



MARIANO MARCOS STATE UNIVERSITY

LAND USE, ZONING, WATER, AND ENERGY POLICIES





LAND USE POLICY

This part of the Land Use Development and Infrastructure Plan translates general guiding principles into corresponding policy statements to serve as enabling mechanism for the rational use of MMSU lands in the pursuit of the goals and objectives it is set to achieve and accomplish. For purposes of organized accounting and referencing, the principle-based policies are grouped into four clusters: moral-ethical and natural, social justice and equity and legal, scientific and technological, and sustainable development.

Moral-Ethical and Natural

Principle 1.0. Environmental integrity and ecological balance

Policy 1.1. Lands are nature's endowment to men for all generations today and in the future and it shall be the moral and ethical obligation of the university to be responsible and accountable steward for the sustainability of all its land resources.

Policy 1.2. The university shall observe and defer to the laws of nature in the exercise and observance of responsibility and accountability in the management of its land resources. The natural laws on regeneration, transformation, balance, and others as may be applicable shall be mandatory consideration in deciding the best options to allocate and use university lands.

Policy 1.3. The allocation and use of university lands shall aim to maintain, protect, conserve, restore, and enhance the integrity of the land itself, the environment and ecological balance in all its campuses as it shall also effectively and positively influence the surrounding areas.

Policy 1.4. All land use options shall endeavor to preserve, promote and enhance the cultural heritage of and historical sites in the university including its immediate environs. University lands by their natural character and/or of the natural sightings or man-made structures found or established therein which has significant cultural and historical value shall be protected, maintained and enhanced.

Social Justice and Equity and Legal

Principle 2.0 Centrality in people

Policy 2.1 The use of lands of the university shall always put the interest of its constituents and clients a priority over any other and anything else. The use of university lands in the performance of its functions in instruction, research, community engagement, and business-like operations shall not be for their own sake but, first and foremost, for the interest of and as expressed by its people-constituents – students, personnel, and all other key stakeholders. The fundamental end in the allocation and use of university lands shall be to satisfy human needs as everyone will find pleasure, happiness, safety, security, and belongingness in any land-space to enjoy and be satisfied of the services of the university.



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Principle 3.0 Social responsibility

Policy 3.1 University lands shall be allocated and used in a responsible manner to promote and sustain robust social processes in the university. As such, the active participation and involvement of all concerned parties, sectors and stakeholders shall be enlisted in the planning, implementation, monitoring and evaluation processes including the equitable and just sharing of benefits therefrom.

Principle 4.0 Obedience to government laws, rules and regulations

Policy 4.1 In the pursuit of social justice and equity in the allocation and use of university lands, all decisions pertinent thereto shall be in accordance with and in full compliance to pertinent laws, rules and regulations.

Policy 4.2 The MMSU-LUDIP shall be the basic institutional policy in the allocation and use of all university lands. In any case where a possible action cannot find basis in the present policy, the university, pursuant to applicable statutes and natural laws, shall formulate, approve and adopt the corresponding policy.

Policy 4.3 The university shall regularly review, update and promptly communicate widely to all sectors the policies, rules and guidelines on land use.

Principle 5.0 Empowerment of all stakeholders

Policy 5.1 All MMSU constituents and stakeholders shall be deliberately enabled and capacitated through trainings, information and education campaigns and related activities for them to effectively understand, advocate and effectively mobilized such that each and everyone shall become vital instruments in the promotion of the rational allocation and use of university lands.

Principle 6.0 Public lands are for public use

Policy 6.1 University lands are public lands and shall be allocated and used strictly for public purposes only.

Scientific and Technological

Principle 7.0 Science-based decision-making

Policy 7.1 All decisions made to allocate and use university lands shall be based on valid and reliable science and all technologies applied thereunto shall be derived therefrom. This is especially so with regards to any intent to alter and/or convert the natural state of any piece of land of the university.

