









# Establishment of the Cagayan Valley Regional Inclusive Innovation Center (CVRIIC)



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## Establishment of the Cagayan Valley Regional Inclusive Innovation Center (CVRIIC)

Proponent:	Philippine Chamber of Commerce and Industry-Cagayan
Project Leader:	Cloyd C. Velasco (Governor, PCCI-Cagayan
<b>Cooperating Agencies:</b>	State Universities: NVSU, CSU, and ISU
	Regional Government Offices: DOST-R02, DTI-R02, DA-RF02
	Private Sectors: Cagayan Valley Citrus Industry Council (CVCIDC); US STRIDE
Project Duration:	Three Years (April 2021-April 2024) in Three Phases
Target Beneficiaries:	20 MSMEs in Cagayan Valley; Four State Universities in Region 02; 20-25 Citrus and Banana Growers in Region 02













## **Technical Justification Ours in Cagayan Valley**

- Highest mandarin production at 6,000 mt (44-47%) (PSA, 2020)
- First in corn and second in rice nationwide (CVRDP, 2020)
- 50% of total employment in the Agriculture sector
- Agri-industries as a priority in the next 10-20 years.









#### STI's Crucial Role

- Use of technology to lower production cost and increase productivity
- R and D in increasing the agricultural sector's enterprises

 Access to technology, innovations, and standards to enhance and sustain productivity













### The Tough Challenge

- 5<sup>th</sup> among regions with lowest R&D expenditures (DOST, 2013)
- limited financial support for research and technology commercialization
- low technology adoption to advance production processes
- weak public-private partnership and technology transfer
- need for harmonizing R&D of agencies and institutions













## Cagayan Valley Regional Inclusive Innovation Center (CVRIIC)

- for strengthening collaboration among actors in the STI ecosystem
- one of the cornerstones of inclusive Filipinnovation and Entrepreneurship Roadmap
- through the combined efforts of DOST, DTI, CHED, DICT in coordination with USAID STRIDE
- pilot tested in Bicol, Cagayan de Oro, Cebu, and Davao













## **CVRIIC General Objective**

To enhance the innovation performance of the region by strengthening linkages among stakeholders and enabling collaborative endeavors that will contribute to inclusive economic growth.













## **CVRIIC Specific Objectives:**

- Harmonize existing knowledge and innovation assets;
- Formulate a more responsive and demand-driven research agenda;
- Guide MSMEs in accessing and using innovation resources for business resiliency and competitiveness;



## Regional Inclusive Innovation Center (RIIC)

















## **CVRIIC Specific Objectives:**

- Streamline adoption of innovative technologies for improved production and post-production systems;
- Create access points for innovation among GIA stakeholders.













# Methodology CVRIIC Operational Strategy











## **Three Phase Implementation (2021-2024)**

Phase 1 (Y1)	Phase 2 (Y2)	Phase 3 (Y3)
<ul> <li>Establishment of the Business Innovation</li> <li>Unit (BIU) to deliver CVRIIC services and key functions:</li> <li>Region 2 knowledge management databases</li> <li>Industry academe consultations</li> </ul>	Demonstration Model of innovation convergence through the Cagayan Valley's Citrus Industry	Replication of Convergence Demonstration Model to banana and other industries:
<ul> <li>Risk management and linkage services</li> <li>Product development solutions</li> <li>Models of innovation sub-network</li> </ul> Benchmarking and process documentation	Citrus-based product development and MSME capacity building	<ul> <li>updating database</li> <li>engagement of industry partners</li> <li>Industry-academe consultations</li> </ul>









#### **Timeline of Activities and Target Accomplishments**

ACTIVITIES	TARGET ACCOMPLISHMENTS		Y1				
ACTIVITIES	(quantify, if possible)	Q1	Q2	Q3	Q4		
1. Development and release of RIIC knowledge	1 inventory of research and research facilities across local HEIs						
management products	1 Inventory of existing equipment and capabilities among identified facilities						
	1 Inventory of funding and loans facilities for MSMEs						
	1 Inventory of MSMEs & local products in priority sector						
	1 Inventory of HEIs, RDIs & experts in priority sector						
	1 Innovation guidebook						
	1 Central Hub database system for innovation assets with multiple access points						
	across Cagayan Valley						
	NVSU Citrus Genetic Resources Information System (CiTris) expanded to a						
	regional citrus industry information system and linked to the Central Hub.						









