



PACIFIC REGIONAL INNOVATION NETWORK

# VANUATU INNOVATION REPORT & PROPOSED INNOVATION WORK PLAN 2020 - 2025

Empowering Ni-Vanuatu lives with affordable, accessible  
and sustainable innovations

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# ACRONYMS

<b>CROP</b>	Council of Regional Organisations in the Pacific
<b>ECO</b>	Economy Pillar
<b>GPS</b>	Global Positioning System
<b>ICT</b>	Information Communication and Technology
<b>MALBF</b>	Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity
<b>MoE</b>	Ministry of Education
<b>MOU</b>	Memorandum of Understanding
<b>NGO</b>	Non-Government Organisation
<b>NSDP</b>	National Sustainable Development Plan
<b>OGCIO</b>	Office of the Government's Chief Information Officer
<b>PRIN</b>	Pacific Regional innovation Network
<b>PSC</b>	Public Service Commission
<b>RBV</b>	Reserve Bank of Vanuatu
<b>SDG</b>	Sustainable Development Goals
<b>SOC</b>	Society Pillar
<b>TRBR</b>	Telecommunications Radiocommunications and Broadcasting Regulator
<b>UNDP</b>	United Nation Development Program
<b>USP</b>	The University of the South Pacific
<b>VBTC</b>	Vanuatu Broadcasting and Television Corporation
<b>VCCI</b>	Vanuatu Chamber of Commerce and Industry
<b>VIT</b>	Vanuatu Institute of Technology
<b>VMGD</b>	Vanuatu Meteorology and Geohazards Department
<b>VNSO</b>	Vanuatu National Statics Office
<b>VBS</b>	Vanuatu Bureau of Standards

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**Vanuatu Innovation Report and Proposed Workplan Tables and Figures**

1. This Report synthesizes the response from a survey on Innovation carried out in May 2020 in Port Vila Vanuatu.
2. The table and figures contained in the report are representative of the sample population of the survey conducted during the period mentioned above.
3. All data displayed in the tables and figures belong to the Pacific Regional Innovation Network (PRIN).

## OVERVIEW

The Pacific Regional Innovation Network (PRIN) is an innovative partnership initiative between the University of the South Pacific (USP) and the United Nations Development Programme (UNDP), seeking to further support regional innovation in the Pacific.

Innovation is the translation of ideas into goods or services that creates value for the communities. Innovations in Vanuatu are most successful when they assist in building capacity or improving the quality of all lives sustainably. Though Vanuatu widely benefits from its abundant natural resources, increasing technological infrastructures, traditional approaches and stakeholder collaboration, the need for more capacity building, financial support and stakeholder collaboration remain as a crucial need to advance innovation initiatives.

The object of this report is to understand the concept of innovation at the local (Vanuatu) context. This report consolidated responses from a survey conducted on Innovation in Vanuatu. The survey seeks to identify existing innovations, innovation strengths that can be maximized at a national level, stakeholders who may support innovations, and also understand the expectations of innovation at the country level. The results had formed the basis of the innovation work plan (see pages 23 - 28) for Vanuatu which will be implemented by all local stakeholders.

## METHODOLOGY

After the stakeholders were identified and informed of the survey, 8 students who were assigned to collect the questionnaire responses were given training around the type of responses and data expected to be collected during the 2-day survey.

Most of the 57 identified stakeholders (see Appendix for stakeholders list) were emailed the survey questionnaire with the hope of receiving

at least one response from each of the stakeholders. The 8 students had paired up into 4 groups, and each group was assigned a list of stakeholders from which responses were to be collected. Some of the responses were received through digital form while the majority was physically collected by the 8 students during their 2-day survey. The completed questionnaires received totaled up to 139.

The questionnaire was composed of 8 open ended questions (see Appendix for questionnaire sample) to gain as much detail from the respondents. Qualitative analysis was used to analyze the responses to the questions. This was done by summarizing responses into categories that represent the core meaning of each response. Graphs were then formed from the categories of responses for each question. The summary of the population size was easily derived from a direct quantitative analysis of the data identified from Age, Gender and Organization fields from the questionnaires.

## STAKEHOLDERS

56 organisations/institutions across the 5 main sectors: Government, Non-Government Organisations (NGOs), Private sector, Education Institutions and Statutory Authorities (see Appendix for stakeholders list) were identified and had been given the questionnaire. However only 73% (41 out of 56) had responded. Some of which had more than one respondents.

## LIMITATIONS

The sample size may not be representative of all stakeholders. One of the challenges faced is the COVID-19 pandemic that had limited the participation of some of the stakeholders as they had other pressing priorities to commit to. Nevertheless the data collected is very much

