

Comprehensive Land Use Plan Municipality of Santa Rita

Province of Pampanga Republic of the Philippines





Table of Contents

1	INT	RODU	JCTION
	1.1	Over	RVIEW & RATIONALE
	1.2	LEGA	AL MANDATES & ENABLING POLICY ENVIRONMENT
	1.3	Rela	TIONSHIP WITH NATIONAL PLANS AND PROGRAMS11
	1.4	Prin	CIPLES AND APPROACHES15
	1.5	Ουτι	PUTS
2	DEV	/ELOP	MENT CONSTRAINTS AND OPPORTUNITIES
	2.1	Soci	AL DEVELOPMENT
	2.1.	1	Constraints
	2.1.	2	Opportunities
	2.2	ECON	NOMIC DEVELOPMENT SECTOR20
	2.2.	1	Constraints
	2.2.	2	Potentials
	2.3	Εννι	RONMENT DEVELOPMENT SECTOR
	2.3.	1	Constraints
	2.3.	2	Opportunities
	2.4	Рнүз	SICAL DEVELOPMENT SECTOR
	2.4.	1	Constraints
	2.4.	2	Potentials
	2.5	Insti	TUTIONAL DEVELOPMENT SECTOR
	2.5.	1	Constraints
	2.5.	2	Opportunities
3	VISI	ION	



	3.1	QuA	ALITIES OF RITEÑANS
	3.2	STAT	TE OF THE NATURAL AND BUILT ENVIRONMENT25
	3.3	ΝΑΤ	URE OF THE LOCAL ECONOMY
	3.4	Сар	ACITY OF LOCAL LEADERSHIP
4	ALTI	ERNA	ATIVE SPATIAL STRATEGIES
	4.1	Lan	D SUPPLY-DEMAND ANALYSIS
	4.2	Exis	ting Land Use Distribution
	4.2.1	1	Agricultural Land Use
	4.2.2	2	Built-up Areas
	4.2.	3	Other Uses Error! Bookmark not defined.
	4.2.4	4	Rivers
	4.3	Lan	d Demand Projection
	4.3.	1	Population Projection
	4.3.2	2	Residential Area
	4.3.	3	Commercial Areas
	4.3.4	4	Institutional Areas
	4.3.	5	Open Spaces
	4.4	Lan	D SUPPLY
	4.4.	1	Map Overlay Analysis
	4.4.2	2	Development Maps for Analysis
	4.5	CON	ISTRAINT MAPS FOR ANALYSIS
	4.5.	1	Flood Map43
	4.5.2	2	Risk Maps45
	4.5.	3	Sieve Analysis
	4.6	ALT	ernative Spatial Strategies



	4.6.	1	Option 1: The Base Plan or "Do-Nothing Scenario"	3
	4.6.2	2	Option 2: Linear Development Scenario54	1
	4.6.3	3	Option 3: Multi-Nodal Development Scenario	5
	4.7	Eval	UATION OF ALTERNATIVE SPATIAL STRATEGIES	3
5	THE	PREF	ERRED SPATIAL DEVELOPMENT STRATEGY: MULTI-NODAL DEVELOPMENT60)
	5.1	Cond	CEPT / STRUCTURE PLAN)
	5.2	Deve	ELOPMENT / GROWTH NODES61	L
	5.2.1	1	Urban Controlled Growth Area62	1
	5.2.2	2	Urban Growth Center	2
	5.2.3	3	Agri-Fishery Growth Center	2
	5.2.4	4	Agri-Tourism Growth Center	2
	5.2.	5	Cultural Heritage Zone	2
	5.2.0	6	Settlement Areas	3
6	LAN	D US	E POLICY FRAMEWORK64	1
	6.1	Gene	eral Land Use Policy Areas	7
	6.1.	1	Settlement Areas	7
	6.1.2	2	Protected Areas	3
	6.1.	3	Production Areas	J
	6.1.4	4	Infrastructure Areas	1



List of Tables

Table 1: Existing Land Use (Detailed)	.29
Table 2: Santa Rita Population Projection	.32
Table 3: Projected Land Requirements by Category	34
Table 4: Average Elevation of Each Barangay	.35
Table 5: Slope Percentages in Sta. Rita	37
Table 6: Flood Susceptibility by Area	.43
Table 7: Summary of Results of Social Cost-Benefit Analysis of the Three Alternatives	.59
Table 8: Proposed Land Use (2024)	.64
Table 9: Land Use Policies for Settlement Areas	.67
Table 10: Land Use Policies for Protection Areas	.68
Table 11: Land Use Policies for Production Areas	.69
Table 12: Land Use Policies for Infrastructure Areas	71



List of Figures

Figure 1: Hierarchy of Plans	.12
Figure 2: CLRPFP Enhanced W Corridor	.14
Figure 3: HLURB's 12-Step Process to CLUP	.16
Figure 4: Base Plan or Do-Nothing Scenario	.54
Figure 5: Linear Development Scenario	.55
Figure 6: Multi-Nodal Development Scenario	.57
Figure 7: The Preferred Spatial Strategy: Multi-Nodal Development	.61



List of Maps

Map 1: Existing Land Use Map, 2014	31
Map 2: Elevation Map	
Map 3: Slope Map	
Map 4: River Map	40
Map 5: Road Map	42
Map 6: Flood Susceptibility Map	44
Map 7: Risk Map – Population	46
Map 8: Risk Map – Urban Use	47
Map 9: Risk Map – Critical Point Facilities	48
Map 10: Risk Map – Natural Resources Production Areas	49
Map 11: Risk Map – Lifeline Utilities	50
Map 12: Sieve Analysis Map	52
Map 13: Proposed General Land Use Map	65



1 INTRODUCTION

The updating of the Comprehensive Land Use Plan (CLUP) of the Municipality of Sta. Rita is based on a general framework to be discussed in this chapter. The rationale for the preparation of the CLUP is briefly explained with the presentation of the legal mandates requiring such preparation as well as relevant policy instruments that provide for an enabling environment. Taking cognizance of the need to prepare a CLUP that complements higher level plans and programs, a brief description of the relevant plans prepared by higher political authorities is presented to ensure the complementarity and synergy between national and sub-national level plans, on one hand, and the CLUP and other relevant local plans, on the other.

1.1 OVERVIEW & RATIONALE

Local Government Units (LGUs) in the Philippines are mandated to prepare their CLUPs through their respective local development councils.¹A CLUP is a long-term plan that translates into spatial and land use terms which are the requirements of the social, physical, economic, environmental, and institutional sectors in a given locality. It should embody specific proposals to guide and regulate local development translated into spatial dimensions; to allocate various sectoral land requirements; and to include in land use map the factors indicating the socially desired mix of land uses and a set of policies to guide future development.

The enactment of two important laws-- Republic Act No. 9729 and Republic Act No. 10121-further justifies the updating of the CLUP of Sta. Rita in order to comply with the mandates of these laws to integrate/mainstream climate change and disaster risk reduction and management in the preparation of local plans. The preparation of the CLUP (or updating in the case of Sta. Rita) is necessitated further by the CLUP Zero Backlog Project of the HLURB which aims to have all CLUPs of LGUs updated by 2013.

1.2 LEGAL MANDATES & ENABLING POLICY ENVIRONMENT

The primary legal basis for the preparation of the CLUP by the LGUs is the 1987 Philippine Constitution which guarantees the promotion of a balanced and healthful ecology. As the fundamental law, the 1987 Constitution provides for the framework to which all other Philippine statutes and legislation must conform in the management of environment and natural resources.

The specific provision on national economy and patrimony is particularly relevant to the management of land resources as it declares that the State has full control and supervision over the exploration, development, and utilization of natural resources.

¹ Republic Act 7160 or Local Government Code of 1991; Republic Act 7279 or Urban Development and Housing Act; Department of the Interior and Local Government Memorandum Circular 2001-77 of 6 July 2001 and Memorandum Circular 2002-30 of 27 February 2002.



The Constitution also provides for the classification of lands and characterizes the use of land as bearing a social function. These provisions have to be strictly followed by every LGU in preparing or updating its CLUP.

The CLUP, implemented through a zoning ordinance, takes the form of a regulatory instrument to implement the police power of the State. At the local government level, the LGUs are mandated by the Local Government Code of 1991, otherwise known as Republic Act No. 7160, to formulate a CLUP as the primary and dominant basis for the future use of land resources and to take into consideration the requirements for food production, human settlements, and industrial expansion (Sec. 20[c]). This is pursuant to the responsibility of the LGUs to promote general welfare and protect public interest in their respective territories as clearly stated in the general welfare clause of the Local Government Code of 1991 (Sec. 16).