Policy 7.2 Only appropriate technologies based on science shall be applied in the use of any land resource of the university.

Policy 7.3 Where applicable, verified indigenous knowledge systems shall be made part of any decision including in the body of science utilized thereto to allocate and use university lands.



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Sustainable Development

Principle 8.0 Balanced development for and of the university

Policy 8.1 All competing interests in the allocation and use of its land resources shall be evaluated and decided upon in favor for the option that is to the best interest of the university; Provided that the best interest option presents the optimal balance in the development of the different sectors and functions of the university.

Principle 9.0 Economic feasibility, the doctrine of best economic option possible

Policy 9.1 Any decision to allocate and use university lands shall be in consideration to the best economic benefits possible but shall be strictly in keeping, never in conflict, with the moral-ethical, natural, social, cultural, ecological and environmental worth and integrity of the land asset. Where any conflict may arise, the later elements shall prevail.

Principle 10.0 Suitability

Policy 10.1 All land allocation and use shall be on the basis of natural suitability for any and all kinds of intents before any kind of alteration, including conversion to make it suitable, for any purpose.

Policy 10.2 Physically and productively fragile lands on the one hand and protected areas on the other of the university shall be given special considerations in their management to satisfy the requisites and demands applicable to protect, conserve, enrich, rehabilitate, and or sustain them as the case may be.

Principle 11.0 Carrying capacity

Policy 11.1 Complementary to suitability assessment, every allocation and utilization option for all university lands shall be within the limits of their objectively assessed carrying capacity.

Principle 12.0 Inter-sectoral partnerships and collaboration

Policy 12.1 All sectors in and outside of the university are indispenable partners and that their involvement and participation in the planning and implementation of land allocation and use shall be enlisted at every opportunity.

References

Philippine Agenda 21

DENR. 2019. *Land use planning*.

Tamil, EG. 2018. *Introduction to Town Planning and Planning Concepts*.

HLURB. 2013. *CLUP Guidebook: A Guide to Comprehensive Land Use Plan Preparation (Volume 1)*.

Republic Act 11396. *The SUCs LUDIP Act of 2019 and Its Implementing Rules and Regulations*.



ZONING POLICY

The land use and zoning plans of the different campuses of the university as hereby conceived are made in accordance with the Comprehensive Land Use Plan (CLUP) of the cities and municipalities where they are located. In all the CLUPs, the campuses are categorized to belong in an institutional zone. In accordance with such zoning scheme and given the functional mandates of MMSU, a standard sub-zoning plan is adopted as follows:

- a) Academic Zone
- b) Research & Extension Zone
- c) Residential Zone
- d) Recreational Zone
- e) Agri-industrial Zone
- f) Economic Zone
- g) Protected Land

Academic Zone

Principle 1. Accessibility and interconnectivity of academic building and related facilities.

Policy 1.1. Academic buildings shall be constructed and located for complementarity of utility across instructional needs and demands among disciplines.

Policy 1.2. Support facilities such as libraries, student center, clinic, auxiliary buildings and facilities shall be located and positioned for ease, safety and efficiency of access for all.

Research Zone

Principle 2. Promotion of sustained innovation and creativity for breakthrough knowledge and technologies

Policy 2.1 Proportionate suitable areas shall be appropriated in each of the campuses of for the whole university to serve as research zone.

Policy 2.2. The research zone shall be developed to support, complement and promote the function and services of the university.

Extension and Production Zone

Principle 3. Showcase of technology development, transfer, and technopreneurship.

Policy 3.1. Extension and production zones (EPZs) shall be established to highlight the operability of research results and developed technology.

Policy 3.2. EPZs shall have uniqueness of each but necessarily complementary with one another to display functions and produce chain in all settings.



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Policy 3.3. EPZs shall be established to the extent proportionate to the needs and demands and dynamics of resources of each campus or collectively in the university.