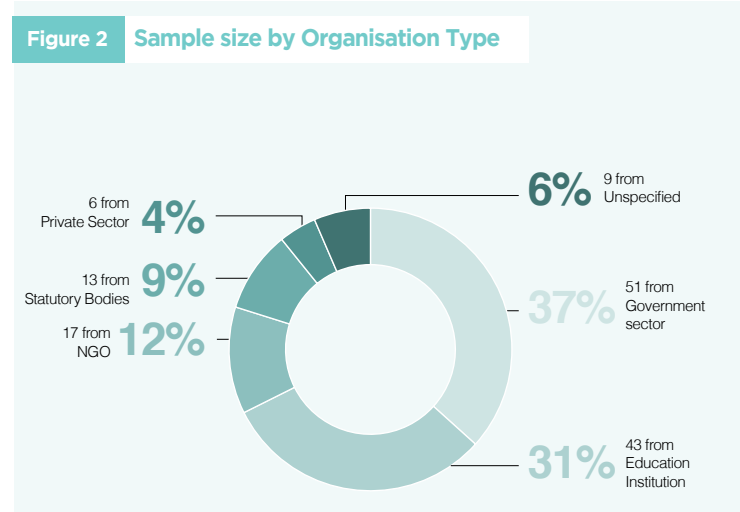
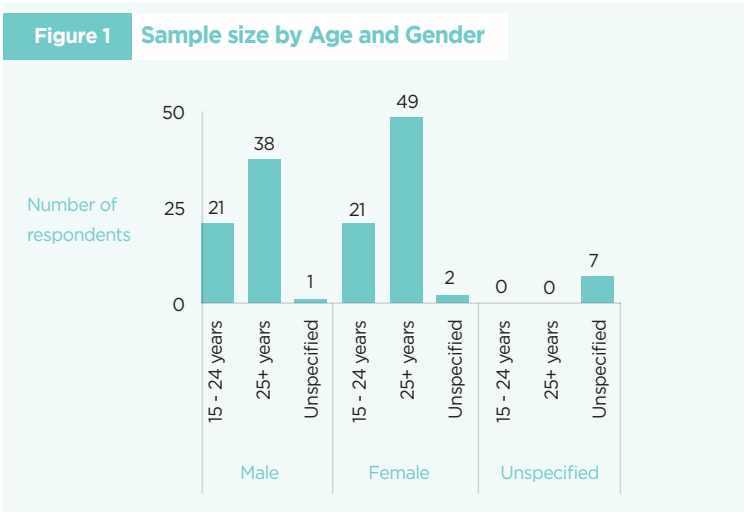


Photo: Students attempting the Innovation survey, 2020 © George Worworbu

useful as an initial attempt to understand innovation in Vanuatu.

The sample size consisted of a good balance in gender with more respondents within the 25+ age group (see Figure 1). It is also clearly

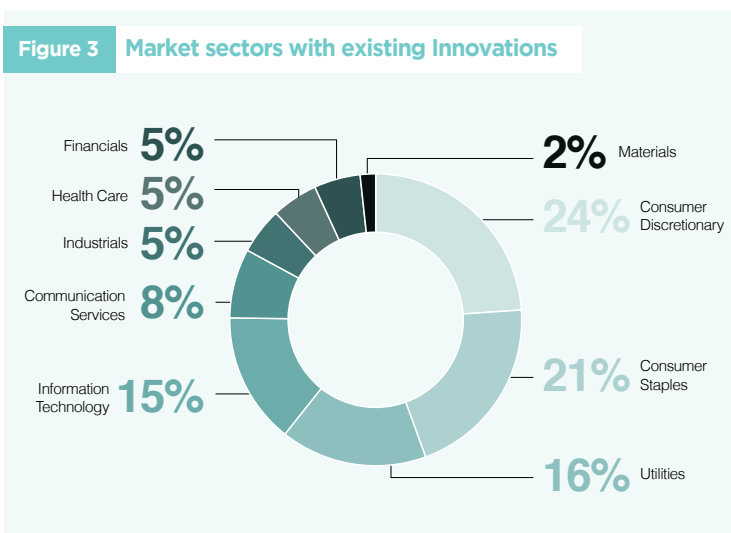
shown that majority of the respondents were from government and education institutions (see Figure 2).



## UNDERSTANDING INNOVATION

### Existing Innovations in Vanuatu

The results after the data consolidation process shows that most innovations in Vanuatu have capitalized on the natural resources. The findings consistently depict innovation as an improvement to the quality of life with more focus placed on sustainability in terms of human resources, finance, and traditional practices to name a few.



Responses from the survey (see Figure 3) have identified Consumer Discretionary (24%), Consumer Staples (21%), Utilities (16%) and Information Technology (15%) as the market sectors with the highest number of activities that have aspects of innovation. Innovative

activities within these sectors (based from the results) mostly involve Agriculture, Capacity Building Programs, utility (water, gas, light) systems and online commercial activities. The market sectors are based on the Global Industry Classification Standard.<sup>12</sup>

In the following, an overview of specific innovative initiatives within some of the sectors identified in Figure 3 will be presented:

#### Consumer Discretionary

Under this sector, stakeholders within the Education and Training industry in particular are executing impactful innovations. Awareness programs, tourism activities, and online retail services are also included within this sector. Some of which are mentioned below:

- **Youth Leadership, Innovation and Entrepreneurship programs** coordinated by Non-Government Organisations (NGO) such as ‘Youth Challenge Vanuatu’ equips youth with skills for employment and provide entrepreneurship opportunities.
- **The Social Economic Empowerment development program** is one of many cross-functional development programs for communities that aims to nurture skills, build networks, and share resources to eradicate poverty and injustice.
- **ICT-based Programs** like the ‘SMART sistas’ empowers young females (between age 11 and 15) with ICT knowledge and skills and could be one of the platforms through which Vanuatu’s digital advancement gap could be bridged.
- **The Vanuatu Agricultural Research and Training Center** is one of Vanuatu’s leading institution in applied research. Some of its projects aims to improve agricultural production through the propagation of new resilient root crops, breeding of resilient cattle varieties, and improving post-harvest processes and others.
- **Online Education** have been heavily relied upon in sustaining the

<sup>1</sup> <https://corporatefinanceinstitute.com/resources/knowledge/finance/the-sp-sectors/>

<sup>2</sup> [https://eresearch.fidelity.com/eresearch/markets\\_sectors/sectors/sectors\\_in\\_market.jhtml](https://eresearch.fidelity.com/eresearch/markets_sectors/sectors/sectors_in_market.jhtml)





Photo: Eilyn a local vendor posing with her locally made products that are also available online © TRBR Annual Report 2018



Photo: SMART Sistas participating in the Drone launch for trial vaccine delivery at Takara, North Efate, Vanuatu on 5 December 2018 © TRBR Annual Report 2018

delivery of education during the recent COVID-19 situation. This approach has given students the benefit of accessing a wider range of online materials in various forms, appealing to different learning behaviors.