Republic Act No. 7279 (Urban Development and Housing Act of 1992) refers to land use plan as "the rational approach of allocating available land resources as equitably as possible among competing user groups and for different functions consistent with the development plan area and the Program under [Republic Act No. 7279]".² The law mandates the LGUs to prepare a CLUP for their respective localities.³ The process of land use planning, as defined in Republic Act No. 10121, refers to "the process undertaken by public authorities to identify, evaluate and decide on different options for the use of land, including consideration of long-term economic, social and environmental objectives and the implications for different communities and interest groups, and the subsequent formulation and promulgation of plans that describe the permitted or acceptable uses".⁴

The new challenge to the LGUs in the preparation of their respective CLUPs is the enactment of two important laws namely Republic Act No. 9729 (Climate Change Act of 2009) and Republic Act No. 10121 (Philippine Disaster Risk Reduction and Management Act of 2010). The Climate Change Act of 2009, in recognition of its critical role in climate change adaptation and mitigation, designates LGUs as the frontline agencies in the formulation, planning, and implementation of climate change action plans.⁵ The same law calls for the mainstreaming of climate change adaptation and mitigation in both national and local plans. Republic Act No. 10121 likewise mandates the integration/mainstreaming of disaster risk reduction into the CLUP of the LGUs.

Other equally important laws/policies that provide for legal bases for or affect the mandates of the LGUs in the preparation of the CLUP by LGUs and that have been considered in the preparation of the CLUP of Sta. Rita include the following:

²Section 3k, Republic Act No. 7279 (1992).

³Section 39, Republic Act No. 7279 (1992).

⁴Section 3w, Republic Act No. 10121 (2010).

⁵Section 14, Republic No 9729 (2009).

REPUBLIC OF THE PHILIPPINES



Municipality of Santa Rita Province of Pampanga

- Commonwealth Act No. 141 (The Public Land Act) which provides for the classification, delimitation, and survey of lands of the public domain
- **Presidential Decree No. 705 (Revised Forestry Code)** which provides for a system of land classification based on topography
- **Presidential Decree No. 856 (Code on Sanitation of the Philippines)** which stipulates that industrial establishments will be allowed to operate only in designated areas as provided for in zoning ordinance
- **Presidential Decree No. 1067 (The Water Code of the Philippines)** which governs the ownership, appropriation, utilization, exploitation, development, conservation and protection of water resources and rights to land related thereto
- Presidential Decree No. 1096 (The National Building Code of the Philippines) which regulates the location and siting of building structures through the permits system based on their conformity with the local zoning ordinances and land use plan
- Republic Act No. 6657 (Comprehensive Agrarian Reform Law of 1988) which provides that lands covered by may not be converted to non-agricultural uses without the order of conversion coming from the DAR
- Republic Act No. 7586 (National Integrated Protected Areas System Act [NIPAS] of 1992) which lays down the process by which an area could be declared as a protected area including the criteria (natural features, management objectives, and allowable human activities) in identifying what category of protected area such area would fall under
- **Republic Act No. 7076 (People's Small Scale Mining Act of 1991)** which governs small scale mining and the authority of the LGUs to impose limitations on mining activities within their respective territorial jurisdictions consistent with national laws and regulations
- Executive Order No. 72 (1993) which provides for the preparation and implementation of the CLUPs of LGUs pursuant to the Local Government Code of 1991 and other pertinent laws and devolved the powers of the HLURB over the review and approval of the CLUPs of component cities and municipalities to the LGUs concerned
- **Memorandum Circular No. 54 (1993)** which prescribes the guidelines governing Section 20 of Republic Act No. 7160 authorizing cities and municipalities to reclassify agricultural lands into non-agricultural uses
- Executive Order No. 124 (1993) which establishes priorities and procedures in evaluating areas for land conversion in regional agricultural/industrial centers, tourism development areas and sites for socialized housing
- **Republic Act No. 7942 (Philippine Mining Act of 1995)** which is the main legal framework for the regulation of the mining industry
- **Republic Act No. 8371 (Indigenous Peoples' Rights Act of 1997)** which provides for the identification and delineation of ancestral domains which are areas generally belonging to indigenous cultural communities and/or indigenous peoples





Municipality of Santa Rita Province of Pampanga

- Republic Act No. 8435 (Agricultural Fisheries Modernization Act of 1997) prescribing urgent related measures to modernize the agriculture and fisheries sector of the Philippines with LGUs to continue preparing CLUPs integrating the Network of Protected Areas for Agricultural and Agro-Industrial Development (NPAAAD) and the Strategic Agriculture and Fisheries Development Zones (SAFDZ)
- **Republic Act No. 8550 (The Philippine Fisheries Code of 1998)** which provides for the authority of the municipal government in the granting of permits to operate within the municipal waters as defined in the same law
- Republic Act No. 9003 (Ecological Solid Waste Management Act of 2003) which is an act providing for an ecological solid waste management program with provision on the roles of LGUs in solid waste management
- **Republic Act No. 9593 (National Tourism Act of 2009)** which mandates LGUs to prepare local tourism development plans that integrate zoning, land use, infrastructure development, the national system of standards for tourism enterprises, heritage and environmental protection imperatives in a manner that encourages sustainable tourism development.
- Republic Act No. 10066 (National Cultural Heritage Act of 2009) which provides for the protection and conservation of cultural and heritage sites

1.3 RELATIONSHIP WITH NATIONAL PLANS AND PROGRAMS

In the preparation of the CLUP, there is a need to have complementarity and synergy links with higher level plans. As presented in Figure 1, the CLUP of Sta. Rita must conform to the National Physical Framework Plan and the Regional Physical Framework Plan of Region III to ensure the vertical integration that is called for in the preparation.

In addition, the CLUP must not only be anchored on the higher level plans but must also be localized in the sense that local conditions and situations are considered in its preparation so that it complements the National Physical Framework Plan. The same vertical integration is necessary in ensuring that the CLUP of Sta. Rita complements the Provincial Physical Framework Plan of the Province of Pampanga as well. The need is premised on the idea that the review and approval of the CLUP of Sta. Rita is lodged with the Provincial Land Use Committee of Pampanga.⁶

⁶ Sec. 468, Republic Act No. 7160.



Figure 1: Hierarchy of Plans



NOTES:

(1) PFP = (N/R/P) Physical Framework Plan (2) CLUP = (P/C/M) Comprehensive Land Use Plan

(3) MTP = Medium Term Philippine (DPand IP)

(4) CDP = (P/C/M) Comprehensive Development Plan



The **National Framework for Physical Planning 2001-2030** provides the analytical parameters for the planned allocation, use, and management of the country's land and other physical resources. It is intended to serve as a framework to guide the planning and management of these resources at the national and sub-national levels. In the updating of the CLUP of Sta. Rita, the following principles as identified in the NFPP, have been considered:

- Food Security
- Environmental Stability and Ecological Integrity
- Rational Urban Development
- Spatial Integration
- Equitable Access to Physical and Natural Resources
- Private-Public Sector Partnership
- People Empowerment
- Recognition of the Rights of Indigenous Peoples
- Market Orientation

The **Central Luzon Regional Physical Framework Plan 2005-2030** serves as a guide on how land and natural resources may be put to the most beneficial use for the people and, at the same time, indicates how such resources may be managed and conserved for the benefit of present and future generations of the population. The vision for Central Luzon is as follows:

To have globally competitive human resources, a highly productive and profitable agricultural sector, self-propelling LGUs ably supported by the national government, seamless and integrated physical access and, a transshipment and logistics hub in the Asia-Pacific Region, a favored international convention center and tourist destination, a developed industrial heartland in Southeast Asia and a model of sustainable utilization and management of forest and mineral resources.

To realize the vision, the CLRPFP adopted the Enhanced "W" Growth Corridor strategy as presented in Figure 2.







The following are the growth corridors:

- **Tourism Corridor** starts from the northernmost town of Sta. Cruz and Masinloc in Zambales up to SBMA area.
- Industrial Heartland is the central portion of the region.
- Green Corridor comprises agricultural areas devoted to high value crops and agroforestry which runs along the fertile western part of Bulacan and through the areas of Nueva Ecija. The ear part and the lateral leg will be a combination of tourism and agriculture development.

The updating of the CLUP of Sta. Rita likewise considers the Provincial Physical Framework Plan of the Province of Pampanga since the Local Government Code of 1991 requires that the formulation, adoption, or modification of the plan shall be in coordination with the approved Provincial Comprehensive Land Use Plan.⁷

⁷ Section 447(2)(vii) and Section 458(2)(vii), Republic Act No. 7160 (1991)



The Province of Pampanga has the following vision:

We envision Pampanga as a competitive province that is effective, transparent and responsive, duly governed and managed by competent and committed human resource where peace, love and **respect** for the environment reign in the heart of every Kapampangan.

In particular, the Province has the following 12 point development agenda:

- Good Governance
- Poverty Alleviation
- Social Amelioration
- Sustainable Quality Health Services
- Equal Access to Quality Education
- Environmental Sustainability and Disaster Resiliency
- Attractive Investment Climate
- Adequate Infrastructure Support
- Peace and Order and Public Safety
- Conservation and Promotion of Kapampangan Culture, Arts and Heritage
- Tourism Promotion
- Promotion of Public-private Partnership

The CLUP of Sta. Rita is focused on the promotion of cultural heritage and agro-tourism. These foci are well within the Development Agenda of the Province of Pampanga.

