



SWOT ANALYSIS MATRIX

Year: 2022

Office/Unit: PHILIPPINE ROOT CROP RESEARCH AND TRAINING CENTER (PhilRootcrops)

Key Areas	PESTLE (External Factors)	#	ACTIVITY/PROCESS	STRENGTHS (S)	WEAKNESSES W)	OPPORTUNITIES (O)	THREATS (T)
RESEARCH AND INNOVATION PROGRAMS							
Ensuring Research Relevance (G2, KRA1) Communication of Research Results (G2, KRA5)	POLITICAL		Publication of research outputs				PRCRTC-22-T1 High competition for funding among research institutions with similar research agenda
	ECONOMICAL					PRCRTC-22-O1 Collaboration between research institutions and funding agencies	
	SOCIAL						
	TECHNOLOGICAL						
	LEGAL						
	ENVIRONMENTAL						
	Human Resource (Internal)			PRCRTC-22-S1 Pool of experts with diverse background in research			
	Operations (Internal)			PRCRTC-22-S2 Existing on-going internal and external funded research projects/studies	<p>OVPREI-21-W4 Weak financial accounting process for RDEI funds</p> <p>OVPREI-21-W5 No research seed funds for returning scholars and newly-hired faculty</p> <p>PRCRTC-22-W1 Majority of senior faculty researchers are due for retirement</p> <p>PRCRTC-22-W2 Lack of cutting-edge laboratory facilities for research and innovation</p>		

	Financial (Internal)						
	Marketing/Promotion (Internal)						
Ensuring Research Relevance (G2, KRA1)	POLITICAL		Utilization of research outputs by the industry or other beneficiaries			PRCRTC-22-02 Development of rootcrop industry through Industry Strategic Plans (ISP) of the Department of Science and technology	
Partnership (G2, KRA2)							
Knowledge Protection, Transfer and Commercialization (G2, KRA3)	ECONOMICAL					PRCRTC-22-03 Growing market for rootcrop based products and technologies	OVPREI-21-T3 Reluctance of industry players to engage in new businesses brought about by Covid-19 pandemic affecting utilization of research
Communication of Research Results (G2,KRA5)							
Commercializing VSUs IP Asset (G4, KRA2)	SOCIAL					OVPRE-21-09 High percentage of Filipino population engaged in social media and other digital platforms PRCRTC-22-04 Sustained and stable partnerships between public and private organizations/industries	OVPREI-21-T4 Institutionalization of technology and business incubation program by other SUCs OVPREI-21-T5 Potential intellectual piracy of other SUCs with similar mandate
	TECHNOLOGICAL						
	LEGAL					OVPREI-21-08 Philippine Technology Transfer Act, Innovation Act and Innovative Startup Act	
	ENVIRONMENTAL						
	Human Resource (Internal)			PRCRTC-22-S3 Researchers actively involved in RDEI	PRCRTC-22-W3 Employment turnover and contractual status of Science Research Assistants		

	Operations (Internal)			PRCRTC-22-S4 Available of innovative rootcrops based technology readily available for dissemination and transfer to interested partner cooperators and stakeholders PRCRTC-22-S5 Availability on-air and digital broadcast program “Magmalambuon sa Lagutmon” for technology promotion	OVPRE-19-W8 Weak university-industry partnership / technologies generated not totally aligned to industry needs OVPREI-21-W7 TBI operation is project-based		
	Financial (Internal)				OVPREI-21-W8 No funds appropriated and plantilla position to hire new IP Technical Experts		
	Marketing/Promotion (Internal)			PRCRTC-22-S6 BPI Accredited PhilRootcrops nursery for sweetpotato and cassava planting materials distribution	PRCRTC-22-W4 No/less participation to trade fairs/exhibits to promote and market technologies due to travel restrictions/community quarantine		