- The recent **establishment of the Vanuatu's National University** was also mentioned as an initiative that will allow more locals to gain quality tertiary education.
- **Online retail services:** Local authentic products produced by girls and women are showcased through the aid of online technology platforms like 'shop Vanuatu'. The online market have exposed vendors to a wider audience with a potential to expand to the international market.

#### Health Care

- **Drones and Health care services:** The recent deployment of drones by the Ministry of Health in 2019 to deliver medical supplies to remote or isolated areas have supported the government's goal for inclusivity of government health services.
- **Reusable sanitary pads:** This product is a part of social innovation that aims to promote good health and hygiene especially for women in rural communities.

- **Digital Campaigns:** The health sector is widely adapting digital platforms (like social media) for extensive public campaigns that are cost-effective.

“ It is important that innovation support social transformation and not only business development. - Anonymous survey participant ”

#### Consumer Staples

The Food products industry (mainly Agricultural Products) within the consumer staples sector have engaged more local entrepreneurs.

Local entrepreneurs find leverage in agricultural activities to produce products of value that sustainably contribute to the country's economy. The results from the survey have identified a range of locally produced consumer staple products which includes the production of coconut oil (also used as a substitute for kerosene), coffee, cocoa, kava, poultry and fishing.

## FINDINGS



Photo: Local rice processing plant on Tanna island, July 2020 © Freddy Manueta



Photo: Local rice packaged, July 2020 © Freddy Manueta

These initiatives have also incorporated resilient measures into their production process against changing climate conditions that may negatively impact the availability of resources.



Due to Vanuatu's geographical isolation, it is necessary for Vanuatu farmers to produce high quality products, organically grown, in order to secure new markets and to remain competitive.

- Anonymous survey participant



The agriculture sector and its developing partners are continuously striving to sustainably support the country's livelihood and economy. Listed below are some of the novel tools and practices that effectively support farmers within this industry:

- **Agriculture livestock app:** An app that allows farmers around Vanuatu to easily access updated agriculture information and

tools to aid farmers in their production.

- **Irrigation systems:** The department of Agriculture utilizes solar energy to set up sustainable farm irrigation systems based on specific water intake by each crop.
- **Agri-tourism:** Farmers are also encouraged to engage in cross-industry initiatives such as Agri-tourism which better utilizes land space and maximizes profitability.
- **Talipa fish farms (Aquaculture):** This fast-growing and low-maintenance breed of fish creates income-generating opportunities for many rural communities.
- **Rice farming:** Existing rice farms and processing plants on Tanna Island will address the domestic market demands and potentially assist the government with disaster food supplies.
- **Frozen Kava:** As the supplier of the best kava in the Pacific, Vanuatu now exports frozen kava through Finefood Company Limited. This form of kava is faster to produce and maintains its quality of taste in comparison to the powdered form.
- **Mobile markets** have become a recent trend in selling locally grown products. The recent situation of COVID-19 have imposed restrictions on public market buildings and resulting in some local farmers starting mobile markets as a more efficient approach in selling their produce.



Photo: Solar susidy products distributed, 2017 © Ministry of Climate Change Annual Report 2017



Photo: Students at Brenwei, Malekula accessing e-library, 2018 © TRBR Annual Report 2018

### Information Technology

The services (generally including Internet, applications, systems, and databases management) within this sector has greatly improved business efficiency and profitability within Vanuatu. Results from the survey shows that most organisations are extending their services online for both the benefit of patrons and businesses.

The following initiatives have been identified within the Information Technology sector:

- **One-stop national Data Hub:** the RBV and its partners have implemented an enhanced General Data Dissemination System as a one-stop national data hub to support improved data transparency, encourage statistical development, and help create synergies between data dissemination and surveillance.
- **GPS in Fleet Management:** GPS technology have been adopted by the government's fleet management to easily manage vehicle usage and related expenses.
- **Services through Mobile Apps:** A few organizations including statutory bodies and government ministries are effectively using mobile applications to run some of their services. This allows more transparency and convenience for users as the mobile data pricing continues to drop <sup>3</sup>. The mobile application 'TRBR Fact

information' is a classic example of an app that contains resources that educate the general public on telecommunication related matters and acts as a grievance portal for online users.

- **Public Private Partnership:** Collaborations between the Office of the Government's Chief Information Officer and Telecommunication companies in terms of sharing resources (e.g. network towers) have extended and maintained coverage of telecommunication and online services to many remote areas across Vanuatu's archipelagic islands. This has enabled rural communities to easily access critical services available online.

### Financials

- The widespread usage of **Mobile Paying Systems**, initiated from financial institutions, is an inclusive approach for all 200,000+ mobile subscribers <sup>4</sup> to easily engage in financial transactions without much effort or cost.
- **Cash Transfer Programs** (using e-vouchers) was indicated as an initiative to stabilize the local economy cash flow and strengthen the resilience of affected stakeholders during a national crisis.