1.4 PRINCIPLES AND APPROACHES

Given the need to synergize and provide complementarity among the various plans prepared by the various levels of political authority (i.e., national government and sub-national government level), the principles adopted for this CLUP reflect the principles that have been adopted by the higher level plans as well as the principles valued at the level of the Municipality of Sta. Rita.

Sustainable Development. Sustainable development is defined by the Brundland Report as a "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". It is a balance between and among competing yet equally important aspects of development- social equity, economic development and environmental management. Sustainability means being able to balance these three aspects for the benefit of both the present and the future generations. Maintaining the equilibrium is a must because being focused on one aspect alone and failing to consider the others is inimical to the very concept of sustainability. This principle takes into account food security, environmental stability, and ecological integrity.



Inclusive Growth. This addresses the social aspect of development by ensuring that social justice is considered in the preparation of the CLUP of Sta. Rita. There must be equitable access to physical and natural resources through a just distribution of the municipality's resources and by providing equal opportunities to its residents in the use and acquisition of land and other resources. This principle recognizes the rights of the marginalized and vulnerable sectors in Sta. Rita in the development, control, and use of lands within its territorial jurisdiction. To the extent applicable, gender considerations must also be integrated in the CLUP as mandated by national legislation and policy instruments. The resulting CLUP must be responsive and sensitive to the needs of the marginalized and vulnerable sectors of the society.

Complementarity and Synergy. The CLUP of Sta. Rita has been prepared to complement the higher level plans and integrate the concerns and needs of the residents of Sta. Rita. The approach used in the process is a hybrid of top-bottom and bottom-up approaches.

Community-Based and Participatory Processes. A participatory environment promotes the integration of community-based approaches in addressing the issues and challenges in the Municipality of Sta. Rita. Collaborative governance necessitates the active participation of the three important domains in governance, namely: the state (or the LGU of the Municipality of Sta. Rita), the civil society, and the private sectors.

The updating of the CLUP of Sta. Rita followed the suggested 12-step HLURB process as presented in the 2006 Comprehensive Land Use Plan Guidebook.



Figure 3: HLURB's 12-Step Process to CLUP



The process also took into consideration Joint Memorandum Circular No. 001, series of 2007 on the harmonization of local planning, investment programming, revenue administration, and budgeting expenditure management.

1.5 OUTPUTS

Ecological Profile.This is an enriched version of the traditional "Socio-Economic Profile" with the addition of greater amounts of information about the natural resources and the environment. The latter addition is in response to the ongoing policy of the national government to localize the implementation of the Philippine Agenda for Sustainable Development in the 21st Century. The profile will be a comprehensive set of information about Sta. Rita that contains the latest data available presented with minimum analysis so that the data can serve as a general reference and can be utilized by a wide range of readers for various purposes. To the extent possible, the data are presented in historical sequence and be dis-aggregated in different spatial scales or geo-political units. The Profile, which will be updated on a regular basis, will serve as the principal database for all the plans that will be prepared in future.

CLUP. The CLUP will serve as the primary basis for determining the future use of land and other natural resources.⁸ The CLUP will also serve as the basis for prescribing reasonable limits and restraints on the use of property within the municipality jurisdiction, for regulating subdivision developments, and for reclassifying agricultural lands into non-agricultural uses.⁹ Being comprehensive in geographical scope, the CLUP covers the entire territorial jurisdiction of Sta. Rita including those areas that are traditionally the domain of the national government. The authority to plan and manage these latter areas will now be shared between the LGU and the national government.¹⁰ To adequately cover every part of the territorial jurisdiction of Sta. Rita, the CLUP embodies appropriate policies for each of the four land use policy areas: protected areas, settlements, production areas, and infrastructure support areas. Moreover, the CLUP will be a long-term policy guide that will span several terms of local officials to ensure continuity of development programs.

Zoning Ordinance. The principal instrument for enforcing the locational policies and performance standards of the CLUP is the Zoning Ordinance. Unless the CLUP is enacted into a zoning ordinance, it remains an indicative plan with only limited persuasive force and effect and people can afford to ignore it. Once the zoning ordinance is enacted, however, the right of property owners to develop their property is transferred from the individual to society, and everyone who wants to develop his/her land must seek permission or clearance from the local government.

⁸ Sec. 20c, Local Government of 1991.

⁹Sec. 458[2], vi-x, Local Government Code of 1991.

¹⁰Sec. 3, i, Local Government Code of 1991.

2 DEVELOPMENT CONSTRAINTS AND OPPORTUNITIES

This chapter presents the result of the situational analysis done in the Municipality of Sta. Rita culled from the Ecological Profile, Climate Change Vulnerability and Disaster Risk Assessment, and other workshops conducted for the purpose. The data gathered, collated, and generated for the Ecological Profile and Climate Change Vulnerability/Disaster Risk Assessment of the Municipality of Sta. Rita served as an input to the analysis of the development constraints and opportunities. Various meetings and workshops participated in by various stakeholders were conducted using various analytical tools towards the analysis of the present condition of the Municipality.

In particular, development constraints and potentials for each of the development sectors in the Municipality of Sta. Rita have been identified and are discussed below. In general, the development constraints observed in the Municipality can easily be addressed by appropriate intervention and effective implementation of policies, programs, and projects.

2.1 SOCIAL DEVELOPMENT

The social development sector comprises particularly health, education, social welfare, housing, and public order and safety in the Municipality of Sta. Rita.

2.1.1 Constraints

Low Health Program Performance. The Municipality identifies health sector performance as a challenge towards its development. This low performance is a result of the challenge to continually provide adequate number and even qualified health personnel in the Municipality. The quantity and quality of the health personnel are important because they function as the managers and operators of the health care delivery system in the municipality. The inadequacy of the health personnel leads to relatively low quality of health services. To respond to this need, the filling up of available *plantilla* positions in the Municipality is recommended.

There are two aspects of health services that have to be responded to- one is availability and the other is accessibility.

<u>Poor Health Seeking Behavior</u>. There is a need to educate the public in terms of proper health seeking behavior to maintain good health condition and to enable the residents of the Municipality to make appropriate choices both in their lifestyles and the use of medical care and treatment. The poor health seeking behavior is also related to the poor waste disposal and sanitation practices in the Municipality.

This finding necessitates the accessibility and not just the availability of the health care and sanitation services and facilities in the Municipality.



Increasing Number of Malnourished Children. In the regular weight monitoring of the children enrolled in the Day Care Centers done by the Day Care Workers, an increasing trend was observed from 2011 to 2012. Severely underweight children increased from 38 in 2011 to 98 in 2013 while the number of overweight children increased from 235 in 2011 to 267 in 2013.

<u>Presence of Urban Poor Households</u>. In the quest towards inclusive local development, the Municipality of Sta. Rita must also be able to provide equal opportunities to its residents especially to the most vulnerable and marginalized sectors. According to Department of Social Welfare and Development's (DSWD) 2011 National Household Targeting Survey (NHTS), there are 1,151 urban poor households in Santa Rita. Barangay Dila-Dila has the most number of urban poor households with 310 households, while Barangay San Matias has 40 urban poor households.

<u>Residential Areas located in Flood-Susceptible and Disaster Risk Areas</u>. The Disaster Risk Assessment indicates that all barangays have residential areas located in flood-susceptible areas.

<u>Increasing Crime Rates</u>. The 2013 total crime volume accounted for 64 crime incidents in the Municipality of Santa Rita which resulted in an increase by 21 incidents compared to the 2012 data of the Santa Rita Municipal Police. There were 35 incidents of index crimes in the municipality in 2013, which are eight crimes higher than the reported 27 index crime incidents in 2012.

Related to the increasing crime rates is the police-to-population ratio in the Municipality. The latest data show that there are 37 personnel as of 2014, with a police personnel-to-population ratio of 1:1,047.62. This is below the national standards of 1:500, police to residents. The Santa Rita Municipal Police will need to employ at least 40 additional police personnel to comply with the national standards.

<u>Inadequate Fire Protection Personnel and Facilities</u>. There are nine fire protection personnel engaged by the Santa Rita Bureau of Fire Protection (BFP) giving a fire fighter-to-population ratio of 1:4,000. This is below national standards, which is 1:2,000. In this regard, there is a need for the municipality to employ at least tenadditional fire fighters to comply with the national standards.

Although the municipality is within the national standards in terms of fire truck-to-population ratio (i.e., 1:19,381 vis-à-vis national standard of 1:28,000), it is suggested that the Santa Rita BFP still needs torehabilitate or purchase an additional fire truck to reinforce the sole good-conditioned truck. In addition to fire truck, there is a low number of water hydrants in the Municipality which might affect the effectiveness and promptness of response during fire incidents.