B. TECHNICAL ADVISORY EXTENSION PROGRAM

Partnership (G2, KRA2) Knowledge Protection, Transfer and Commercialization (G2, KRA3) Community Empowerment (G3, KRA2)	POLITICAL		Partnerships with Local Government Units (LGUs), industries, Non-Government Organizations, National Government Agencies, MSMEs, and other stakeholders as a result of extension				
	ECONOMICAL						
	SOCIAL					PRCRTC-22-O5 Emerging partnerships with LGUs, NGOs, NGAs, MSMEs and other stakeholders in the period of pandemic and climate change	
	TECHNOLOGICAL						

	LEGAL						OVPREI-21-T6 Restricted working environment due to community quarantine (recast) PRCRTC-21-T2 Reduced engagements to potential partners outside of the region due to COVID restrictions
	ENVIRONMENTAL						
	Human Resource (Internal)			PRCRTC-22-S7 Competent faculty researchers in sustaining partnerships with public and private industries			
	Operations (Internal)				OVPREI-21-W12 Absence of MIS of rehabilitated land, water and forest areas for protection purposes PRCRTC-22-W5 Absence of established mechanism for extension capability building for faculty and staff		
	Financial (Internal)						
	Marketing/Promotion (Internal)						
Capability Development (G2, KRA4)	POLITICAL		Conduct of trainings and provisions of advisory service				
	ECONOMICAL						
Enhanced capacities of faculty, staff and students to engage in extension (G3, KRA1)	SOCIAL					PRCRTC-22-O6 Increase clientele awareness and flexibility in availing training and advisory services through online platforms	
	TECHNOLOGICAL						
Community Empowerment (G3, KRA2)	LEGAL						PRCRTC-22-T3 Limited face-to-face trainings and advisory services due to IATF travel restrictions

	ENVIRONMENTAL						
	Human Resource (Internal)			PRCRTC-22-S8 Presence of experts in extension and advisory services	PRCRTC-22-W6 Absence of faculty researcher focused on extension and communication		
	Operations (Internal)				PRCRTC-22-W7 Unstable internet connectivity for online trainings and webinars		
	Financial (Internal)						
	Marketing/Promotion (Internal)			PRCRTC-22-S9 PhilRootcrops Learning Site and demo farms			
Communication of Research Results (G2, KRA5)	POLITICAL		Delivery of extension programs consistent with the SUC's mandate and priority programs			OVPREI-21-O14 Internet infrastructure of the country is a priority program of DICT	
Enhanced capacities of faculty, staff and students to engage in extension (G3, KRA1)	ECONOMICAL					PRCRTC-22-O7 Funding support to rootcrop extension programs for pandemic and climate change response	PRCRTC-22-T4 Competition between institutions with similar extension agenda
Community Empowerment (G3, KRA2)	SOCIAL						OVPREI-21-T10 Proliferation of private and public institutions offering NFE certification courses OVPREI-21-T11 Other SUCs with similar mandate have better website presence
	TECHNOLOGICAL						
	LEGAL						
	ENVIRONMENTAL						
	Human Resource (Internal)			PRCRTC-22-S8 Presence of experts in extension and advisory services	PRCRTC-22-W8 Insufficient institutional budget allocation for extension		

	Operations (Internal)			PRCRTC-22-S10 Presence of strong extension program "Integrated Extension Program for Rootcrops"	OVPREI-21-W15 Non-compliance of Non-Formal Education (NFE) facilities to accreditation standards OVPREI-21-W17 Highly static website content and low presence in digital media		
	Financial (Internal)						
	Marketing/Promotion (Internal)						
C. NEEDS OF INTERESTED PARTIES							
Interested Party: Students	POLITICAL		Research mentoring				
	ECONOMICAL						
	SOCIAL					PRCRTC-22-O8 Interdepartmental collaboration for research mentoring through OJT and immersion programs	PRCRTC-22-T5 Limited interaction with students due to COVID-19 restrictions
	TECHNOLOGICAL					PRCRTC-22-O9 Available technologies for alternative approaches of research mentoring	
	LEGAL						
	ENVIRONMENTAL						
	Human Resource (Internal)			PRCRTC-22-S1 Pool of experts with diverse background in research	PRCRTC-22-W9 Inadequate S&T background/foundation of students		
	Operations (Internal)			PRCRTC-22-S2 Existing on-going internal and external funded research projects/studies PRCRTC-22-S11 Available laboratory facilities for research and innovation	PRCRTC-22-W10 Unstable internet connectivity for online consultation		
	Financial (Internal)						
	Marketing/Promotion (Internal)						