Residential Zone

Principle 4. Community Building

Policy 4.1. A compact area dedicated for residential purpose for personnel, students and visitors shall be developed to be known as residential zone in each of the campuses of the university.

Policy 4.2. The residential zone shall be located and situated for utmost security, peace, accessibility and convenience of residents.

Policy 4.3. The residential zones shall be developed to blend and be compatible with the overall design and structure of the each of the campus.

Recreational Zone

Principle 5. Social responsibility to promote health, recreation and well-being.

Policy 5.1 A proportionate area in each of the campuses shall be apportioned for leisure and cultural purposes.

Policy 5.2 The zones dedicated for leisure, cultural including spiritual facilities and activities shall be known as recreational zone.

Agro-Industrial Zone

Principle 6. Modeling agro-industrial development

Policy 6.1 Feasible land areas of the university shall be allocated to showcase agro-industrial development making these areas for breakthrough research, training modules as well as business models.

Policy 6.2 Agro-economic zones shall be in a scale proportionate to their needs and demands of the functions and services of the university.

Agri-fisheries

Principle 7. Compatibility with related university functions and services

Policy 7.1 Relevant land and water bodies owned by the university shall be appropriately developed to advance the functions and services of the university.



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Economic Zone

Principle 8. Socioeconomic development

Policy 8.1 Suitable and feasible portion of MMSU lands shall be appropriated and utilized for economic activities to optimize their utility to generate additional income of the university.

Policy 8.2 University lands appropriated for economic purposes shall be in accordance with the standard rules of comparative advantages.

Protected Land

Principle 9. Protection, conservation and preservation

Policy 9.1 Protected landholdings of the university shall be conserved, preserved and to be excluded from any form of alteration except as may be permitted by operation of law.



WATER POLICY

This part of the Plan translates general guiding principles into corresponding policy statements to serve as enabling mechanism for the rational use of water resources in the pursuit of the goals and objectives it is set to achieve and accomplish, the LUDIP and the university as a whole. For legal guidance, this policy is primarily based from the Water Code of the Philippines with its Amended Implementing Rules and Regulations (WIRR) of 2005. Accordingly, the water policy of MMSU under SIRMATA 2040 shall be expressed as principles in the first order represented by the five (5) Rules in the WIRR, and, in the second order, are the corresponding applicable policies for MMSU for each rule. Wherefore, the water policy of the university shall adopt the first three (3) Rules of the WIRR 2005 as principal and the “principle” components as follows: 1) appropriation and utilization; 2) control, conservation, and protection of waters and related land resources; and 3) administration and enforcement. The sense of the two (2) other Rules are incorporated in the adopted first three (3) Rules.

Principle 1.0. Appropriation and Utilization of Waters

Policy 1.1. Moral obligation and legal covenant. It shall be the moral obligation and a legal covenant of the university to be a responsible and accountable steward of its water and related resources for sustainable use by the university today and in the future.

Policy 1.2. Support to the mandated functions of the university. Water resources of the university shall be wisely appropriated and used in support to the effective and efficient performance of its mandated functions and services.

Policy 1.3. Water as a social and economic good. The university shall ensure accessible, adequate and quality standard supply of in-campus water to its constituents. At the same time, water resources of the university shall be explored and appropriated wisely in their prescribed forms and standards to support the strategic operations of the university.

Policy 1.4. Compliance to government and quasi-government laws and declarations. The appropriation and use of water resources of the university shall be in accordance with pertinent government and quasi-government laws and doctrines. Quasi-governments include supra-regional groups like the ASEAN, international bodies like the UN, and others of global recognition.

Policy 1.5. Laws of nature. The university shall observe and defer to the laws of nature in the exercise and observance of responsibility, accountability and covenant in the appropriation and use of its water and related resources.

Policy 1.6 Aim. The appropriation and use of the water resources of the university shall aim to maintain, protect, conserve, restore, and enhance the integrity of the water resources itself, to the environment and ecological balance in all its campuses as to also effectively and positively influence the surrounding areas. Towards this end, management options and mechanisms therein shall hasten the university’s ability to prevent, reduce, and/or mitigate risks and vulnerabilities from natural disasters.