<u>Critical Point Facilities located in Flood-Susceptible and Disaster-Risk Areas</u>. Findings from the climate disaster risk assessment of Sta. Rita show that all barangays have critical point facilities (health centers, barangay halls, schools, social-welfare centers) in low or moderate flood susceptibility areas. Barangay Sta. Monica has the largest number of facilities exposed to flood in which 92% of the facilities are located in areas with medium flood susceptibility.

2.1.2 **Opportunities**

<u>Sufficient Health and Social Welfare Facilities</u>. The facilities in the Municipality are relatively in good condition in terms of quality and quantity. Even the Municipality's health statistics are not a cause of concern but have to be monitored to ensure that a decline would be avoided.

<u>Good Education Performance Indicators</u>. The statistics on education in the Municipality are satisfactory and are within the national education standards. These statistics include the classroom-to-student and teacher-to-student ratios. The Municipality has also recorded a very high participation rate.

2.2 ECONOMIC DEVELOPMENT SECTOR

2.2.1 Constraints

<u>Land Use Conversion</u>. Conversion of land uses from agricultural to other uses as driven by urbanization and development continues to be a challenge to local government units. Although this appears to be minimal at this time, uncontrolled conversion of land might pose a problem in the future especially since the primary drivers of economic growth as envisioned would be agriculture and heritage tourism.

<u>Agricultural Areas located in Flood-Susceptible Areas and Disaster-Risk Areas</u>. All barangays have production areas located in flood-susceptible areas classified as low, medium, or high. San Basilio has the largest size of agricultural lands at low and medium flood susceptibility with an estimated 139 and 124 hectares respectively. As for agricultural areas at risk, all barangays have low to moderate risk except for San Matias and Sta. Monica which have approximately 21.9 hectares and 8.1 hectares of agricultural lands at high risk.

<u>Minimal Number of Facilities and Programs to Support the Agricultural Adaptive Capacity to</u> <u>Climate Change Impacts</u>. Since agriculture is one of Sta. Rita's main thrusts, facilities and programs must be adequate to increase its adaptation to the effects of climate change. The climate vulnerability assessment shows that there is lack of facilities for agriculture such as water impounding and irrigation facilities for some barangays. In terms of programs, the municipality has not availed itself of these to strengthen the knowledge of farmers regarding climate information such as the climate field school program under the Department of Agriculture.



<u>Commercial and Tourism Establishments located in Flood-Susceptible and Disaster-Risk Areas</u>. Data from the disaster risk assessment of Sta. Rita show that most commercial and tourism establishments are located in low and medium susceptible flood-prone areas. Regarding risk category, tourism and commercial establishments in barangays Becuran, Dila-dila, San Agustin, San Basilio, San Isidro, and San Juan fall under a low-risk category while those of the remaining barangays fall under a moderate-risk or high-risk category.

2.2.2 Potentials

<u>Increasing Agricultural Crops Production</u>. Notwithstanding the slight decrease in the areas used for rice and vegetable production, the Municipality still has managed to increase its crop production by 100.7 MT.

<u>Cultural Heritage as Tourism Potential</u>. Santa Rita's fine delicacies like *turrones de casoy,sans rival* and*duman* as well as the heritage church and ancestral houses are among the attractions of the municipality. There are 19 tourist attractions in the municipality, majority of which are associated with history and culture of the municipality. Most of these tourism establishments are located in Barangay San Jose. All are accessible through land and are 40 kilometres (kms) and 3 kms away the nearest airport, the DiosdadoMacapagal International Airport and a national highway, respectively. All roads leading to these tourist attractions are cemented and in good condition.

2.3 ENVIRONMENT DEVELOPMENT SECTOR

2.3.1 Constraints

<u>Flooding</u>. Based on the flood hazard map of Project NOAH, the Municipality of Sta. Rita is generally susceptible to flooding. The dis-aggregated data at the barangay level show that that several areas in the municipality of Santa Rita are flood prone, especially in the lower barangays of Sta. Monica, San Vicente, and San Jose. This flood susceptibility ranges from low to high. Most sectors are affected including agriculture and other economic activities. It has also been observed from the past typhoon occurrences that there are tendencies for the bodies of water such as *SapangMaragul*in San Vicente to overflow.

<u>Poor Solid Waste Management System</u>. High volume of wastes is observed in the Municipality as a result of poor disposal of garbage and underutilization of the Materials Recovery Facility (MRF). This poor solid waste management system is an identified cause of certain problems, particularly flooding. In addition to the strict implementation of Republic Act No. 9003, there is a need to increase awareness among the residents about proper solid waste management.



2.3.2 **Opportunities**

<u>Geophysical Characteristics Conducive to Development</u>. Notwithstanding the natural hazards identified as constraints, the geo-physical characteristics of the Municipality of Sta. Rita are conducive to development expansion. The elevation and slope throughout the municipality is favorable tothecreation of built-up areas. There is a need however to balance urban development and expansion with environment protection and management.

2.4 PHYSICAL DEVELOPMENT SECTOR

2.4.1 Constraints

<u>Need to Construct and Improve Farm-to-Market Roads</u>. The ecological profile, as well as the climate vulnerability assessment, mentions that there are insufficient farm-to-market roads within the municipality. This is a major concern since agriculture is one of the major economic activities of Sta. Rita, and the linkages need to be improved in order to support the distribution of crops and other agricultural necessities.</u>

<u>Lifeline Utilities located in Flood-Susceptible Areas and Disaster-Risk Areas.</u> The supplemental guidelines of HLURB for Climate Mainstreaming and Disaster Risks in the CLUP refer to lifeline utilities as major linkages and distribution systems associated with transportation access systems and power, water and communication distribution/line systems. Based on the climate vulnerability and disaster risk assessment, all barangays have lifeline utilities located in flood susceptible areas.

2.4.2 Potentials

<u>Provincial and Municipal Roads Traversing the Municipality are in Good Condition</u>. It is observed that the major linkages within the municipality, particularly, the provincial and municipal roads, are in good condition. If these roads are properly maintained, the transportation system in the municipality will be efficient for the citizens.

2.5 INSTITUTIONAL DEVELOPMENT SECTOR

2.5.1 Constraints

<u>Need to Maximize Sources of Local Revenues</u>. For the Municipality to be dynamic, it hasto be less dependent on the Internal Revenue Allotment (IRA) and maximize its local sources of income such as local taxes. Public-private partnership must also be explored as a modality of financing local projects such as in the protection and promotion of local heritage buildings, which are usually owned by the private sector.



<u>Need to Improve Ease of Doing Business</u>. The permitting and licensing system in the Municipality has to be improved in order to attract more investments that would propel its agricultural-and-tourism industry-centered economic activities.

<u>Accessibility and Availability of Information to the Public</u>. The Municipality has a website, the potentials of which have to be maximized. Very limited data are available through the Municipality's website. Given the Municipality's vision to consider tourism as one of its prime movers of local economy, it is but apt for the local government to make information about Sta. Rita accessible to the various users ranging from business investors to tourists and even the general public.

<u>Need to Strengthen the Capacity of the Local staff</u>. The Santa Rita LGU has to ensure that it is complemented with competent and professional staff by providing opportunities for continuing learning and education and by imposing discipline on non/under-performing personnel. Likewise, there is a need to rationalize the staffing pattern of the locality in order to address the need for additional personnel (e.g., police) in areas that pose a challenge to public order and safety in Sta. Rita. In filling up the *plantilla* positions, the LGU must make sure not to exceed the personal services expenditure limit.

2.5.2 **Opportunities**

<u>Openness to Change</u>. The commitment of the local government to development is indicated by its openness and willingness to learn in the local processes and procedures as exemplified by the process undertaken in the updating of the CLUP. The planning process has been steered by the local chief executive by ensuring that all relevant offices and units in the LGU participated in the process

<u>Local Executive-Legislative Cooperation</u>. There is a conducive environment for the cooperation between the local executive and legislative branches which could facilitate the implementation of necessary policy actions towards local development.



3 VISION

The vision statement is of foremost importance in planning since it identifies what the future would be like based on what the community wants for the Municipality of Sta. Rita. The crafting of the vision statement of the Municipality of Sta. Rita was prepared through a seminar-cumworkshop where stakeholders in the Municipality were invited to participate and shared meaningful insights. The crafting of the vision statement took into account not just the local opportunities and challenges but also the wider provincial and regional context including higher level plans such as the framework plans and development plans of the region. From the final vision statement, descriptors were identified and each descriptor was given a set of success indicators.

The vision statement has two components namely: the outward looking component and the inward looking one. The outward looking component sets the role of the Municipality of Sta. Rita within the provincial and regional context. The inward looking, on the other hand, presents the characteristics of the Municipality of Sta. Rita to be attained in the future. The vision as crafted reads as follows:

"By 2024, we envision Sta. Rita as a progressive cultural heritage destination with Godloving and productive citizenry, having a sense of pride for its unique culture and heritage, living in a safe, balanced and healthful environment, and enjoying a globallycompetitive and sustainable agricultural economy under a dynamic and competent leadership committed to the principles of good governance."

