COMPLEX**
LOCATION : TARLAC AGRICULTURAL UNIVERSITY CAMILING, TARLAC

SHEET CONTENTS : **AS SHOWN**
PREPARED BY : CHECKED BY : ENGR. ROCHEL E. VIBAR DATE :

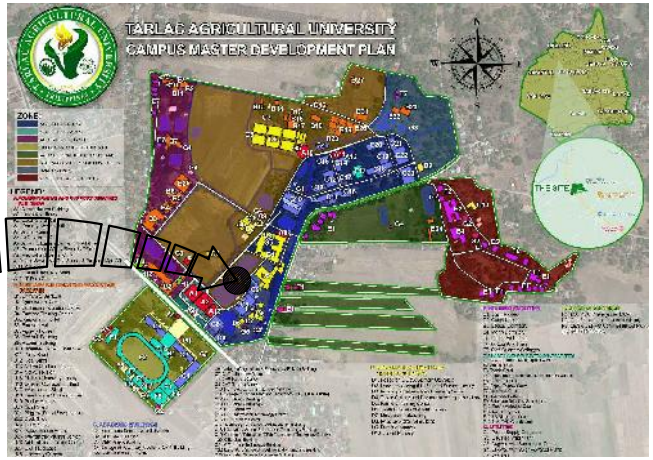
APPROVED:
ARNOLD R. LORENZO, Ed.D — DIRECTOR, PLANNING & DEVELOPMENT
MAX P. GUILLERMO, Ph. D — PRESIDENT
JOEL J. PETERO, Ph. D — VP FOR FINANCE AND ADMIN.

REMARKS: **AS BUILT PLAN**
SHEET NO : **D1**



FLOOR PLAN

BUILDING SITE



LOCATION MAP

N. T. S.

PERSPECTIVE

REPUBLIC OF THE PHILIPPINES
TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC

PLANNING AND DEVELOPMENT OFFICE

INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT

ARCHITECT:
FAHD B. IBARRA
IAPOA NO:
PRC NO: 0024199 | PTR NO: 45010981
TIN NO: | DATE: 01/12/2023
PLACE : TARLAC CITY

R.A 9266 SECTION 33

DRAWINGS & SPECIFICATION AND OTHER CONTRACT DOCUMENTS DULY SIGNED,STAMPED OR SEALED,AS INSTRUMENTS OF SERVICE ARE THE INTELLECTUAL PROPERTY & DOCUMENTS OF ARCHITECT, WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. IT SHALL BE UNLAWFUL FOR ANY PERSON TO DUPLICATE OR TO MAKE COPIES OF SAID DOCUMENTS FOR USE IN THE REPETITION OF AND FOR OTHER PROJECTS OR BUILDINGS, WHETHER EXECUTED PARTLY OR IN WHOLE,W/ OUT THE WRITTEN CONSENT OF ARCHITECT OR AUTHOR OF SAID DOCUMENTS

ENGINEER:
ROCHEL E. VIBAR
PRC NO: 086643 | PTR NO: 4500940
TIN NO: 206-804-447 | DATE: 01/10/2023
PLACE : TARLAC CITY

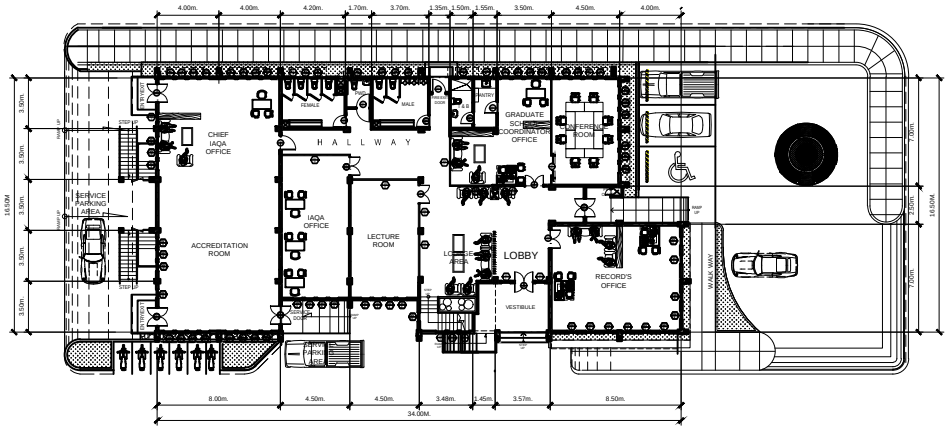
PROJECT TITLE :
UNIVERSITY GAZEBO
LOCATION :
TARLAC AGRICULTURAL UNIVERSITY
CAMILING, TARLAC