ACTIVITIES	TARGET ACCOMPLISHMENTS		Υ	′1			Υ	2	
ACTIVITIES	Q1	Q2	Q3	Q4	ą	Q2	Q3	Q4	
Citrus Industry Roadmap consultation	Institutional policy briefs among SUCs on anchoring a part of R and D thrusts for citrus industry needs supported with memorandum of agreement								
Conduct of fora, ideation/project design workshops	One Best Practices Forum conducted to validate high impact commodity-based R and D in the region  Documentation of three completed priority R and D models								
4. Market Linkages Service	15 (5/year) innovation consultations and information sessions conducted								
5. Producers Linkages service	15 (5/year) products accessed and established in online platforms								
	09 (3/year) MSMEs linked to local raw material sources								
6. Finance Linkages Services	09 (3/year) MSMEs linked to government and private financial programs								
	09 (3/year) MSMEs accessing financial programs								
7. Capacity building on enterprise management and market linkage	10 trainings conducted on enterprise management and market linkage for start-up enterprises in the priority industry 02 market studies for citrus and banana 02 market positioning strategies 20 MSMEs trained								
8. Risk management service for MSMEs	01 Innovation Business Recovery Team created 03 trainings conducted on Innovation for Business Recovery 01 for year 1 and 2 for year 2 Innovation for business recovery plans developed 10 MSMEs assessed								

Activities in peach are aligned with and will be supported with funds by DTI-R02











ACTIVITIES	TARGET ACCOMPLISHMENTS		Υ	′1			Υ	2		Y3			
ACTIVITIES	(quantify, if possible)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Creation of technology option packages for increased orchard productivity in the region	A package of citrus best orchard production and management practices in a technoquide for farmers and entrepreneurs Citrus Production Appreciation												
	One press con saga												
	Citrus Innovation Forum												
Testing information and communication technology (ICT)-based applications for precision agriculture in citrus	A customized ICT-based system application for improved management of citrus												
Creation of technology option packages for increased banana productivity in the region	A package of improved production practices for banana in a technoguide												
12. ICT-based applications replicated in Banana	A customized ICT-based system application for improved management of citrus												
Acquisition of processing equipment and operation of a citrus based processing facility for product development	01 citrus-based processing facility in the production site at Malabing Valley												









ACTIVITIES	TARGET ACCOMPLISHMENTS		Υ	<b>′</b> 1			Y2				Υ	3	
ACTIVITIES	(quantify, if possible)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<ol> <li>Organization of a citrus cluster as raw material sources</li> </ol>	A citrus grower cluster consisting of five farms with a minimum of 3 hectares each												
<ol> <li>In-house protocol optimization for priority citrus-based processed products (mandarin juice, pectin, and oil)</li> </ol>	Protocols for juice, pectin, and oil extraction												
<ol><li>Mandarin fruit processing for extraction of juice, pectin, and oil</li></ol>	From 10 tons batch of raw fruits, 5,000 L of juice, 200 kg of powder pectin, 400 L of liquid pectin; and 150 ml citrus oil												
17. Product analysis, packaging, and shelf-life	Nutrition facts for juice; Vitamin C and phytochemical contents of juice												
test for three products	Pectin grade as a gelling agent (liquid and powdered pectin)												
	Oil fraction content (essential oil and flavor)												
	Shelf life for the three products												
Product launching and market arrangements	04 Market Channels established in the region (one for each province, <u>Batanes</u> not included)												
19. Banana Forum and Product Exhibits	Banana Forum cum Product exhibits conducted												
20. Develop demonstration models around Food Innovation Center (FIC)	1 business process review/design for improved promotion and utilization of food innovation centers												