<sup>3</sup> TRBR 2018 Annual Report, Page 59

<sup>4</sup> TRBR 2018 Annual Report, Page 56

## FINDINGS



Photo: 3-year-old Sarah washing her hands using Bamboo Tippy tap, 2017 © World Vision

### Utilities

- **Access to fuel:** The on-going establishments of new fuel stations in dense-populated remote areas create opportunities for rural business developments.
- **Affordable power source:** There are existing geothermal power stations powering electricity at reasonable prices.
- **Bamboo Tippy tap:** Apart from water systems that use solar pumps and desalination machines, the Vanuatu innovation 'Bamboo tippy tap' created by a villager from southwest Tanna not only improves children's health but encourages the use of local sustainable materials.
- **Subsidy scheme:** In an attempt to realize Vanuatu's goal of using 100% renewable energy by 2030 <sup>5</sup>, the Vanuatu government's Department of Energy leads in implementing projects that subsidize solar products for the public. Such innovation increases business opportunities for the private sector (solar product vendors) whilst expanding access to reliable electricity throughout the country.

### Industrials

Industries within this sector as identified by the survey responses include Professional services, Research, and Transportation Infrastructure.

- **Policy intervention:** Some legislation have integrated innovation while others such as the ban of plastic bags (passed in parliament in 2018) have indirectly given rise to the production of local alternative products. In addition, a good number of other government policies have included strategies for building capacities that will drive future innovations.
- The existing **establishments of sector-specific Associations and Committees** such as the Farm support association, the Vanuatu Business Resilience Committee, and the Vanuatu National Youth Council help to provide guidance, assistance and act as advocators for its member stakeholders.
- **The Entrepreneurship and Innovation hub** administered by V-lab provides an environment to assist and mentor individuals with innovative ideas.
- **Community-based Approach:** In maintaining and upgrading urban and rural road infrastructure throughout the country, the ministry of infrastructure and public utilities has adapted a community-

<sup>5</sup> National Energy Road Map 2016 - 2030: <https://www.nab.vu/sites/default/files/documents/NERM2016-30.compressed.pdf>

based approach in which the responsibility for maintenance of a certain length (km) of road is contracted to communities. This approach instigates responsibility and ownership by communities.

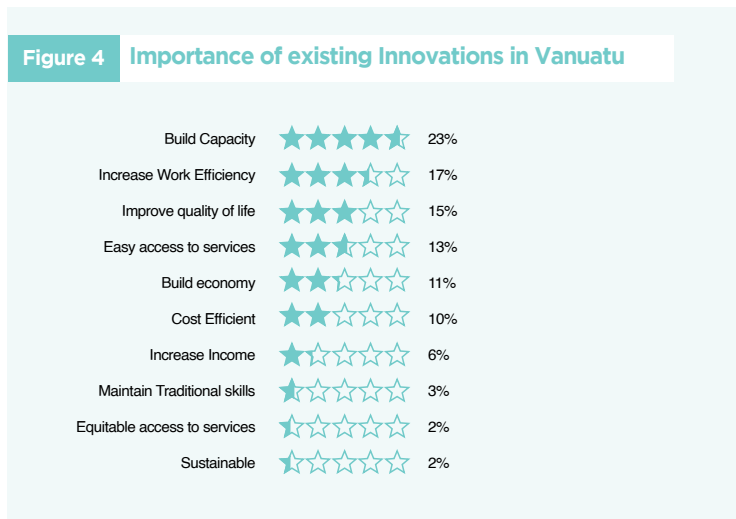
### Importance of existing Innovations in Vanuatu

The survey participants were asked to give reasons as to why the existing innovations previously outlined were important for understanding innovation in the context of Vanuatu. The responses from participants were categorized into 10 attributes or desirable outcomes of innovation (see Figure 4) that makes the innovation critical for Vanuatu.

From the results, it can be noted that building capacity (23%), increasing work efficiency (17%) and improving the quality of life (15%) are among 3 of the highest recorded desirable outcomes of innovations in Vanuatu.

These results, when compared to figure 3, re-affirms that most of the innovations within the education and training industry are focused on building capacity. The increase in work efficiency of stakeholders is prevalent among innovations that have integrated some aspects of information technology. The quality of life has been generally improved by various innovation but especially within the utilities sector where the provision of sustainable water and energy supply is involved.

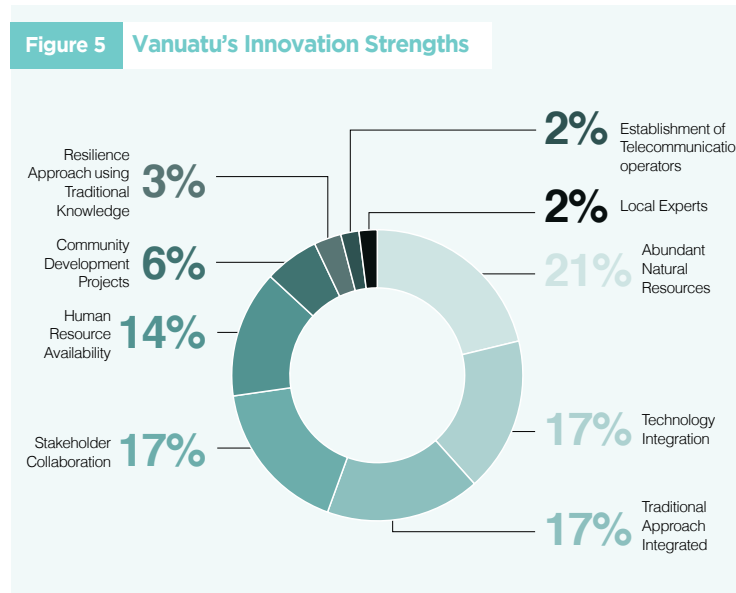
The attributes in Figure 4 may also be viewed as possible gaps that the country may need to strengthen through innovation.