SHEET CONTENTS :
AS SHOWN
PREPARED BY :
CHECKED BY :
ENGR. ROCHEL E. VIBAR
CHIEF, DLUZ
DATE :

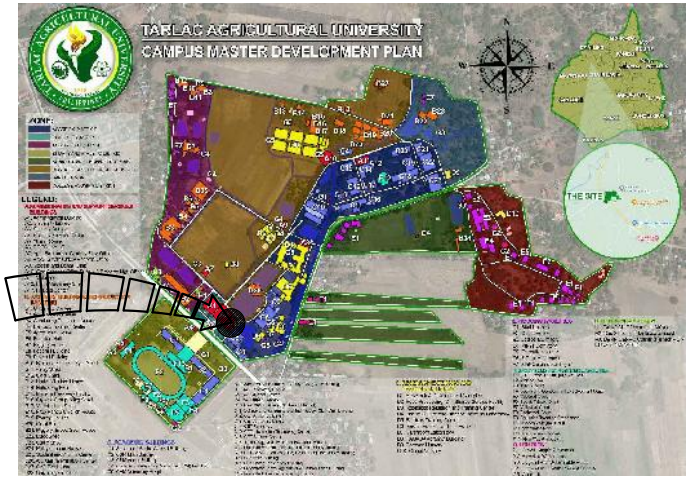
APPROVED:
ARNOLD R. LORENZO, Ed.D
DIRECTOR, PLANNING & DEVELOPMENT
MAX P. GUILLERMO, Ph. D
PRESIDENT
JOEL J. PETERO, Ph. D
VP FOR FINANCE AND ADMIN.

REMARKS:
AS BUILT PLAN

SHEET NO :
B28



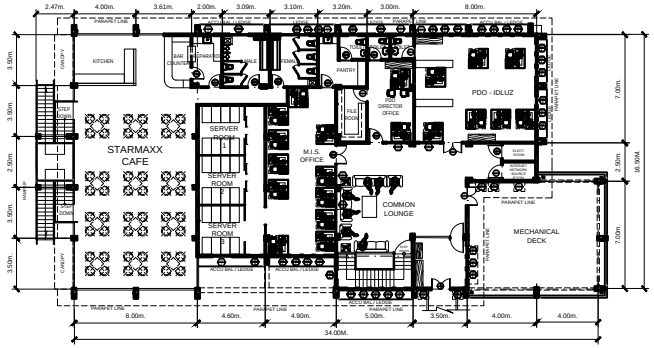
GROUND FLOOR PLAN



BUILDING SITE

LOCATION MAP

N. T. S.



SECOND FLOOR PLAN

PERSPECTIVE

REPUBLIC OF THE PHILIPPINES
TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC
PLANNING AND DEVELOPMENT OFFICE
INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT

ARCHITECT: FAHD B. IBARRA
IAPOA NO:
PRC NO: 0024199 PTR NO: 45010981
TIN NO: DATE: 01/12/2023
PLACE : TARLAC CITY

R.A 9266 SECTION 33

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ENGINEER: ROCHEL E. VIBAR
PRC NO: 086643 PTR NO: 4500940
TIN NO: 206-804-447 DATE: 01/10/2023
PLACE : TARLAC CITY