The Municipality of Sta. Rita aims to be the cultural heritage destination in Central Luzon because it is known for its heritage sites and buildings (e.g., houses and churches) as well as intangible cultural heritage. The inward looking component of the statement can be categorized into major sectoral characteristics: qualities of the people/society; state of the natural and built environment; nature of the local economy; and, capacity of local leadership. These sectoral characteristics and their respective elements and descriptors are further discussed in the succeeding sections of this chapter.

3.1 QUALITIES OF RITEÑANS

The development that is desired for the Municipality of Sta. Rita follows the national development vision of having an inclusive growth which emphasizes the role that the people in the Municipality play in development. To have a meaningful local development, the residents must be able to contribute productively in the local activities. This means that the development must be able to uplift the quality of life of the Riteñans by providing them with adequate social services and facilities as well as equitable opportunities for personal and professional growth. It is envisioned that Riteñans are able to meet basic needs, provided with opportunities for personal and professional growth, and given a wide range of economic and social choices.



The vision for the Municipality also includes harnessing the quality of the residents towards becoming God-loving people. As God-loving individuals, the people are expected to be more caring for their fellowRiteñans. The trait presupposes a social environment that is more peaceful and orderly as God-loving individuals are peace loving, honest, and law-abiding.

Finally, banking on the role that the Municipality will play in the region as a cultural heritage destination, Riteñansmust have a sense of pride as residents of the Municipality. Through this awareness, the Municipality's historical and cultural properties and image will be protected, conserved, and promoted.

The Municipality is replete with cultural and heritage properties – both tangible and intangible. Of late, its *Duman* Festival has become the focus of mass media not just in the region but in the country as well. To harness this very important treasure, the Municipality must be able to foster a community that preserves, enriches, and promotes its cultural heritage in the midst of an advanced and developed society.

3.2 STATE OF THE NATURAL AND BUILT ENVIRONMENT

The vision statement for the Municipality's physical environment adopts the concept of sustainable development and recognizes the right of the people to a balanced and healthful ecology as enunciated in the Philippine Constitution.

As such, the Municipality aims to balance the development of the two major components of the physical environment namely: the natural environment and the built environment. The balance is aimed at ensuring that the development in the built environment does not sacrifice the natural environment. In this context, the need to protect areas such as agricultural lands, aquifer and aquifer recharge areas, among others from built-up urban expansion is highlighted. The built-up area in the Municipality is integrated in the locality's open space network by ensuring that open space requirements are complied with. In particular, the Municipality will have an efficient, effective, and interconnected physical infrastructure facilities with urban development dispersed in self-contained growth nodes. Moreover, the urban landscape in the Municipality of Sta. Rita is enhanced by ensuring that blighted areas are reduced, historical landmarks are preserved and maintained, and open spaces within the built-up areas are greened.

The physical environment of the Municipality must also be safe so that the locality is climateproof and disaster-prepared. This element of the vision of the Municipality responds to the mandatory requirements of the statutes namely: Republic Act No. 9729 and Republic Act No. 10121. The Municipality prevents and reduces the adverse impacts of climate change and disasters by incorporating climate change adaptation and mitigation as well as disaster risk reduction and management in all its development efforts in the context of sustainable development. Foremost among these efforts is ensuring that urban expansion and development in the Municipality are directed towards areas with least environmental constraints.



The physical environment must also be healthful so that the quality of both the natural environment and the built-environment is maintained. The quality of air and water in the Municipality are within acceptable standards and an effective waste management system is in place. Areas that need protection from urban encroachment are maintained and well-managed.

3.3 NATURE OF THE LOCAL ECONOMY

The Municipality's local economy is primarily driven by agricultural activities. As such, the Municipality aims to stimulate a globally-competitive and sustainable agricultural economy. By globally competitive, the Municipality provides sufficient and accessible support facilities for the businesses and enterprises located in the locality. Likewise, policies and programs to harness modern technologies towards rural economic development are in place and implemented.

As the development in the Municipality is anchored on the concept of sustainable development, agricultural economy must also be sustainable such that ecological principles are valued and followed in any agricultural activities in the locality. In particular, the local agricultural economy must be able to satisfy the production that will help propel local growth and development by sustaining economic viability of agricultural operations without sacrificing environmental and natural resources quality. Farmlands in the Municipality shall be well distributed and optimally utilized. Likewise, participants in local agricultural production are properly supported through the provision of facilities and mechanisms that will enable them to enhance their quality of life.

The promotion of agriculture as the primary driver of local economic growth does not however neglect the fact that there are other sectors that contribute towards local economic development. This focus on the development efforts of the Municipality is aimed at the promotion of the other economic sectors that will be contributory and not damaging to agricultural production.

3.4 CAPACITY OF LOCAL LEADERSHIP

The Municipality will simply be paying lip service to its vision statement without the proper attention given to local administration and governance. Largely, the success or failure of any plan is determined by the capacity of local leadership to transform the plan into action. Given this idea, the Municipality of Sta. Rita gives appropriate attention to local administration, management, and governance.

The local administration is envisioned to be dynamic, that is, it is able to respond to the everchanging demands of local development. As such, the Municipality is able to harness the broadened taxing powers accorded to it by the Local Government Code of 1991 by ensuring less dependency on the internal revenue allotment while increasing share of local sources of income in the revenue generation of the Municipality.



This self-sufficiency guarantees the implementation of more policies, programs, projects, and activities of the Municipality without being hampered by limited financial and funding sources. The Municipality, being beyond the control of limited financial resources, shall be able to devise and innovate in the provision of local facilities and services.

Corollary to the presence of a dynamic local government unit is a competent leadership. The Municipality shall have a leadership characterized by professionalism, efficiency, and effectiveness, indicated by, among others, the provision of an environment that is conducive to local development. Well-managed structural and functional aspects of the local organization and management and a leadership that is motivated by public interest and general welfare characterize this environment.

Most importantly, local leadership shall be committed to the principles of good governance. The success of governance is largely dependent upon the conduct of local officials and employees, and the hallmark of good local governance is the principle of accountability. It is important to note that accountability does not only refer to the local government institutions but to the private and civil society sectors as well. In this context, all the important sectors in the Municipality are accountability, the public and to their respective institutional stakeholders. To ensure accountability, the principles of transparency and rule of law shall be well accepted by the local government. As such, participatory processes and mechanisms in both the decision-making and implementation of activities in Sta. Rita shall be in place and functioning.

4 ALTERNATIVE SPATIAL STRATEGIES

After the vision statement has been finalized, various alternative spatial patterns or urban forms are explored to serve as framework or guide for detailed allocation of space and location of various activities and facilities. These spatial strategies translate the vision into broad physical and development terms. From these alternatives, one pattern or a combination of several patterns is chosen and put in final form to become the organizing concept for the long-term physical development of Sta. Rita.

The alternative spatial strategies are assessed to determine the advantages and disadvantages of each strategy. It is expected that the selected alternative will best provide the conditions necessary to attain the long-term development goals of the Municipality

4.1 LAND SUPPLY-DEMAND ANALYSIS

In balancing the demand and supply of urban land in the Municipality of Sta. Rita, the projected demand and the estimated land supply available for urban expansion are considered. Projected demands for the industrial, commercial, residential, institutional and other uses are computed and the total constitutes the projected demand for urban land in Sta. Rita. The estimated land supply is arrived at by computing the total built up areas and protected/preservation and conservation areas in hectares and subtracting the same with the total land area of the Municipality.

4.2 EXISTING LAND USE DISTRIBUTION

The existing land use distribution of Sta. Rita is presented in this section. The general land use of the municipality in 2014 is composed of agricultural lands, built-up areas, and rivers. The data generated are based on the participatory mapping workshop and validation through a GIS software output.

Sta. Rita's land area covers a total of 2,266 hectares according to the Municipal Planning and Development Office. Majority of the land in the municipality is for agriculture, accounting for 1,823.36 has. or 80.47% of the total land area. Built-up areas total to 430.71 has. or 19%, while river and other bodies of water total to 11.93 hectares or 0.53%. A more detailed classification for built-up areas and other land uses is presented in Table 1.



Table 1: Existing Land Use

Land Use Category	Area (Has.)	Percentage (%)
Agriculture	1621.42	71.55
Aquaculture	201.94	8.91
Built-up Areas		
Agri-Industrial	12.53	0.55
Commercial	6.97	0.31
Institutional	15.1	0.67
Residential	291.61	12.87
Tourism	8.84	0.39
Parks and Recreation	2.37	0.1
Cemetery	5.98	0.26
Utilities, Transportation and Services	87.32	3.85
River	11.93	0.53
Total	2,266.00	100

4.2.1 Agricultural Land Use

Agricultural lands, which are defined by RA 8435 as "lands devoted to or suitable for the cultivation of the soil, planting of crops, growing of trees, raising of livestock, poultry, fish or aquaculture production, including the harvesting of such farm products, and other farm activities and practices performed in conjunction with such farming operations by persons whether natural or juridical and not classified by law as mineral land, forest land, residential land, commercial land, or industrial land" comprise the largest portion of Sta. Rita's total land area.