## SUPPORTING INNOVATION

### Innovation Strengths for Vanuatu

The analysis from the results (see Figure 5) shows that the success of most innovations within Vanuatu are very much dependent on the resource availability (21%), technology integration (17%), the integration of traditional approaches, and good collaboration between stakeholders (17%).



The following elaborates on these key strengths or innovation-dependent factors which have been identified to increase innovation success and/or opportunities in Vanuatu.

- **Abundant Natural Resources:** Resources on land and sea has

allowed an increase in locally-made products and in particular subsistence farming. There is also potential to process some plants into pharmaceutical products to cure diseases.

- **Technology integration:** Technology, now integrated into most business models, is an enabler for businesses to reach maximum productivity.
- **Stakeholder Collaboration:** The survey result seems to suggest the existence of an active support of technical and financial resources to the government and NGOs from various development partners. The private sector has also supported both government innovations and entrepreneurs. Furthermore, government department stakeholders such as the OGCIO will support and drive innovation through technology. There is also an ongoing development of policies that encourages new innovation.
- **Human Resource Availability:** There is a large human resource pool available to sustain innovations especially in the primary and secondary sector that does not require much technical skills.
- **Community Development Projects:** There are existing practices on how to preserve fruits, vegies, and root crops for food security and income-generation purposes. Such initiatives build communities' capacity in adding value to their local resources.
- **Resilience Approach using Traditional Knowledge:** Most communities build resilience to combat the negative impacts of tropical cyclones, droughts and other environmental issues by using existing traditional knowledge like the preservation method to allow breadfruit to last for months, and building cyclone-proof houses from local materials.
- **Establishment of Telecommunication operators:** The

telecommunication operators provide the necessary infrastructure for innovative development.

Though not overly mentioned, the investment-friendly environment within Vanuatu with no heavy regulations may also be considered as a stimulus for economic growth through innovation.

### Local Stakeholders Support

There is still a need for support mechanisms to enable potential innovators to produce valuable innovations with the previously identified strengths.

From the survey, most stakeholders have identified the following ways as a necessity to strengthen existing and potential innovations in Vanuatu:

- **Capacity Building:** This includes group-specific training programs, public awareness of best sustainable development practices, entrepreneurship program between universities and private sector, and using mentors in existing innovation programs. Also, the inclusion of 'Innovation' and 'Entrepreneurship' in school curriculums may inculcate innovation in students at an early age.

“ Innovation intervention should support national priorities and build human resource capacity to sustain the innovation.  
- Anonymous survey participant ”

- **Financial Support:** This includes financial costs in proposal stage through implementation stage from government and development partners.
- **Research:** Strengthening existing technical research institutions with more resources and facilities to accommodate more types of innovation through applied science and research, and pilot projects.

“ Innovation coupled with science should be the driving forces for the development of our country.  
- Anonymous survey participant ”

- **Strengthen Provincial Headquarters:** Equip provincial headquarters with necessary resources that may promote and encourage innovation in the outer islands.
- **Resource Equitability:** This ensures that critical services, infrastructure and resources that some innovations may depend on, are equally accessed by all. Internet services in particular, upon which most business operate, should be made accessible and affordable to all.
- **Government Intervention:** This includes the setup of financial support schemes, and the setup of institutions that may create, guide, protect and improve innovations.
- **Innovation incubators:** Assist and promote existing innovation hubs.

## FINDINGS

Apart from government stakeholders, a range of other stakeholders including statutory bodies, private sector, NGOs, Council of Regional Organisations in the Pacific (CROP) agencies and training institutions have been identified as potential key players in supporting innovation strengths within Vanuatu.

### PRIN Support

The survey results show that stakeholders have positively regarded PRIN as a network that will help support innovation in the following ways:

- **Research and Development:** A workspace specialised and equipped with the necessary resources to facilitate the development process of innovations. This may include sourcing funds, provision of technical expertise/scientists, and marketing the innovation. The research component may also include identification of transformative innovations that will contribute to achieving Vanuatu's National Sustainable Development Plan (NSDP) goals.
- **Training:** A center that provides innovation and entrepreneurship training to communities.
- **Networking and Collaboration:** Providing a platform that facilitates partnership and connections between innovators, relevant stakeholders and experts both locally and regionally.
- **Information and Resource Center:** A central repository that allows information and resource sharing and exchange among stakeholders.

A comparison between the support from local stakeholders and the support from PRIN (see Table 1) clearly shows that capacity building and financial support is a great need for most innovations. Contrastingly, more government interventions (15%) would be required from local stakeholders while PRIN is expected to establish a platform to support research and development (17%), and stakeholder collaborations (16%) in order to successfully execute innovations within Vanuatu.