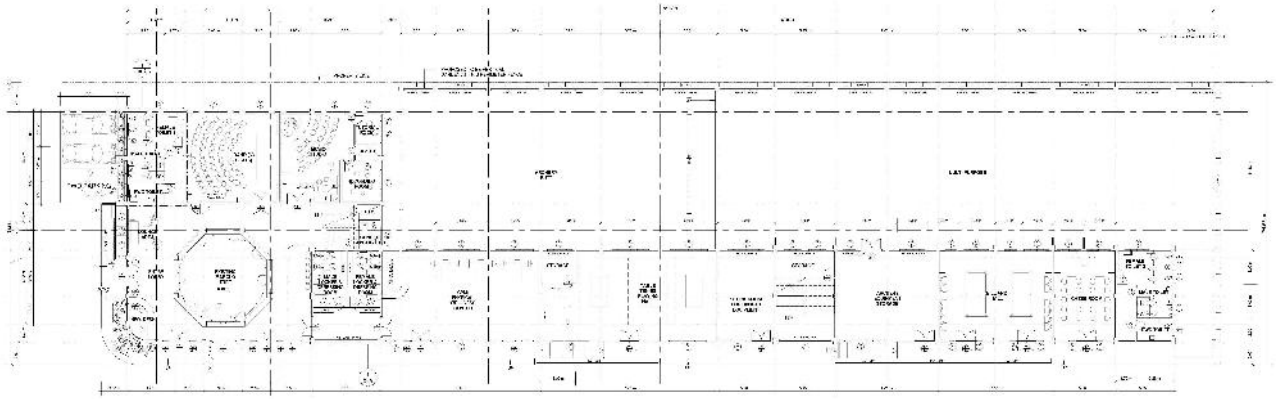
PROJECT TITLE : **IT DATA CENTER**
LOCATION : TARLAC AGRICULTURAL UNIVERSITY CAMILING, TARLAC

SHEET CONTENTS : **AS SHOWN**
PREPARED BY : CHECKED BY : ENGR. ROCHEL E. VIBAR CHIEF - E&U II DATE :

APPROVED:
ARNOLD R. LORENZO, Ed.D — DIRECTOR, PLANNING & DEVELOPMENT
MAX P. GUILLERMO, Ph. D — PRESIDENT
JOEL J. PETERO, Ph. D — VP FOR FINANCE AND ADMIN.