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Principle 2.0. Control, Conservation and Protection of Waters, Watersheds and Related Land Resources

Policy 2.1. Science-based. The university shall be fully guided by sound ethical science in the appropriation and utilization and in the control, conservation and protection (CCP) practices of its water and related resources. The university shall endeavor to invest in research along this concern.

Policy 2.2. Guided by natural laws. The CCP practices on water and related resources of the university shall be guided by the laws of nature. Disobedience and disregard to natural laws portends calamities and unwanted consequences to men in general and to university operations and services in particular.

Policy 2.3 Appropriate technologies. Only appropriate technologies based on sound ethical science guided by natural laws and, if applicable, verified indigenous knowledge systems (VICKS), shall be applied in the appropriation and use and CCP practices of all water and related resources of the university.

Policy 2.4. Balanced development. All competing interests in the appropriation and use and in the CPP practices of its water and related resources shall be evaluated and decided upon in favor for the option that is to the best interest of the university; Provided, that the best interest option presents the optimal balance in the development of the different sectors and functions of the university.

Policy 2.5. Economic feasibility. Any decision to appropriate and use and in the CPP practices of water and related resources of the university shall be in consideration to the best and balanced economic, social, political, cultural, ecological and environmental benefits possible but shall be strictly in keeping with the integrity and sustainability of the water asset.

Policy 2.6. Fragile and critical resources. Fragile and critical water resources especially those in protected areas shall be given special considerations in their appropriation, operation and management in order to satisfy the requisites and demands for their protection, conservation, enrichment, rehabilitation, and sustenance.

Policy 2.7. Carrying capacity. Every appropriation and utilization and CCP practice-options of and for all water and related resources of the university shall be within the limits of their objectively assessed carrying capacity.

Policy 2.8. Conservation and rehabilitation. Water conservation measures like of establishment of water impoundments, catch basins, water treatment facilities, and related infrastructures shall be given importance. At the same time, activities to recharge water tables and the restoration of watersheds shall be a priority concern. Rehabilitation of "polluted" resources must be immediate.

Policy 2.9. Protection. All water and related resources of the university, ground and surface, shall be shielded from any kind of pollution, ground water exploitation, and of destruction induced by nature and/or perpetrated by man and/or animals.

Principle 3.0. Administration and Enforcement

Policy 3.1. University Water Resources Management (UniWaRM) Office. An office shall be created to manage and administer the water resources of the university. Where such task is an implicit or



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implied function of an office already existing,, i.e., a directorate, a section for such shall be created and the role of water resources management to be assigned officially.

Policy 3.2. Support committee. In the pursuit of well deliberated, well-crafted and implemented water management and administration, the university may compose a university committee to assist the UniWaRM office in the crafting of policies, rules, guidelines, and in the implementation, monitoring and evaluation of its programs projects and scivities. The committee may be an integral part of the structure of theUniWaRM office.

Policy 3.3. Concern of all. Effective and efficient administration of water and related resources of the university is a function of the collective effort of MMSU as a unified community. The university shall strategize to empower, engage and mobilize every constituent to become a responsible and accountable party to the cause.

Policy 3.4. Engagement with the extra-community. Complementary to Policy 3.3, the university shall endeavor to work with its adjacent communities, local government units, other communities, and government agencies, non-government and poeples' organizations, and stakeholders with joint or common interest on any given water and related resources, i.e., water sheds, lakes, springs, rivers, bays, gulfs, etc.

Policy 3.5. Immediate policy and corollary action. The MMSU-LUDIP shall be the immediate institutional policy in the appropriation and use of water and related resources of the university. In any case where a possible action cannot find basis in the present policy, the university, pursuant to applicable statutes and natural laws, shall formulate, approve and adopt the corresponding policy.