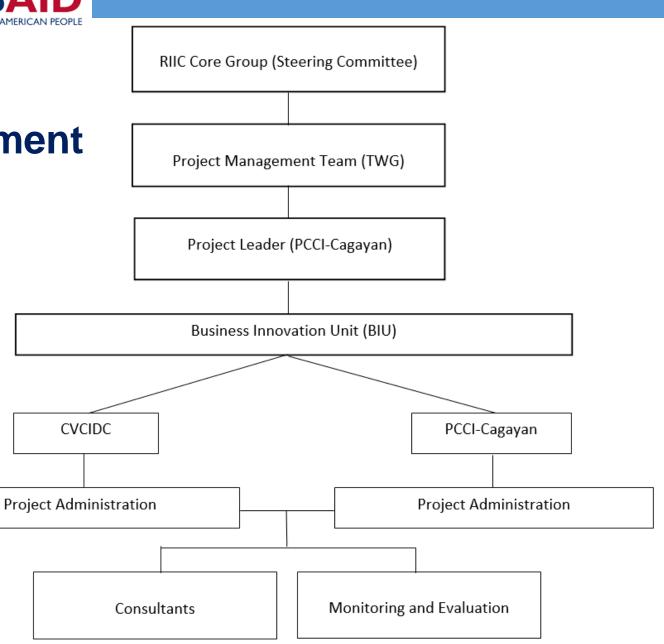








## **CVRIIC Project Management Structure**













## Monitoring, Evaluation and Sustainability Planning

- Periodic reports of the PMT shall be furnished to the NEDA Regional Office
   2 as technical secretariat of the Regional Development Council (RDC).
- Results-based M and E will be set-up with quarterly and annual progress reports prepared and circulated among partner agencies and institutions.
- During Phase I, an evaluation and sustainability planning workshop will be conducted to further fine tune CVRIICs operational implementation and determine long term plans for the project.
- Assessment of achievement through an external evaluation in the third year.

### **Summary of Financial Requirements**

					YEAR	1							
ITEM	Depar	tment of Scie	nce and Tech	nology (DOS	T-R02)	De	partment of	Trade and Ind	lustry (DTI-R	(02)	YEAR 2	YEAR 3	TOTAL
	Q1	Q2	Q3	Q4	TOTAL	Q1	Q2	Q3	Q4	Total			
I. Personnel Services (PS)													
Salaries and Wages													
(2) Clerk II @ P16,568.40 for 11 mos.	66,273.60	99,410.40	99,410.40	99,410.40	364,504.80						397,641.60	397,641.60	1,159,788.00
(1) Project Assistant I @ P21,006.00/mo for 11 mos.	42,012.00	63,018.00	63,018.00	63,018.00	231,066.00						252,072.00	252,072.00	735,210.00
Honoraria													
(1) Project Leader @ 8,800.00/mo. for 12 mos.	17,600.00	26,400.00	26,400.00	26,400.00	96,800.00						105,600.00	105,600.00	308,000.00
(1) Project Staff @ 6,000/mo. for 11 mos.	12,000.00	18,000.00	18,000.00	18,000.00	66,000.00						72,000.00	72,000.00	210,000.00
Sub total for PS	137,885.60	206,828.40	206,828.40	206,828.40	758,370.80						827,313.60	827,313.60	2,412,998.00
II. Maintenance and Other Opeating Expenses (MOOE)													
Direct Cost													
Travel Expenses	10,000.00				10,000.00	10,000.00		10,000.00		20,000.00	30,000.00		80,000.00
Supplies and Materials Expenses	25,629.20				25,629.20	89,370.80				89,370.80	600,000.00	100,000.00	904,370.80
Communication Expenses													-
Telephone/Mobile/Internet	15,000.00				15,000.00	20,000.00		20,000.00		40,000.00	40,000.00		135,000.00
Training/Seminar Expenses	45,000.00				45,000.00	40,000.00		40,000.00		80,000.00	80,000.00	80,000.00	365,000.00
Printing and Binding Expenses				20,000.00	20,000.00					-			20,000.00
Representation Expenses	10,000.00				10,000.00	10,000.00		20,000.00		30,000.00	20,000.00	20,000.00	110,000.00
Professional Services (Consultancy, Enumeration, Innovation													
Business Recovery Plan, and Expert Services)	81,000.00				81,000.00	195,000.00		200,000.00		395,000.00	150,000.00	100,000.00	1,121,000.00
Rent Expenses	20,000.00				20,000.00						20,000.00		40,000.00
Subscription Expenses					-	25,000.00				25,000.00	25,000.00		75,000.00
Sub-Total for MOOE-DC	206,629.20		•	20,000.00	226,629.20	389,370.80		290,000.00		679,370.80	965,000.00	300,000.00	2,850,370.80
Indirect Cost (IC)													
Utility Expenses (Water, Electricity, Gas), Supplies and Materi	15,000.00				15,000.00						30,000.00		45,000.00
Sub-Total for MOOE-IC	15,000.00		-		15,000.00						30,000.00		45,000.00
Sub-Total for MOOE	221,629.20	-	-	20,000.00	241,629.20						995,000.00	300,000.00	1,536,629.20
III. Equipment Outlay (EO)													
(2) DLSR camera					-						120,000.00		120,000.00
(1) citrus juicer											450,000.00		450,000.00
(1) citrus oil extractor											500,000.00		500,000.00
(1) citrus pectin extractor											700,000.00		700,000.00
(1) water quality system											300,000.00		300,000.00
Sub-Total for EO	-				-						2,070,000.00		2,070,000.00
GRAND TOTAL	359,514.80	206,828.40	206,828.40	226,828.40	1,000,000.00	389,370.80		290,000.00		679,370.80	3,892,313.60	1,127,313.60	6,019,627.20











## Thank You Very Much!