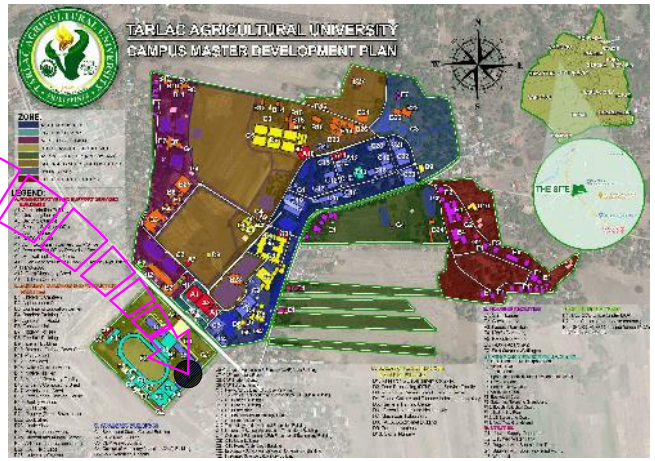
REMARKS: **AS BUILT PLAN**

SHEET NO : **A13**



GROUND FLOOR PLAN

PERSPECTIVE VIEW

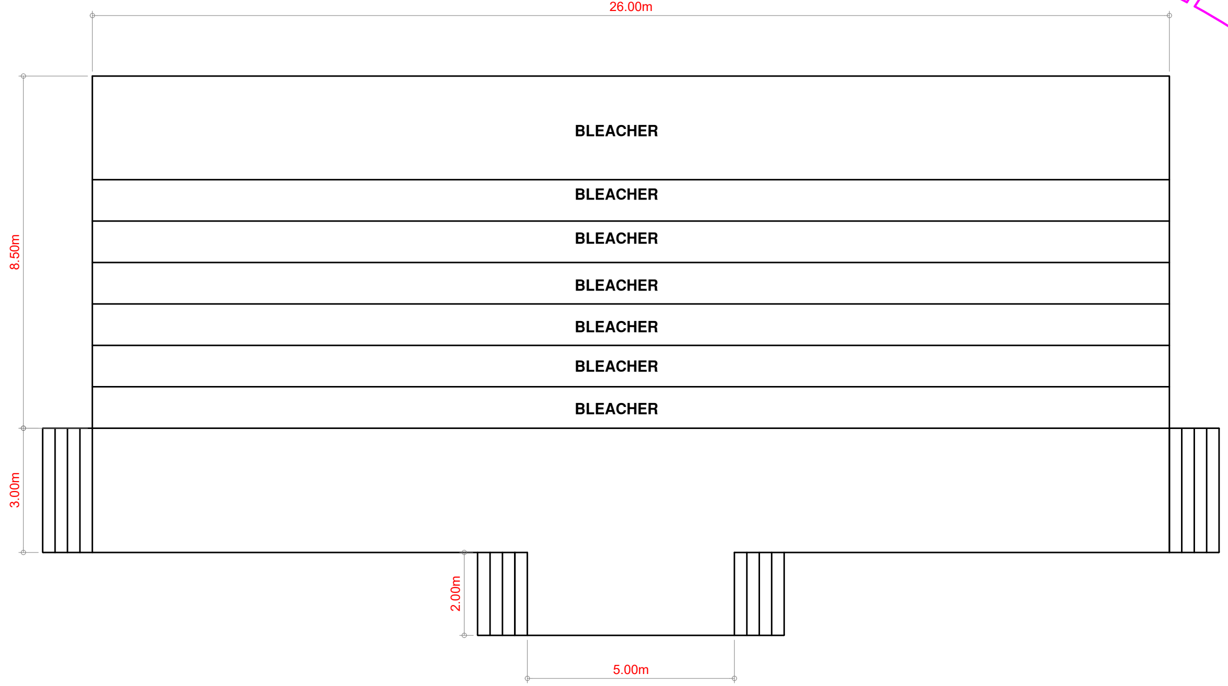


BUILDING SITE

LOCATION MAP

N. T. S.

REPUBLIC OF THE PHILIPPINES **TARLAC AGRICULTURAL UNIVERSITY** CAMILING TARLAC **PLANNING AND DEVELOPMENT OFFICE** **INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT**	ARCHITECT: FAHD B. IBARRA IAPOA NO: PRC NO: 0024199 / PTR NO: 45010981 TIN NO: / DATE: 01/12/2023 PLACE : TARLAC CITY	**R.A 9266 SECTION 33** DRAWINGS & SPECIFICATION AND OTHER CONTRACT DOCUMENTS DULY SIGNED,STAMPED OR SEALED,AS INSTRUMENTS OF SERVICE ARE THE INTELLECTUAL PROPERTY & DOCUMENTS OF ARCHITECT, WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. IT SHALL BE UNLAWFUL FOR ANY PERSON TO DUPLICATE OR TO MAKE COPIES OF SAID DOCUMENTS FOR USE IN THE REPETITION OF AND FOR OTHER PROJECTS OR BUILDINGS,WHETHER EXECUTED PARTLY OR IN WHOLE,W/ OUT THE WRITTEN CONSENT OF ARCHITECT OR AUTHOR OF SAID DOCUMENTS	ENGINEER: ROCHEL E. VIBAR PRC NO: 086643 / PTR NO: 4500940 TIN NO: 206-804-447 / DATE: 01/10/2023 PLACE : TARLAC CITY	PROJECT TITLE : **SPORTS AND SOCIO CULTURAL BUILDING** LOCATION : TARLAC AGRICULTURAL UNIVERSITY CAMILING, TARLAC	SHEET CONTENTS : **AS SHOWN** PREPARED BY : CHECKED BY : ENGR. ROCHEL E. VIBAR CHIEF, IDLUZ DATE :	APPROVED: ARNOLD R. LORENZO, Ed.D DIRECTOR, PLANNING & DEVELOPMENT MAX P. GUILLERMO, Ph. D PRESIDENT NOEL J. PETERO, Ph. D VP FOR FINANCE AND ADMIN.	REMARKS: **AS BUILT PLAN**	SHEET NO : **C1**