4.2.2 Built-up Areas

The built-up areas of Sta. Rita cover 430.71 hectares or nearly 19% of the total land area. Classifications of built-up areas include commercial, institutional, residential, tourism and infrastructure areas. Commercial areas in Sta. Rita can be found in all barangays, having a total



of around 6.97 hectares. Residential areas on the other hand are largest in number among the built-up areas with 291.61hectares.

Institutional areas, which cover major government facilities such as barangay halls, health centers, schools, and day care centers cover around 15.1 hectares. Tourism establishments, which can be found in 7 barangays, cover around 8.84 hectares.

4.2.3 Rivers

Rivers or small bodies of water in Sta. Rita amount to 11.93 hectares or 0.53% of the total land area.





4.3 LAND DEMAND PROJECTION

Since the Comprehensive Land Use Plan will be covering a 9-year period, projections for land demand will follow this required time line. Several tools have been used to determine the demand for future land requirements such as Volume 2 of HLURB's CLUP Guidebook and Formula for Land Requirements from FAO (Food Agriculture Organization). The tool to be used in computing the land demand will depend on the availability of data as well as the appropriateness of the tool. However, this tool will not limit the pattern of land use development in the municipality. The development of land uses will still take into account other factors such as the direction of the municipality's growth as dictated by the LGU.

4.3.1 **Population Projection**

To determine the needed land requirements for the proposed land use plan, the projected population must be taken into account. Projection figures based on the existing historical population data of Sta. Rita are shown below. The assumed annual population growth rate is 1.69 %. Based on the growth rate, the population of Sta. Rita will reach more or less 47,711by 2024.

Municipality / Barangay	2007	2010	2015	2024
Santa Rita	36,723	38,762	40,979	47,711
Becuran	2,968	3,669	3,847	4,479
Dila-Dila	8,423	8,598	9,481	11,039
San Agustin	2,641	2,745	3,113	3,624
San Basilio	8,339	8,389	8,407	9,788
San Isidro	2,850	3,324	3,653	4,253
San Jose (Pob)	2,725	2,710	2,627	3,059
San Juan	2,190	2,159	2,330	2,713
San Matias	3,021	3,081	3,312	3,856
San Vicente	1,082	1,126	1,231	1,433
Santa Monica	2,484	2,961	2,978	3,467

Table 2: Santa Rita Population Projection

4.3.2 Residential Area

The land demand for residential area can be computed using the FAO urban land distribution formula. According to the formula, the land distribution of residential areas range from 4.0 hectares (low) to 6.0 hectares (high) for every 1,000 population. The current residential area density is at 7.077 hectares for every 1,000 population. This shows that the density is slightly above the suggested area density of FAO.

4.3.3 Commercial Areas

For commercial areas, the formula of FAO states that the land distribution of commercial areas ranges from 0.2 hectares (low) to 0.5 hectares (high) for every 1,000 population. The current commercial land use density is at 0.166 hectares per 1,000 population, which is below the low requirement. To increase the commercial land use density in 2024 to 0.2 to 0.5 hectares for every 1,000 population, an additional 2.74to 17.057hectares must be added respectively.

4.3.4 Institutional Areas

For institutional areas, the ideal land distribution ranges from 0.2 hectares (low) to 0.5 hectares (high) for every 1,000 population. The institutional areas consist of administrative, educational, and health facilities. Sta. Rita has currently an institutional land density of 0.387 hectares per 1,000 population. To increase the institutional land density to 0.5 hectares (high) for every 1000 population in 2024, around 7.993 hectares of institutional land must be added.

4.3.5 Open Spaces

Open spaces require a range of 0.5 hectares (low) per 1,000 population up to 3.0 hectares (high) per 1,000 population. This requires additional hectares of open space ranging from 20.29 hectares (low) to 133.121 hectares (high).



In summary, the additional land requirements for each major land use in the next 9 years as recommended by FAOaresummarized below:

Land Use Category	Low	High
Residential	-	-
Commercial	2.22	15.76
Institutional	None	6.70
Open Space	20.30	133.121

Table 3: Additional Land Requirements by Category from FAO standards

4.4 LAND SUPPLY

4.4.1 Map Overlay Analysis

The map overlay analysis is a tool to determine which areas in the municipality are appropriate for expansion of land uses. Various thematic maps undergo a process of overlaying or sieve analysis in order to determine suitable areas for development. This process also determines which areas in the municipality have development constraints.

Sieve analysis is done through the use of GIS (Geographic Information Systems) software such as ArcGIS. The software analyzes developable areas through certain parameters of available thematic maps. For the municipality of Sta. Rita, the available thematic maps for development analysis are: Elevation map, Slope Map, River Map, and Road Map. On the other hand, constraint maps include Flood Susceptibility Map and Risk Maps generated from the disaster risk assessment.

4.4.2 Development Maps for Analysis

4.4.2.1 Elevation Map

According to the implementing rules and regulations of the NIPAS act (RA 756), areas with greater than 1000 m above sea level are considered to be protected forests. Sta Rita's elevation ranges from 4.56 m, MSL to 29.33 m, MSL, indicating that the elevation throughout the whole municipality is acceptable for development. See table below for average elevation of each barangay in meters above sea level derived from GIS.



Table 4: Average Elevation of Each Barangay

Barangay	Average Elevation (m, MSL)
Becuran	13.91
Dila-dila	27.48
San Agustin	4.90
San Basilio	29.33
San Isidro	14.06
San Jose (Pob)	5.10
San Juan	7.73
San Matias	7.64
San Vicente	4.88
Santa Monica	4.56




4.4.2.2 Slope map

As for slope requirements, the forestry code mentions that areas with 18% or higher slope should be devoted to forest use. For the municipality of Sta Rita, around 98% of its slope falls under 0-18% category, slope of greater than 18% is only found in the mega dike area. See table below for area and percentage values of each slope category.

Slope	Area (hectares)	Percentage Area (%)
0 - 3 : Level to very gently sloping	1999.54	88.2410
3.1 - 8 : Gently sloping to undulating	182.44	8.05 <mark>12</mark>
8.1 - 18 : Moderately sloping to rolling	47.26	2.08 <mark>56</mark>
18.1 - 30 : Rolling to hilly	27.59	1.21 <mark>76</mark>
30.1 - 50 : Steep hills and mountains	9.11	0.4020
Above 50 : Very steep hills and mountains	0.05	0.0022

Table 5: Slope Percentages in Sta. Rita





4.4.2.3 River map

There are small creeks traversing from Barangay San Vicente, and dispersing north to Barangays San Matias, San Isidro, Becuran, Dila-Sila, and San Basilio. These maps also show which areas are not for development due to the bodies of water.





4.4.2.4 Road / Bridge Network Map

The road network map shows whether there is enough linkage within municipality. There is a total of 52.08 km of road traversing in Santa Rita. Provincial, municipal and barangay roads are the only types of road present in the municipality.





4.5 CONSTRAINT MAPS FOR ANALYSIS

4.5.1 Flood Map

For the municipality of Sta. Rita, a 100 year flood hazard map produced by project Noah shows areas susceptible to flooding based on elevation and natural drainage. Flood susceptibility categories in the map are classified as low, medium, and high. Several areas in the municipality have low, medium and flood susceptibility. Areas with susceptibility to flooding may be considered hindrances to land utilization unless major interventions are applied.

Table 6: Flood Susceptibility by Area

Flood Hazard	Area (hectares)	Percentage Area (%)
Low	474.95	20.96
Medium	431.67	19.05
High	107.86	4.76
No Flood	1251.52	55.23





4.5.2 Risk Maps

The climate / disaster risk assessment of Sta. Rita contains the generated exposure maps with areas at risk. Based on the *severity of consequence* and *likelihood of occurrence of flooding*, risk categories for each exposure map were obtained. The exposure maps include: population exposure, urban use exposure, natural production areas, lifeline utilities, and critical point facilities. Similar to the flood susceptibility map, areas at high risk are considered impediments to development unless interventions are applied. The derivation of risk maps can be seen in detail in the disaster risk assessment.













4.5.3 Sieve Analysis

The sieve analysis shows a map portraying the results of overlaying the thematic maps mentioned. Various parameters can be seen in the map such as location of built-up areas, medium to high category flood susceptible areas, and areas with slope greater than 18%. The remaining areas are considered optimal for development, which can guide decision makers in terms of options for land use expansion.