Policy 3.6. Review and communication. The university shall regularly review, update and promptly communicate widely to all sectors the policies, rules and guidelines on the appropriation and use of water and related resources.

Policy 3.7. Implementing rules and regulations. The UniWaRM office shall be responsible in translating this policy into specific implementing rules and guidelines and for the execution and internal monitoring and evaluation thereof.

References

Philippine Agenda 21

HLURB. 2013. CLUP Guidebook: A Guide to Comprehensive Land Use Plan Preparation (Volume 1).

Presidential Decree 1067. Water Code of the Philippines: Amended Implementing Rules and Regulations of 2005.

Republic Act 11396. The SUCs LUDIP Act of 2019 and Its Implementing Rules and Regulations.

United Nations. 2016. Sustainable Development Goals.



POLICIES ON ENERGY GENERATION AND UTILIZATION

Principle 1. Solar Energy Generation

- Policy 1.1 Designs of new buildings shall integrate/incorporate the option for the construction of solar power facility (solar panels and accessories).
- Policy 1.2 Roof deck (roof integrity) must be considered in the designs.
- Policy 1.3 Consideration of south facing roof (around 18°) is recommended.
- Policy 1.4 Buildings shall consider provision for the integration of interconnectivity with the grid/utility with net-metering.

Principle 2. Diesel/Gasoline Generator Sets for Power Generation (For 50 KVA And Larger)

- Policy 2.1 Consideration of generator sets as standby units for power generation (not only during emergencies)
- Policy 2.2 Consideration of standby generator sets to operate on renewable fuels (such as biofuels – hybrid with fossil fuel)
- Policy 2.3 Maintenance program for generator sets should be in place and to be strictly observed.

Principle 3. Net Metering

- Policy 3.1 To optimize the potentials of distributed generation in the university, all generation facilities (large capacity) especially on renewables (solar) should consider net-metering scheme.

Principle 4. Integration of *green technologies* but not limited to:

- Policy 4.1 Inverter-type of air conditioning units are preferred for new installations
- Policy 4.2. Roof insulation should be installed for air conditioned areas.
- Policy 4.3 LED lamps or high efficiency lights must be used in buildings/facilities including street lighting
- Policy 4.4 Appropriate building orientation must be considered for new buildings to optimize energy conservation.
- Policy 4.5 Sufficient shade (canopies) must be provided for outdoor units of split-type air conditioning units.

Principle 5. Energy Audit

- Policy 5.1 There shall be periodic conduct of spot and detailed energy accounting and audit (electricity, water, fuel) by energy auditors within all energy centers of the university.
- Policy 5.2 Spot energy audit shall be as often as possible. This can be done by coordinators.



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Policy 5.3 Detailed energy audit by energy auditors shall be done at least once every three years.

Policy 5.4 University-wide Energy Efficiency and Conservation Technologies and Practices must be implemented.

Principle 6. Sustainability

Policy 6.1 The University shall sustain the conduct of research and development on alternative energy sources.

Policy 6.2 The University shall invest on energy-efficient infrastructure and facilities.

Policy 6.3 The University shall adopt and implement relevant government issuances on energy and power generation and utilization.



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
MARIANO MARCOS STATE UNIVERSITY Board of Regents

BOR RESOLUTION NO. 050, s. 2021

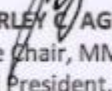
RESOLVED, AS IT IS HEREBY RESOLVED, that upon its agreement, the Board approved the MMSU Sirmata 2040: Land Use Development and Infrastructure Plan, including the policies, plans and perspectives included therein.

Approved by the Board of Regents during the 138th (Regular) BOR Meeting held on 14 October 2021 via videoconferencing.

CERTIFIED TRUE AND CORRECT:


LUVÉE HAZEL C. AQUINO
Board Secretary

ATTESTED BY:


SHIRLEY C. AGRUPIS
Vice Chair, MMSU BOR
and President, MMSU