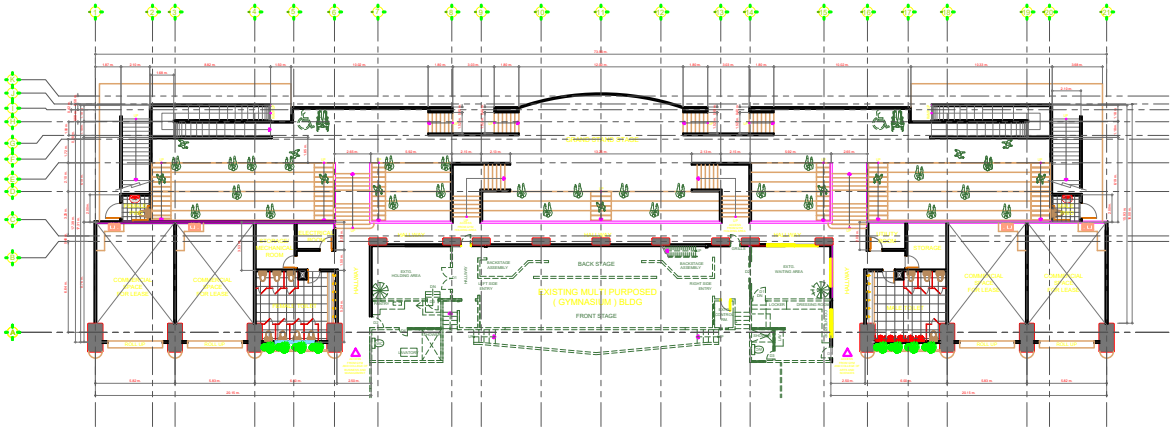
FLOOR PLAN

LOCATION MAP

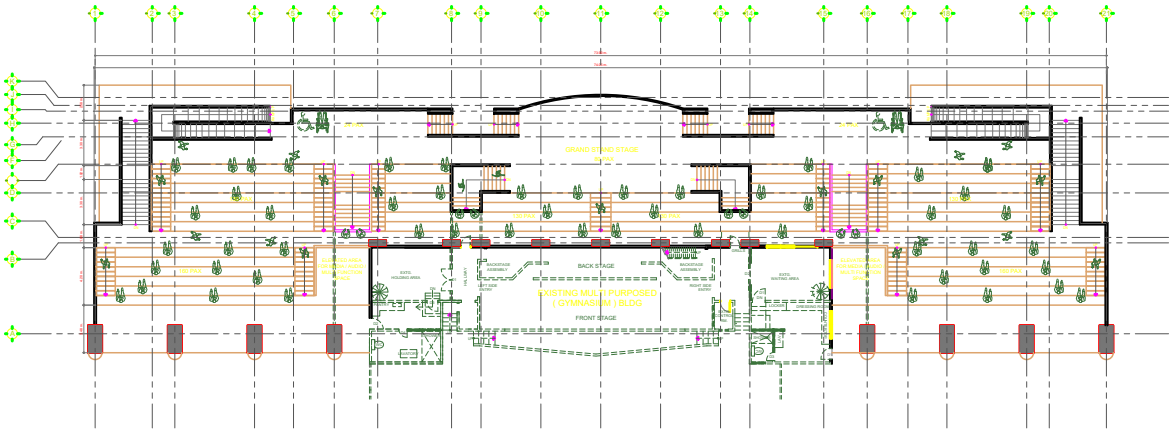
N. T. S.

PERSPECTIVE VIEW

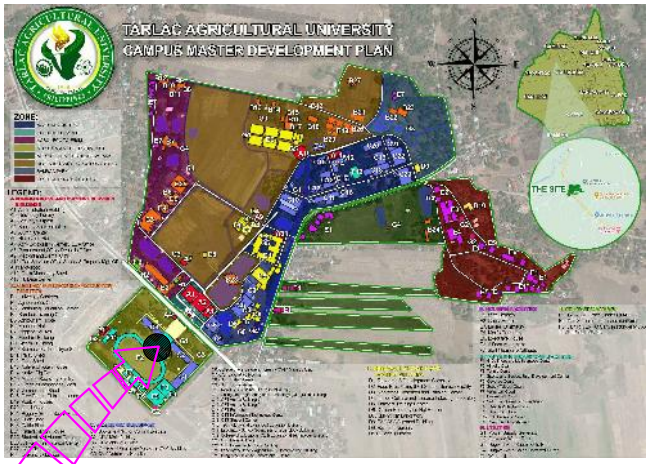
REPUBLIC OF THE PHILIPPINES **TARLAC AGRICULTURAL UNIVERSITY** CAMILING TARLAC **PLANNING AND DEVELOPMENT OFFICE** **INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT**	ARCHITECT: FAHD B. IBARRA IAPOA NO: TIN NO:	**R.A 9266 SECTION 33** DRAWINGS & SPECIFICATION AND OTHER CONTRACT DOCUMENTS DULY SIGNED,STAMPED OR SEALED,AS INSTRUMENTS OF SERVICE ARE THE INTELLECTUAL PROPERTY & DOCUMENTS OF ARCHITECT. WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. IT SHALL BE UNLAWFUL FOR ANY PERSON TO DUPLICATE OR TO MAKE COPIES OF SAID DOCUMENTS FOR USE IN THE REPETITION OF AND FOR OTHER PROJECTS OR BUILDINGS,WHETHER EXECUTED PARTLY OR IN WHOLE,W/ OUT THE WRITTEN CONSENT OF ARCHITECT OR AUTHOR OF SAID DOCUMENTS	ENGINEER: ROCHEL E. VIBAR	PROJECT TITLE : **SATURNINO TOLENTINO GRANDSTAND** LOCATION : TARLAC AGRICULTURAL UNIVERSITY CAMILING, TARLAC	SHEET CONTENTS : **AS SHOWN** PREPARED BY : YOANA ALEXIS JUAN, [redacted] CHECKED BY : ENGR. ROCHEL E. VIBAR, CHIEF, IDLUZ DATE :	APPROVED: ARNOLD R. LORENZO, Ed.D DIRECTOR, PLANNING & DEVELOPMENT MAX P. GUILLERMO, Ph. D PRESIDENT NOEL J. PETERO, Ph. D VP FOR FINANCE AND ADMIN.	REMARKS: **AS BUILT PLAN**	SHEET NO : **F9**