4.6 ALTERNATIVE SPATIAL STRATEGIES

In developing the alternative spatial strategies, the following parameters are considered:

- a. The defined role of the Municipality of Sta. Rita in the wider context (that is, in the province and in the region);
- b. The development potentials of the Municipality
- c. The Municipality's general physical and natural resources.

Based on the foregoing parameters, the following spatial strategies are developed:

- a. The Base Plan or "Do Nothing" Scenario
- b. Linear Development Scenario
- c. Multi-Nodal Development

4.6.1 Option 1: The Base Plan or "Do-Nothing Scenario"

This development scenario, an alternative in the development of spatial strategies, proposes the continuation of the current trends of development in the Municipality. Adoption of this scenario would mean that no major government intervention would be made by the local government other than the continuation of its on-going, programmed or committed activities.

Among the spatial alternatives, the "do-nothing" scenario requires the least regulation of development since the local government will just let the urban expansion follow the current trends. And given the current trends in Sta Rita, the existing urban center comprises barangays San Vicente and San Jose with residential settlements dispersed along the existing road networks. The do-nothing scenario would mean expansion of areas along the residential areas and the urban town center.





Figure 4: Base Plan or Do-Nothing Scenario

Although majority of the current land use in the Municipality is still devoted to agriculture, there are indications that the land area allocation for agricultural uses has a decreasing trend. This might cause a concern in case the do-nothing scenario is adopted, considering that the vision of the Municipality is to continue to develop its agricultural economy. The threat of land use conversion would be present in this scenario.

4.6.2 Option 2: Linear Development Scenario

The linear development scenario follows a ribbon or strip following the main road traversing the Municipality, which is the Sta. Rita Porac Provincial Road. This road traverses barangays San Vicente, San Matias, Becuran, Diladila. The existing development in barangays San Vicente and some parts of San Matias are mostly commercial while the development in the rest of the barangays traversed by the provincial road are mostly residential. Majority of land in the Municipality is for agricultural uses.







The two strips of development in this scenario would be comprised of the residential-commercial strip and the agricultural-residential strip. The residential-commercial strip will traverse the barangays of San Vicente, San Matias, Becuran, Diladila. The development along this strip will be for commercial and residential purposes. The second strip of development is the agricultural-residential strip, which will pass through the barangays of San Basilio, San Isidro, San Juan, and San Jose. As the name indicates, the allowed development activities along this strip would be agricultural and residential, with the former dominating such activities.

Since the role of the Municipality of Sta. Rita is to be a cultural heritage destination and the heritage buildings are mostly located in the barangays of San Jose and San Vicente, the lower portions of the two strips of development along these two barangays would also be considered for heritage tourism activities.



The challenge in this type of spatial strategy for the Municipality would be the mobility and interconnectivity of activities. Although this development scenario emphasizes the agricultural activities of the Municipality, the heritage sites are not given full recognition.

4.6.3 Option 3: Multi-Nodal Development Scenario

The multi-nodal development scenario suggests that there are at least two nodes of development or growth centers in the Municipality with specific specialized functions depending on their respective competitive advantages. The identified nodes of development following this spatial strategy for the Municipality of Sta. Rita are: the (1) urban growth controlled center; (2) urban growth center; (3) agri-tourism growth center; and, (4) agri-fishery growth center. These four nodes of growth or development shall be interconnected through a road network. In between these growth nodes shall be the residential areas.

The spatial pattern resulting from this spatial development strategy will provide more accessibility and mobility to the residents of the Municipality of Sta. Rita. The primary economic activity in the Municipality is agriculture. The strategic location of the two agriculture nodes (agrifishery and agri-tourism) will provide more accessibility to the residential areas.

The growth or expansion resulting from urbanization will be more controlled in a multi-nodal spatial strategy. Since the nodes for development and their respective functions are clearly identified, relative ease in the regulation of land uses and land use conversion in the Municipality will be expected given the clear identification of the agricultural areas to be protected.

The nodes identified conform to the role that the Municipality of Sta. Rita envisions, which is to be a cultural heritage destination driven by an agricultural economy. The cultural heritage sites and buildings in the Municipality are located in the identified urban controlled growth center and urban growth center. Thus, monitoring and protection as well as the direction of efforts towards the promotion of tourism in the Municipality would be easier.









4.7 EVALUATION OF ALTERNATIVE SPATIAL STRATEGIES

The alternative spatial strategies that could realize the vision for the Municipality of Sta. Rita were evaluated through a workshop participated in by relevant stakeholders. The first part of the workshop was focused on the presentation of the three alternative spatial strategies and their respective general descriptions, including the advantages and disadvantages of each strategy.

By using the social cost and benefit analysis tool, the alternative spatial strategies were evaluated: the cost to realize each spatial strategy and the implications of that realization. Moreover, the alternatives were also evaluated by considering factors such as ease of implementation, the time needed to see the benefits of each alternative, and the secondary (or externalities) of each of the spatial strategies. The results of the analysis showed that the most preferred alternative by the Municipality of Sta. Rita is the **multi-nodal spatial strategy**. Although among the three alternatives this strategy would require the most resources, it was given the highest rating in terms of the benefits that it could offer once realized.

A summary of the assessment ratings for the spatial strategies is presented in the table below.



Table 7: Summary of Results of Social Cost-Benefit Analysis of the Three Alternatives

Characteristics	Alternative 1: Do Nothing	Alternative 2: Linear Development	Alternative 3: Multi-Nodal
WHAT IT TAKES TO REALIZE THIS O	PTION (COST)		
Cost of new roads and other transport infrastructure	3.06	2.67	2.13
Provision of urban utilities and services	3.00	2.06	2.06
Preservation of protected croplands and fishponds	2.26	2.4	2.33
Strict government enforcement of regulations	2.73	2.53	2.33
People's compliance with regulations desired	1.93	2.6	2.6
The infrastructure for disaster mitigation and adaptation	1.87	2.4	2.6
Incentives to private sector in preferred areas of development	2.47	2.47	2.47
Average	2.47	2.45	2.36
IMPLICATIONS WHEN DEVELOPMEN	T OPTION IS REA	LIZED (BENEFITS)	
Access of people to municipality-wide services	1.4	2.86	3.06
Amount of air and water pollution produced	1.87	2.27	2.67
Traffic problems reduced	1.6	2.4	3.33
Overall attractiveness of the municipality and its image	1.73	2.8	3.6
Potential for increased LGU revenue	1.6	2.73	3.33



Characteristics	Alternative 1: Do Nothing	Alternative 2: Linear Development	Alternative 3: Multi-Nodal
Prospects for more jobs and higher compensation	1.6	2.6	3.6
LGUs role in the region maintained	1.4	2.87	3.13
Relative safety of inhabitants from natural and man-made disasters	1.47	2.73	3.27
Increase in household income	1.47	3.06	3.53
Contribution of the LGU to higher-level goals and strategies	1.47	2.8	3.47
Average	1.56	2.71	3.30
EASE OF IMPLEMENTATION	2.4	2.67	3
TIME	1.93	2.53	2.67
SECONDARY IMPACTS	1.4	2.67	2.57
GENERAL AVERAGE RATING	1.95	2.61	2.78

5 THE PREFERRED SPATIAL DEVELOPMENT STRATEGY: MULTI-NODAL DEVELOPMENT

The evaluation of the three spatial development strategies resulted in the selection of the multinodal development as the spatial strategy that will provide for the framework for the physical development of the Municipality of Sta. Rita. This framework is expected to facilitate the realization of the vision of the Municipality by 2024 anchored on its identified role as a cultural heritage destination in Central Luzon --with economy primarily driven by the agriculture sector.

5.1 CONCEPT / STRUCTURE PLAN

The multi-nodal development strategy delineates four growth or development nodes in the Municipality of Sta. Rita namely: (1) urban controlled growth center; (2) urban growth center; (3) agri-fishery growth center; and, (4) agri-tourism growth center. Below is the map of the structure plan based on the preferred spatial strategy of the Municipality of Sta. Rita. Surrounding these growth nodes will be the settlement areas.





Figure 7: The Preferred Spatial Strategy: Multi-Nodal Development

5.2 DEVELOPMENT / GROWTH NODES

The preferred spatial strategy delineates the Municipality into four growth or development nodes with assigned functions as discussed below:

5.2.1 Urban Controlled Growth Area

The urban controlled growth area shall cover Barangay San Jose which is currently the government center of the Municipality wherein most of the government buildings, including the Municipal Hall, are located. This is the town center or the *poblacion* area of the Municipality. As such, the development in this node shall be regulated to ensure that government and other institutional activities shall characterize the node.



Moreover, since many historical/cultural heritage buildings are found in Barangay San Jose, this node shall also be the urban redevelopment and heritage conservation zone of the Municipality, the primary node for cultural heritage tourism. In addition to the government and administration buildings and facilities, other tourism facilities and infrastructure shall be allowed to be developed in this zone.

