

CALABARZON RDRA 2018-2022
URGENT PRIORITY RESEARCH STUDIES¹

I. Industry and Services

Table 1.1. Technological Innovation Research Areas for Industry and Services

Development Challenges	Research Areas	Rationale/Objective of Research	Assigned SUC
Traffic congestion leading to tourist destinations such as Calamba City and Los Banos in Laguna, Sariaya in Quezon, Bauan and Batangas City in Batangas and Antipolo City and Cainta in Rizal. (UP)	Traffic management	To conduct a study on new scientific traffic management scheme	MSEUF <i>College of Criminology,</i> BatStateU – <i>Bauan and Batangas City areas</i>

Table 1.2. Socio-economic and Policy Research Areas for Industry and Services

Development Challenges	Research Areas	Rationale/Objective of Research	Assigned SUC
Traffic congestion leading to tourist destinations such as Calamba City and Los Banos in Laguna, Sariaya in Quezon, Bauan and Batangas City in Batangas and Antipolo City and Cainta in Rizal. (UP)	Traffic management	To identify the economic impact/losses of heavy traffic in major economic/business areas.	MSEUF <i>College of Criminology/ College of Business and Accountancy,</i> BatStateU – <i>Bauan and Batangas City areas</i>

II. Agriculture, Hunting, Forestry and Fishing

Table 2.1. Technological Innovation Research Areas for Agriculture, Hunting, Forestry and Fishing

Development Challenges	Research Areas	Rationale/Objective of Research	Assigned SUC
Declining productivity of major high value crop commodities (UP)	High Value Commercial Crops	To identify the causes for the decline in the productivity of major high-value crop commodities.	LSPU, SLSU, CvSU, BatStateU – <i>Coffee, cacao and ates</i> UPLB
Declining fisheries' production. (UP)	Fisheries development	To identify the causes for the decline of fish production and recommend strategies to improve production.	LSPU, CvSU, URS UPLB

¹ UP (Urgent Priority) – research areas that address urgent or critical issues of the Region

Development Challenges	Research Areas	Rationale/Objective of Research	Assigned SUC
Vulnerability of farmers and fisherfolks to natural hazards (UP)	Climate change and natural hazards	<ul style="list-style-type: none"> • Drought-resistant and cultured rice varieties will contribute in ensuring food security despite the impacts of extreme weather conditions. • Impacts of invasive species in local fish • Potential use of yapyap and indigenous/ invasive species of fish. 	UPLB
	Seed production and fingerlings supply (UP)	<ul style="list-style-type: none"> • Increase in seed production and fingerlings supply • New practices and technologies for alternative sources of income of farmers and fisher folks. 	BatStateU
Environmental degradation caused by food production and sustained production. (UP)	Environment protection	<ul style="list-style-type: none"> • To determine agricultural practice/s that cause environmental degradation. • Resources into more effective input in production will contribute to food production and environmental protection. Solar-powered irrigation, water harvesting and Bio-gas are some of the technologies that can be utilized in agricultural production. 	CvSU, BatStateU – <i>impact of swine, livestock and poultry industries in Batangas Province</i> <i>- solar powered mechanical facilities for agricultural produce</i> URS

III. Accelerating Infrastructure Development

Table 3.1 Technological Innovation Research Areas for Accelerating Infrastructure Development

Development Challenges	Research Areas	Rationale/Objective of Research	Assigned SUC
Traffic congestion along major roads (UP)	Transport system	To introduce new or upgrade transport systems and infrastructures to meet the	BatStateU – CALABARZON area

Development Challenges	Research Areas	Rationale/Objective of Research	Assigned SUC
		quality standards and to enhance mobility.	
Shortage and vulnerability of social infrastructures in rural and remote areas (UP)	Social infrastructure	To determine the social impacts, shortage, vulnerability and sustainability of social infrastructure facilities in rural and remote areas.	CvSU, BatStateU – CALABARZON area

Table 3.2 Socio-economic and Policy Research Areas for Accelerating Infrastructure Development

Development Challenges	Research Areas	Rationale/Objective of Research	Assigned SUC
Road Right-of-way (ROW) acquisition (UP)	Government policy	<ul style="list-style-type: none"> To assess the existing policies and procedures in the road ROW acquisition. To identify the causes of delay in road ROW acquisition. 	CvSU, BatStateU – Batangas province
Traffic congestion along major roads (UP)	Transport system	To identify the effects of heavy traffic in the economic growth of the region.	CvSU, BatStateU – Batangas province
Relocation of obstructive utility posts along road right-of-way (UP)		<ul style="list-style-type: none"> To identify the effects of obstructions in the flow of traffic along the road. To identify measures to fast track the removal of obstructions. 	BatStateU – Batangas City

IV. Social Development (Health, Education, Labor, Families)

Table 4.1. Technological Innovation Research Areas for Social Development

Development Challenges	Research Areas	Rationale/Objective of Research	Assigned SUC
Tuberculosis and HIV detection rate increased.	Health and Nutrition	To determine the causes of increased cases of tuberculosis and HIV.	SLSU, MSEUF College of Nursing and Allied Health Sciences, BatStateU – BRAVE project -Drainage design of Bats City

Development Challenges	Research Areas	Rationale/Objective of Research	Assigned SUC
Natural hazards are unexpected shocks that can further set back already vulnerable and poor population and those that are near the poverty line. Natural hazards are occurring more frequently and with greater intensity.	Disaster Risk Reduction	<ul style="list-style-type: none"> To assess the vulnerability and risk of areas with poor population and near poverty line. To devise interventions and innovation to prevent disaster. 	CvSU SLSU*

Table 4.2. Socio-economic and Policy Research Areas for Reducing Vulnerability of Individuals and Families

Development Challenges	Research Areas	Rationale/Objective of Research	Assigned SUC
High poverty incidences in Quezon Province and other identified municipalities in Calabarzon.	Poverty	<ul style="list-style-type: none"> To identify and address the prevailing causes of poverty incidence in Quezon Province. To identify new programs, projects and strategies to effectively alleviate/reduce poverty. 	MSEUF <i>College of Arts and Sciences,</i> BatStateU <i>Social Innovation Center</i> SLSU*
Low achievement rate	Education	To determine the causes/reasons for low achievement rate.	CvSU, MSEUF <i>College of Education,</i> BatStateU -c/o CTE and SIC URS

V. Ecological Integrity, Clean and Healthy Environment

Table 6.1. Technological Innovation Research Areas for Ecological Integrity, Clean and Healthy Environment

Development Challenges	Research Areas	Rationale/Objective of Research	Assigned SUC
Fast urbanization and high population	Solid waste management	To study and identify strategies to sustain environment friendly waste management system in fast urbanization and high population areas.	CvSU, BatStateU <i>c/o Sanitary Engineering and with on-going study/proposal from BatStateU Nasugbu</i>

* SLSU expressed interest to be assigned in the research area during the 1st semester 2020 RRIC meeting