LOWER FLOORPLAN



UPPER FLOORPLAN



LOCATION MAP

N. T. S.

BUILDING SITE

PERSPECTIVE VIEW

REPUBLIC OF THE PHILIPPINES
TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC
PLANNING AND DEVELOPMENT OFFICE
INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT

ARCHITECT: FAHD B. IBARRA
IAPOA NO:
PRC NO: 0024199 | PTR NO: 45010981
TIN NO.: | DATE: 01/12/2023
PLACE : TARLAC CITY

R.A 9266 SECTION 33

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ENGINEER: ROCHEL E. VIBAR
PRC NO: 086643 | PTR NO: 4500940
TIN NO: 206-804-447 | DATE: 01/10/2023
PLACE : TARLAC CITY

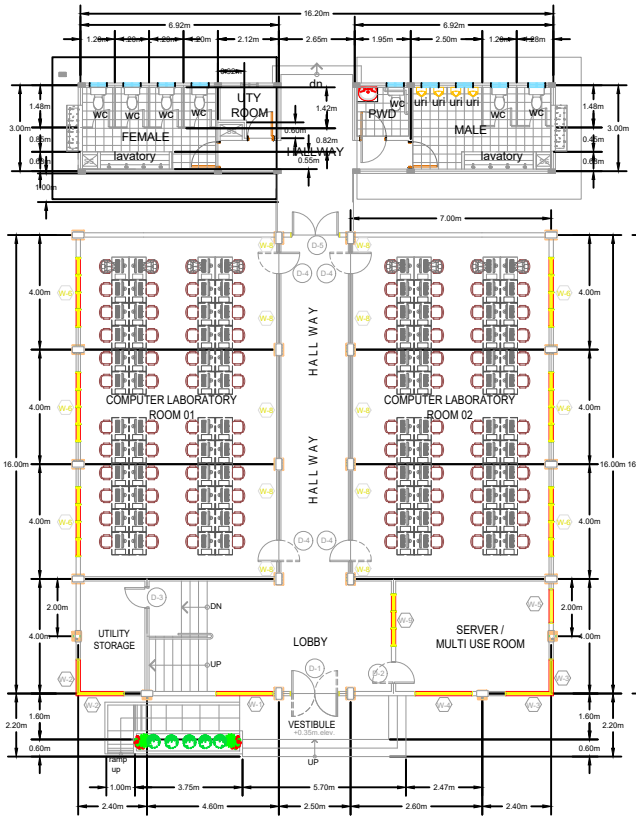
PROJECT TITLE : **NEW TAU GRANDSTAND**
LOCATION : TARLAC AGRICULTURAL UNIVERSITY CAMILING, TARLAC

SHEET CONTENTS : **AS SHOWN**
PREPARED BY : | CHECKED BY : ENGR. ROCHEL E. VIBAR, CHIEF, IDLUZ | DATE :