5.2.2 Urban Growth Center

The urban growth center shall be the commercial district hub of the Municipality of Sta. Rita where concentration of commercial and other related activities shall be allowed. At present, commercial establishments in the Municipalities are located mostly in Barangay San Vicente and in some parts of San Matias. The municipal public market as well as recognizable convenience stores/establishments such as MiniStop is located in Barangay San Vicente. The urban growth center shall also cover Barangay Sta. Monica.

5.2.3 Agri-Fishery Growth Center

The agri-fishery growth center shall cover barangays San Basilio, San Isidro, Dila-Dila, and Becuran. These barangays currently have the highest crops and fishery production. As such, the land of these barangays must be protected from wanton conversion to other land uses. Within this development node, activities that relate to agriculture and fisheries production and development shall be promoted, including the development of light industries and facilities that support agricultural development.

5.2.4 Agri-Tourism Growth Center

The agri-tourism growth center covers barangays Becuran, San Agustin, and San Matias. This node is for the promotion and development of agri-ecotourism in the Municipality. The barangays to be included in this node were selected based on the following factors: (1) the prominent use of agricultural land; (2) their proximity to Barangays San Jose and San Vicente where most of the heritage sites/buildings in the Municipality are located; and, (3) existence of two famous tourism attractions/establishments in the Municipality namely Mahogany Farm and Alviz Farm in Barangay Becuran and Barangay San Agustin, respectively.

5.2.5 Cultural Heritage Zone

Two development nodes or growth centers shall be designated as the Municipality's cultural heritage zone because of the proliferation of cultural heritage buildings/sites in these nodes. These nodes are the urban controlled growth area and the urban growth center. Since cultural heritage buildings are also found in other barangays, the same protection and promotion shall also be provided for these sites and structures.



5.2.6 Settlement Areas

The settlement areas shall be allocated in between these development nodes or growth centers.



6 LAND USE POLICY FRAMEWORK

This chapter presents the land use policy framework which was prepared following the data generated from the analysis of the Ecological Profile of the Municipality of Sta. Rita and the preferred spatial strategy, namely, the multi-nodal development. In particular, the four general land use policy areas are delineated and mapped: settlements, protection, production, and infrastructure. The proposed general land use is shown in the table below:

Land Use Category	Area (Has.)	Percentage (%)
Agriculture	1549.06	68.36
Aquaculture	201.94	8.91
Built-up Areas		
Agri-Industrial	28.86	1.27
Commercial	58.63	2.59
Institutional	21.14	0.93
Residential	271.64	12
Tourism	16.64	0.73
Parks and Recreation	2.37	0.1
Cemetery	13.44	0.59
Utilities, Transportation and Services	90.41	3.99
River	11.93	0.53
Total	2,266.00	100

Table 8: Proposed Land Use (2024)





The comparison for the existing and proposed land use in terms of difference in hectares is shown in the table below.

	Existing	g Land Use	Propose	d Land Use	
Land Use Category	Area (Has.)	Percentage (%)	Area (Has.)	Percentage (%)	Difference in Has.
Agriculture	1621.42	71.55	1549.06	68.36	-72.36
Aquaculture	201.94	8.91	201.94	8.91	
Built-up Areas					
Agri-Industrial	12.53	0.55	28.86	1.27	16.33
Commercial	6.97	0.31	58.63	2.59	41.66
Institutional	15.1	0.67	21.14	0.93	6.04
Residential	291.61	12.87	271.64	12	-9.97
Tourism	8.84	0.39	16.64	0.73	7.8
Parks and Recreation	2.37	0.1	2.37	0.1	
Cemetery	5.98	0.26	13.44	0.59	7.46
Utilities, Transportation and Services	87.32	3.85	90.41	3.99	3.09
River	11.93	0.53	11.93	0.53	
Total	2,266.00	100	2,266.00	100	

Table 9: Comparison between Existing and Proposed Land Use



6.1 GENERAL LAND USE POLICY AREAS

6.1.1 Settlement Areas

The settlement areas cover the *poblacion* or the town center including the other urban barangays and rural settlements.

Proposed Land Use Categories	Description	Location	Policies
Residential Areas	Areas designated for human settlements, supporting infrastructure	All barangays	Allowable Use: Necessary repairs, new construction, substantial alteration
			Prohibited Use: No conversion into commercial establishments
Socialized Housing	Areas that are least vulnerable to flooding and storm surges	Dila-dila, San Basilio	Allowable Use: Necessary repairs, new construction, substantial alteration
			Prohibited Use: Industrial establishments

Table 10: Land Use Policies for Settlement Areas



6.1.2 Protected Areas

These are private lands, public lands and waters that are set aside for conservation, preservation, and rehabilitation because of their long-term strategic benefit as well as the observed and projected impact of climate-related events and disasters on these areas.

Protection policy areas can be in public, private, and ancestral lands as identified and designated by existing laws (i.e. PD 705, National Integrated Protected Areas System, Agriculture and Fisheries Modernization Act, Indigenous Peoples Rights Act, Climate Change Act, National Disaster Risk Reduction and Management Act, Water Code, etc.) or agreements by local stakeholders as they see it fit to satisfy strategic local land use and long-term development objectives and purposes.

In general, the use of protected areas is restricted to those that complement and enhance the areas' existing functions or purpose (restricted land use). Any human activity that shall be destructive, injurious, disruptive, or disturbing to the efficient, sustainable, and effective functioning of the protection land use areas shall not be allowed.

Proposed Land Use Categories	Description	Location	Policies
Critical geo-hazard high risk area	Areas which are high risk and severely threatened by geo hazard and climate- induced disasters	Sta. Monica, San Vicente, San Jose, San Juan	
Riverbank/Lakeshore easements and riparian buffer zones	Areas comprising the riverine system of the municipality	San Jose, San Isidro, San Basilio, Becuran, San Matias	Allowable Uses: Fishing using allowable fishing gears, active and passive recreation, river bank stabilization, remnant riverine vegetation protection, scientific researches

Table 11: Land Use Policies for Protection Areas



Proposed Land Use Categories	Description	Location	Policies
	Aroos identified as		Prohibited uses: Sand and gravel quarrying, cutting of riverine vegetation, urban development along the legal easements
Prime agricultural lands	Areas identified as protected agricultural lands	Irrigated lands in all barangays	To be protected from, and are non- negotiable for reclassification and conversion
Cultural/ heritage/ historical zones/areas	Areas with historical and/or cultural significance	San Jose, San Vicente, Sta. Monica, San Matias, San Isidro	Allowable use: Adaptive reuse

6.1.3 **Production Areas**

Production areas are those where all types of activities and uses can be conducted subject to restrictions imposed by LGU zoning ordinance.

Table 12: Land Use Policies for Production Areas

Proposed Land Use Categories	Description	Location	Policies
Agri-fishery areas	Areas suitable for	San Basilio, Dila-dila,	Prohibited Use: Land
	cultivation of rice,	Becuran, San Matias,	conversion Prime
	corn, vegetables and	Santa Monica, San	Agricultural Lands
	other high value	Agustin, San Isidro,	and construction of
	commercial crops	San Jose, San Juan	permanent structures



Proposed Land Use Categories	Description	Location	Policies
Commercial Areas	Areas suitable for the development of hotels, restaurants, related services, and supporting infrastructure	San Vicente, San Matias, Becuran, Dila- dila	Allowable Use: Can also simultaneously use as institutional Prohibited Use: No new development for urban uses
Agri-tourism areas	Agricultural areas that offer opportunities for commercial tourism and recreational activities	Becuran	Allowable Use: Parks and other recreation Prohibited Use: Human settlements, institutional and commercial establishments
Institutional Areas	Areas suitable for the establishment of government buildings/offices, educational institutions, and supporting infrastructure	All barangays	Allowable Use: Can also simultaneously use as commercial Prohibited Use: Human settlements
Buffer Areas	areas serve to separate different land use categories within production or multiple use areas	Diladila, San Basilio	Allowable uses may be limited to simple and non-machinery based activities



6.1.4 Infrastructure Areas

The infrastructure areas cover social infrastructure, administrative infrastructure, economic infrastructure, and utilities and transportation infrastructure. The policies for these major categories of infrastructure are discussed in the table below.

Table 13: Land Use Policies for Infrastructure Areas

Proposed Land Use Categories	Description	Location	Policies
Social infrastructure	These cover areas that support education, health, social welfare, and other morale and welfare facilities	All barangays	Construction of buildings should be in accordance with the National Building Code and other relevant planning parameters
Administrative infrastructure	Areas that provide for government buildings, barangay halls, and solid waste facilities	All barangays	Should address not just availability but also accessibility
Economic infrastructure	Covers public markets, slaughterhouses, and other public enterprises	San Vicente, San Matias, Diladila, Becuran, San Basilio	
Utilities and transportation infrastructure	Covers roads, bridges, transportation facilities, water supply and sewerage system, power/electricity, and	All barangays	Implementation of the road right of way and road easements/ minimum setback from the ROW
	telecommunications, etc.		Proper location and placement of infrastructure