Interested Party: Employees (Faculty, Staff, and Administrative and Support Staff)	POLITICAL		Good and safe working environment in research laboratories/experimental areas				
	ECONOMICAL					PRCRTC-22-O10 Available funds from funding agencies for S&T facility improvement	
	SOCIAL						
	TECHNOLOGICAL						
	LEGAL						OVPREI-21-T12 Non- compliance to safety standards (BFP, GAP, GMP, etc)(W21)
	ENVIRONMENTAL						
	Human Resource (Internal)						
	Operations (Internal)			PRCRTC-22-S12 Project for repair, rewiring, and provision of additional research equipment and facilities (Rootcrops Genomics: Securing Rootcrops Genetic Diversity and Enhancing Crop Improvement for a Climate Smart Agriculture)	OVPREI-21-W20 Deteriorating and/or inadequate research and processing laboratories (e.g.non compliant to GMP) OVPREI-21-W21 Unstable power supply and inadequate electrical connections		
	Financial (Internal)						
	Marketing/Promotion (Internal)						
	POLITICAL		Job security /tenure				
	ECONOMICAL						
	SOCIAL						
	TECHNOLOGICAL						
	LEGAL						
	ENVIRONMENTAL						
	Human Resource (Internal)				PRCRTC-22-W11 Limited regular positions and job order status of researchers and administrative officers		

	Operations (Internal)			PRCRTC-22-S13 Available plantilla positions for Science Research Assistant/Aide, Administrative Officer	OVPREI-21-W-22 No regular staff (administrative and technical positions) assigned to some research centers (eg. RCCRDC, ARIC, ViCARP, Extension, Research and Innovation)		
	Financial (Internal)						
	Marketing/Promotion (Internal)						
	POLITICAL		Training and personnel development				
	ECONOMICAL						
	SOCIAL					PRCRTC-22-O1 Collaboration between research institutions and funding agencies	PRCRTC-22-T5 Limited opportunity for hands-on training due to COVID-19 restrictions
	TECHNOLOGICAL					PRCRTC-22-O11 Available on-line training/webinars	
	LEGAL						
	ENVIRONMENTAL						
	Human Resource (Internal)			PRCRTC-22-S1 Pool of experts with diverse background in research PRCRTC-22-S14 New faculty researchers are receptive to training and mentoring	PRCRTC-22-W2 Majority of senior faulty researchers are due for retirement		
	Operations (Internal)			PRCRTC-22-S15 Existing Information, Education & Communication Committee	PRCRTC-22-W12 No proper turnover of documents from outgoing to incoming researchers (faculty and research assistants)		
	Financial (Internal)						
	Marketing/Promotion (Internal)						
	POLITICAL		Adequate facilities and resources				
	ECONOMICAL						
	SOCIAL						