**Table 1** Expected support from Local stakeholders and PRIN

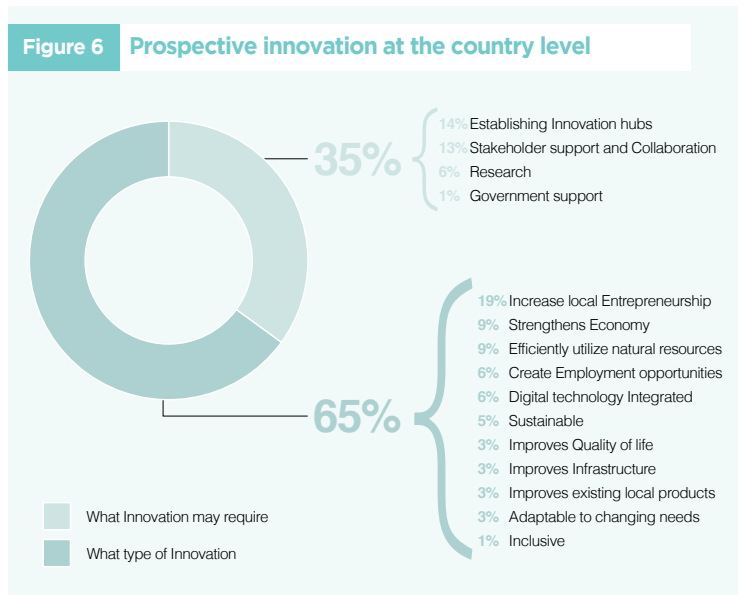
Type of Support	Local Stakeholders Support	PRIN Support
1 Capacity Building	48%	36%
2 Financial Support	23%	25%
3 Research and Development	6%	17%
4 Information and Resource Center	1%	7%
5 Government Intervention	15%	-
6 Resource Equitability	6%	-
7 Strengthen Provincial Headquarters	1%	-
8 Networking and Collaboration	-	16%
	100%	100%



## PROSPECTIVE INNOVATION

The participants' responses to prospective innovation at a country level have been sorted into two categories of responses (see Figure 6). 65% of responses reflected the types of innovation expected and 35% of the responses reflected the kind of innovation support that would be required at a country level.

It is interesting to note that most of the data in Figure 6 re-enforces the responses captured in Table 1.



The following will give specific details on these results. This will also be used to inform the proposed innovation work plan for Vanuatu.

- **Establishing Innovation hubs:** The establishment of a 'talk space' or 'innovation hubs' through which innovators and relevant stakeholders may share ideas and build capacities.
- **Improved and Relevant local products:** Enhancement of existing local products.
- **Government support:** Achieved through actions that include:
  - More collaboration between government and relevant authorities to extend essential services to the rural population
  - Innovation integrated into government policies
  - Promotion and support of innovation efforts
  - Budget allocated for sustainable innovations
  - Investments in research development
  - Establishment of a government Research and Innovation center and a working group for that matter
- **Education system** to integrate Innovation initiatives into curriculums.
- **Entrepreneurship:** Explore and/or create new potential markets to encourage more entrepreneurship that improve lives and strengthens the economy.
- **Digitize** all business services with more effort on contextualizing technology application to Vanuatu context and language.
- **Research:** More research on innovation coupled with science such as the development of cost-effective production materials that can be naturally sourced.

# CONCLUDING REMARKS

This report has provided evidence to the types of existing innovations within Vanuatu. It identifies Education, Agriculture, Technology and Utilities as industries that generate most innovations. It also identifies innovation gaps and opportunities that can be strengthened through stakeholder collaborations across the sectors.

Among the essential mechanisms to support innovations were capacity building, financial support, stakeholder partnership between the government and relevant stakeholders, and the establishment of a Research and Development center.

The report had also highlighted natural resources, human resources, stakeholder collaborations, and the integration of traditional knowledge and modern technology to be among the core innovation strengths for Vanuatu.

The analysis have conclusively demonstrated that most innovations are aimed at improving the economy, and quality of life, and simultaneously designed to be affordable, accessible and sustainable amidst changing environmental conditions.

The results from this report will provide useful evidence to design the Innovation work plan for Vanuatu (see next section).





Innovation is the transformation of an idea into value either by enhancing an existing product, service, or process or by creating a new product or service.

“ Without innovation companies die.  
Without innovation societies die.

- Anthony D William

During a UNDP Asia-Pacific Regional  
Innovation Summit

”

In an attempt to support regional innovation UNDP is working with USP to support innovation in 3 countries including Vanuatu, Marshall Islands and Tonga. Through the Pacific Regional Innovation Network, USP-UNDP will support the establishment of national innovation hubs through the USP's 3 regional campuses.

For a start, the innovation hub will be a collaborative space, equipped with basic necessary resources for potential users and stakeholders to develop their innovative ideas and practices.

The survey was framed to simulate a SWOT analysis from the stakeholders' responses which formed the basis of this proposed work plan.

The goal of this proposed work plan is to identify priority actions that will foster the growth of innovations within Vanuatu based on the findings from PRIN Phase 1. More importantly, the implementation of the plan will allow for greater dialogue among stakeholders and also support a coordinated approach to innovation in Vanuatu. It will also promote the transformation of research outputs into social and economic value. Local stakeholders will own and drive this plan.

# OVERVIEW OF THE PROPOSED WORKPLAN 2020 - 2025

## STRATEGIC ALIGNMENT

### Alignment to Sustainable Development Goals

Innovation is a cross-cutting theme that has been integrated throughout the USP's Strategic Plan 2019 - 2021. The USP strategic plan is aligned to the Global Sustainable Development Goals and focuses on the translation of research into sustainable outcomes. The PRIN program has allowed USP and UNDP to create dialogues and extend their support for Innovation to other Pacific countries including Vanuatu.

Vanuatu's alignment to the Global Sustainable Development Goals (SDG) is reflected through its NSDP 2016 - 2030. This plan has contextualized the SDGs into Vanuatu's context and encompasses the 3 main pillars below.