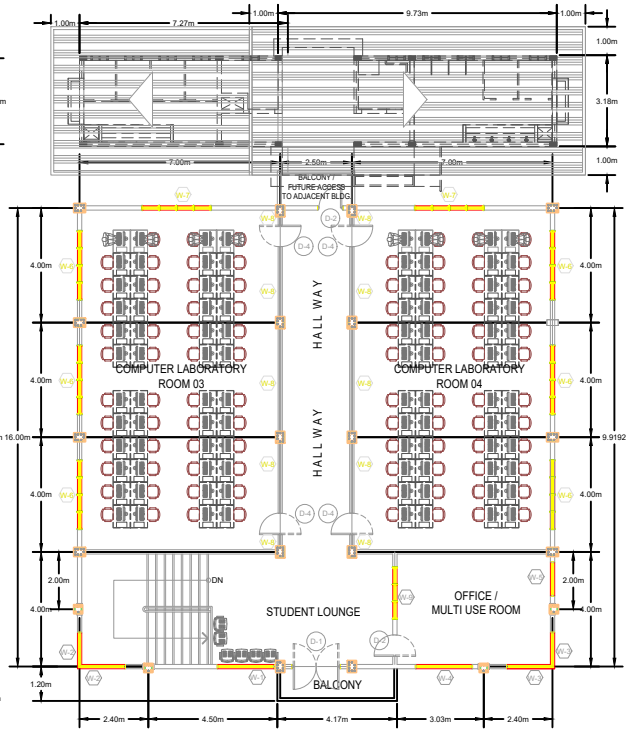
APPROVED:
ARNOLD R. LORENZO, Ed.D — DIRECTOR, PLANNING & DEVELOPMENT
MAX P. GUILLERMO, Ph. D — PRESIDENT
NOEL J. PETERO, Ph. D — VP FOR FINANCE AND ADMIN.

REMARKS: **AS BUILT PLAN**

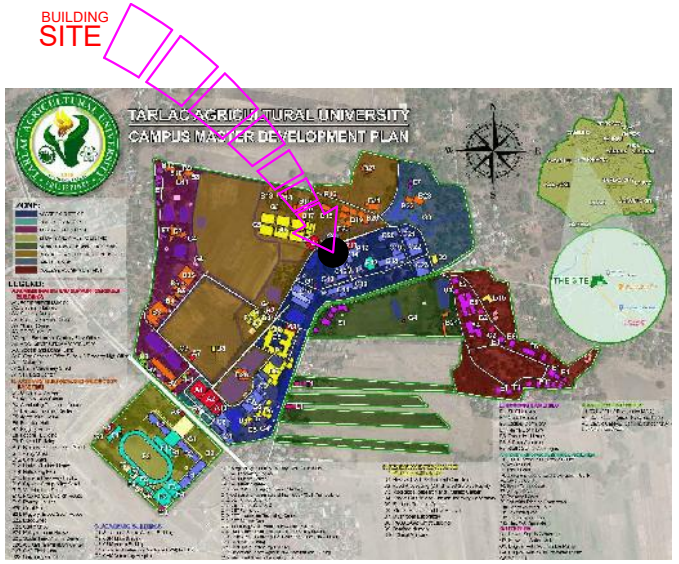
SHEET NO : **F13**



GROUND FLOOR PLAN



SECOND FLOOR PLAN



LOCATION MAP

N. T. S.

PERSPECTIVE VIEW

REPUBLIC OF THE PHILIPPINES
TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC
PLANNING AND DEVELOPMENT OFFICE
INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT

ARCHITECT: FAHD B. IBARRA
IAPOA NO:
PRC NO: 0024199 PTR NO: 45010981
TIN NO: DATE: 01/12/2023
PLACE : TARLAC CITY

R.A 9266 SECTION 33

DRAWINGS & SPECIFICATION AND OTHER CONTRACT DOCUMENTS DULY SIGNED,STAMPED OR SEALED,AS INSTRUMENTS OF SERVICE ARE THE INTELLECTUAL PROPERTY & DOCUMENTS OF ARCHITECT, WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. IT SHALL BE UNLAWFUL FOR ANY PERSON TO DUPLICATE OR TO MAKE COPIES OF SAID DOCUMENTS FOR USE IN THE REPETITION OF AND FOR OTHER PROJECTS OR BUILDINGS, WHETHER EXECUTED PARTLY OR IN WHOLE W/ OUT THE WRITTEN CONSENT OF ARCHITECT OR AUTHOR OF SAID DOCUMENTS