	TECHNOLOGICAL						
	LEGAL					PRCRTC-22-O12 Regulatory policies of exchange in materials	
	ENVIRONMENTAL						PRCRTC-22-T6 Utilization of disease-infected planting materials clientele (farmers and researchers)
	Human Resource (Internal)						
	Operations (Internal)			PRCRTC-22-S6 BPI Accredited PhilRootcrops nursery for sweetpotato and cassava planting materials distribution	PRCRTC-22-W13 Non-compliance of periodic equipment calibration in research laboratories		
				PRCRTC-22-S16 FDA compliant food processing laboratory	PRCRTC-22-W14 Germplasm collections are exposed to biotic and abiotic stresses		
				PRCRTC-22-S17 Germplasm collections of 4 major rootcrops (cassava, sweetpotato, taro, yam)	PRCRTC-22-W15 Slow procurement of resources and facilities for research and innovation		
				PRCRTC-22-S18 Established protocol for cassava and sweetpotato pre-planting treatment			
	Financial (Internal)						
	Marketing/Promotion (Internal)						
Interested Party: Community	POLITICAL		Communities' request problems are addressed based on needs				
	ECONOMICAL						
	SOCIAL					PRCRTC-22-O13 Available social media and communication routes for promotion and awareness	PRCRTC-22-T7 Losing stakeholders and target client's interest in the extension project
	TECHNOLOGICAL						
	LEGAL						
	ENVIRONMENTAL						

	Human Resource (Internal)						
	Operations (Internal)						
	Financial (Internal)						
	Marketing/Promotion (Internal)			PRCRTC-22-S5 Availability on-air and digital broadcast program "Magmalambuon sa Lagutmon" for technology promotion PRCRTC-22-S19 RBME system to ensure relevance and alignment of extension projects	PRCRTC-22-W16 Weak stakeholders engagement and participation in development programs and projects		
Interested Party: Government Agencies and Regulatory Bodies	POLITICAL		Environmental protection and ethical behavior				
	ECONOMICAL						
	SOCIAL						
	TECHNOLOGICAL						
	LEGAL						
	ENVIRONMENTAL						
	Human Resource (Internal)						
	Operations (Internal)			PRCRTC-22-S20 Exiting policy on solid waste management	PRCRTC-22-W17 Non-compliance of DENR regulatory requirements		
	Financial (Internal)						
Marketing/Promotion (Internal)							
Interested Party: Accrediting Agencies	POLITICAL		Compliance with standards and requirements				
	ECONOMICAL						
	SOCIAL						
	TECHNOLOGICAL						
	LEGAL						
	ENVIRONMENTAL						
	Human Resource (Internal)						
	Operations (Internal)			PRCRTC-22-S21 Compliant to ISO 9001 standards (No NC)	OVPRE-19-W36 Extensive paper works		
	Financial (Internal)						

	Marketing/Promotion (Internal)						
Interested Party: Government, Non- government Agencies and Accrediting Agencies	POLITICAL		Proper and efficient utilization of funds as indicated in the terms of reference				
	ECONOMICAL						
	SOCIAL						
	TECHNOLOGICAL						
	LEGAL					PRCRTC-22-O14 Effective and efficient annual auditing of fund utilization	OVPRE-19-T18 Stringent rules and regulations on procurement law
	ENVIRONMENTAL						
	Human Resource (Internal)						
	Operations (Internal)			PRCRTC-22-S22 Established guidelines for procurement (PPMP and PR)	OVPRE-19-W35 Slow procurement process		
	Financial (Internal)						
	Marketing/Promotion (Internal)						
	POLITICAL		Timely submission of reports				
	ECONOMICAL						
	SOCIAL					PRCRTC-22-O15 Scheduled reporting of project updates to concerned agencies	OVPRE-19-T19 Very short notice from concerned agencies on deadlines
	TECHNOLOGICAL						
	LEGAL						
	ENVIRONMENTAL						
	Human Resource (Internal)						
	Operations (Internal)			PRCRTC-22-S23 Submission of quarterly reports	OVPRE-19-W31 Delayed submission of reports from other concerned units (e.g financial, terminal reports) OVPRE-19-W33 Work overload		
	Financial (Internal)						
	Marketing/Promotion (Internal)						

Red – issues identified in OVPREI ROAM 2021 with risks that were not minimized or eliminated

Black- new issues identified by the center

Blue – non conformities detected and customer feedback

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