**SOCIETY PILLAR** **ENVIRONMENT PILLAR** **ECONOMY PILLAR**

This work plan will strengthen innovation efforts through research and training, strong partnership, and good governance frameworks with an objective of achieving Vanuatu's sustainable development goals.

The innovation activities for this proposed work plan are derived from the responses of the survey. All of which are aligned to 11 of the 15 Vanuatu NSDP goals. The specific goal objectives under these 11 goals are also shown in the following:

<b>SOC 1</b>	<b>Vibrant Culture Identity</b>	<b>SOC 1.2</b> Preserve and enhance cultural and traditional knowledge, including appropriate medicines, natural remedies and healing practices
<b>SOC 2</b>	<b>Quality Education</b>	<b>SOC 2.1</b> Ensure every child, regardless of gender, location, educational needs or circumstances has access to the education system

<b>SOC 4</b>	<b>Social Inclusion</b>	<b>SOC 2.4</b> Increase higher education opportunities, including technical and vocational training and skills
<b>SOC 6</b>	<b>Strong and Effective Institutions</b>	<b>SOC 4.6</b> Provide opportunities, support and protection services for youth and children as valued members of society
		<b>SOC 6.1</b> Enhance the capacity and accountability of public officials, and ensure the impartiality and effectiveness of performance management systems
		<b>SOC 6.4</b> Strengthen national institutions to ensure they are cost-effective and well-resourced to deliver quality public services
		<b>SOC 6.5</b> Strengthen local authorities and municipal institutions to enable decentralised service delivery
		<b>SOC 6.7</b> Guarantee the public's right to information
		<b>SOC 6.8</b> Coordinate donor resources to align with national objectives
		<b>SOC 6.9</b> Strengthen research, data and statistics for accountability and decision-making
<b>ENV 1</b>	<b>Food and Nutrition Security</b>	<b>ENV 1.5</b> Enhance traditional agricultural practices, focusing on disaster risk reduction and climate change adaptation
<b>ENV 2</b>	<b>Blue-Green Economic Growth</b>	<b>ENV 2.1</b> Increase access to knowledge, expertise and technology to enact our blue-green growth strategies
		<b>ENV 2.6</b> Ensure adequate financial resources to support our sustainable development aspirations
<b>ENV 4</b>	<b>Natural Resource Management</b>	<b>ENV 4.7</b> Build capacity and support local communities to manage natural resources
<b>ECO 1</b>	<b>Stable and Equitable Growth</b>	<b>ECO 1.4</b> Increase trade and investment opportunities and reduce barriers, including through the use of Aid-for-Trade
		<b>ECO 1.5</b> Increase access to markets for Vanuatu exports
<b>ECO 2</b>	<b>Improve Infrastructure</b>	<b>ECO 2.1</b> Increase access to safe, reliable and affordable modern energy services for all that are increasingly generated from renewable sources and reduce reliance on imported fossil fuels

ECO  
3

Strengthen  
Rural  
Communities

- ECO 2.9 Increase use of and access to information and communications technologies, including on-line government services
- ECO 3.3 Improve access to markets through quality infrastructure, utilities, storage and processing facilities in rural areas
- ECO 3.4 Increase primary sector production, including through extension services and cooperatives
- ECO 3.5 Improve the collection, analysis and dissemination of market data on the rural economy and communities

ECO  
4

Create jobs  
and business  
opportunities

- ECO 4.1 Improve the collection, analysis and dissemination of market data on the rural economy and communities
- ECO 4.3 Increase production and processing of niche commodities, and value addition to commodities in which Vanuatu enjoys a comparative advantage
- ECO 4.5 Increase the number of decent, productive employment opportunities, particularly for young women and men and people with disabilities
- ECO 4.6 Ensure the health and safety, employment rights and skills development of the workforce
- ECO 4.8 Ensure processes for acquiring and using land for economic activity provides a stable platform for investment and business growth
- ECO 4.9 Strengthen dialogue between government and the private sector, and enact a robust governance framework for effective partnerships

The Vanuatu NSDP 2016 - 2030 can be accessed via the link:  
<https://ogcio.gov.vu/images/nsdp/Vanuatu2030-EN.pdf>

## PRIORITY AREAS EMERGED FROM FINDINGS

The participants' responses for supporting innovation were categorised into 5 strategic objectives (see next section). These objectives were then grouped into 3 area of focus or priority areas: 'Research and Innovation', 'Capacity Development and Training' and 'Governance'.

### Research and Innovation

Initiatives under this priority area will seek to create an impact on the market including economic sustainability.

### Capacity Development and Training

This priority area is supported by initiatives that will build, engage and support communities with an enabling environment for sustainable innovations. It will also seek to establish strong alliances with relevant industries through industry-based supervision, innovation projects, and mentoring programs.

### Governance

This priority area focuses on establishing and strengthening support mechanisms and frameworks to facilitate and advance innovation.

## STRATEGIC APPROACH

### STRATEGIC OBJECTIVES

The 5 strategic objectives below and their respective activities (see workplan) were informed by the survey responses, and will be implemented by various stakeholders.

- 1 Create viable innovation opportunities (such as new markets) that will positively impact peoples' lives, and strengthen the economy.
- 2 Create and support an enabling environment for the sustainable development of innovation in communities.
- 3 Integrate and support Innovation through collaborations between education institutions and industries.
- 4 Establish appropriate systems and framework to effectively administer, develop and protect innovations.
- 5 Integrate enabling technologies to increase innovation productivity and process efficiency.