ENGINEER: ROCHEL E. VIBAR
PRC NO: 086643 PTR NO: 4500940
TIN NO: 206-804-447 DATE: 01/10/2023
PLACE : TARLAC CITY

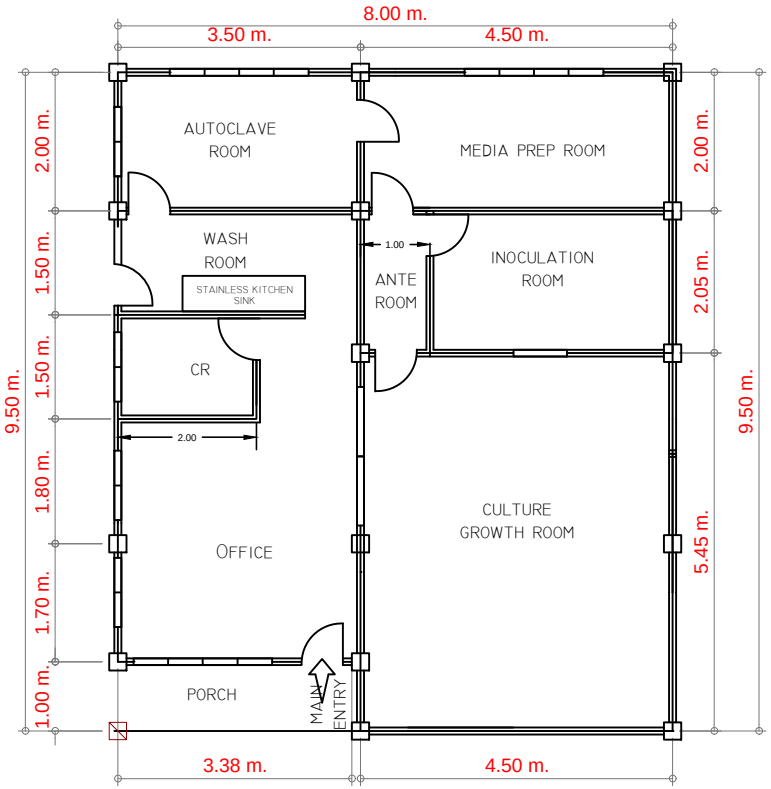
PROJECT TITLE : **COLLEGE OF ENGINEERING AND TECHNOLOGY (CET) INFORMATION TECHNOLOGY CENTER**
LOCATION : TARLAC AGRICULTURAL UNIVERSITY CAMILING, TARLAC

SHEET CONTENTS : **AS SHOWN**
PREPARED BY: CHECKED BY: ENGR. ROCHEL E. VIBAR DATE:

APPROVED:
ARNOLD R. LORENZO, Ed.D — DIRECTOR, PLANNING & DEVELOPMENT
MAX P. GUILLERMO, Ph. D — PRESIDENT
JOEL J. PETERO, Ph. D — VP FOR FINANCE AND ADMIN.

REMARKS: **AS BUILT PLAN**

SHEET NO : **C15**



FLOOR PLAN

LOCATION MAP

N. T. S.

PERSPECTIVE VIEW

REPUBLIC OF THE PHILIPPINES
TARLAC AGRICULTURAL UNIVERSITY
CAMILING TARLAC
PLANNING AND DEVELOPMENT OFFICE
INFRASTRUCTURE DEVELOPMENT, LANDUSE AND ZONING UNIT

ARCHITECT: FAHD B. IBARRA
IAPOA NO: PRC NO: 0024199 PTR NO: 45010981
TIN NO: DATE: 01/12/2023
PLACE : TARLAC CITY

R.A 9266 SECTION 33

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ENGINEER: ROCHEL E. VIBAR
PRC NO: 086643 PTR NO: 4500940
TIN NO: 206-804-447 DATE: 01/10/2023
PLACE : TARLAC CITY

PROJECT TITLE : **TISSUE CULTURE AND DISEASE INDEXING LABORATORY**
LOCATION : TARLAC AGRICULTURAL UNIVERSITY CAMILING, TARLAC

SHEET CONTENTS : **AS SHOWN**
PREPARED BY : CHECKED BY : ENGR. ROCHEL E. VIBAR CHIEF - PDO DATE :

APPROVED:
ARNOLD R. LORENZO, Ed.D — DIRECTOR, PLANNING & DEVELOPMENT
MAX P. GUILLERMO, Ph. D — PRESIDENT
JOEL J. PETERO, Ph. D — VP FOR FINANCE AND ADMIN.

REMARKS: **AS BUILT PLAN**

SHEET NO : **D4**