### OVERVIEW OF THE WORKPLAN STRUCTURE

Below is an overview of the workplan structure that depicts the linkages between the 3 priority areas of the innovation workplan, its 5 supporting objectives and the Vanuatu NSDP goals.

Priority Area	Strategic Objectives	NSDP Goal Alignment
Research and Innovation	1	SOC 1, SOC 6, ENV 1, ENV 2, ECO 2, ECO 3, ECO 4
	2	SOC 1, SOC 2, SOC 4, SOC 6, ENV 2, ENV 4, ECO 1, ECO 2, ECO 3, ECO 4
Capacity Development and Training	3	SOC 2, SOC 6, ENV 2, ENV 1, ENV 4
	4	SOC 6, ENV 2, ECO 2, ECO 4
Governance	5	SOC 2, ECO 2, ECO 4

# RESEARCH AND INNOVATION



Of the 15 Vanuatu NSDP Goals, strongly associated goals for this priority area are shown.

STRATEGIC OBJECTIVE **1** Create viable innovation opportunities (such as new markets) that will positively impact peoples' lives, and strengthen the economy.

Activity	Outputs / Indicators	Responsible	Timeframe	NSDP Policy Objective
1.1 Facilitate engagements with other local and regional innovation hubs	Research Papers of joint initiatives, shared online resources	USP Emalus Innovation Hub Coordinator		SOC 6.9
1.2 Create a pool of accessible experts to support innovation across industries.	Experts registered in the hub's database	VCCI, USP, OGCIO		SOC 6.9, ENV 2.1
1.3 Promote strategic partnership with private and public sector	Partnership agreements signed	All government line ministries, VCCI, USP		ECO 4.9
1.4 Contextualizing government online services to Vanuatu context and language	OGCIO	OGCIO		ECO 2.9
1.5 Enhance existing local products to be more cost-effective, inclusive and relevant to Vanuatu's context	Successful launching of improved products	Department of Trades, Womens Affairs, VCCI		ENV 1.5, ECO 4.3
1.6 Explore market opportunities for Innovations that embrace both modern and traditional knowledge	consultation report prepared	Cultural Center, USP, OGCIO		SOC 1.2 , ECO 1.4
1.7 Seek to foster potential industrial collaborations and partnerships locally and regionally	MOU signed	USP, VCCI, Department of Trades		ECO 1.4
1.8 Undertake an audit of industry needs and opportunities to identify potential innovation across sectors	Industry Innovation Analysis Report delivered	USP, OGCIO, USP, VCCI, All sectors		SOC 6.9, ECO 3.5
1.9 Conduct affordable applied research or pilot projects with communities to solve existings problems	Technical report of Applied research	USP, Technical institutions		SOC 6.9
1.10 Identify and leverage existing strengths in communities	Strengths evaluation report delivered	USP, VCCI, OGCIO		ECO 4.3

# CAPACITY DEVELOPMENT AND TRAINING



Of the 15 Vanuatu NSDP Goals, strongly associated goals for this priority area are shown.

STRATEGIC OBJECTIVE **2** Create and support an enabling environment for the sustainable development of innovation in communities.

Activity	Outputs / Indicators	Responsible	Timeframe	NSDP Policy Objective
2.1 Deliver public awareness of best sustainable development practices for Innovation through media and communications	Post event evaluation report delivered	Department of Trades, USP, VCCI, VBTC		SOC 6.7
2.2 Provide specific technical training on product development for targeted innovators	Technical training report delivered	Department of Trades, USP, VCCI		SOC 2.4
2.3 Merge with existing youth development programs to deliver innovation and Entrepreneurship workshops	Workshop report provided	VCCI, Department of Trades, Youth Challenge, VCCI		ECO 4.5
2.4 Work collaboratively with communities and relevant stakeholders to improve rural communities' access to vital services including online services	Stakeholder meetings, Social infrastructure needs assessment	USP, OGCI, Provincial Headquarters		SOC 6.5, ECO 2.9
2.5 Establish strategic partnerships that increase communities' access to financial and technical assistance for projects	MOU signed, reports on initiatives implemented	USP		ENV 2.6
2.6 Conduct trainings on how to effectively utilize local natural resources to produce marketable products	Guidelines, media campaigns	Government departments, USP, MALBF, VBS		ENV 4.7, ECO 3.4, ECO 4.3
2.7 Secure early-stage innovation grants from donors and government financial support schemes	Funds secured	USP, Department of Trades, VCCI		ENV 2.6
2.8 Develop innovation management toolkits to aid entrepreneurs / innovators	Innovation management toolkits reviewed	VCCI, Consultant, Department of Trades		ECO 4.1, ECO 4.6
2.9 Conduct awareness workshops for all stakeholders to address the importance of innovation in all levels of society	Awareness Report	USP, Youth Challenge, Vlab		SOC 6.8



Activity	Outputs / Indicators	Responsible	Timeframe	NSDP Policy Objective
2.10 Identify and accelerate youth entrepreneurs at community level	Entrepreneurs identified and assisted	VCCI		SOC 4.6
2.11 Encourage the integration of local knowledge into sustainable innovations	Delivery of initiative	Cultural Center, USP, MALFB		SOC 1.2
2.12 Develop and support innovation strategies to improve productivity and access to a wider market for local farmers	Innovation strategies developed	Department of Trades, MALFB		ECO 1.4, ECO 1.5, ECO 4.3
2.13 Educate communities on how to use technology and the world wide web, as a self-learning tool and resource for innovation	Workshop report	OGCIO, VCCI		ENV 2.1, SOC 6.7
2.14 Support local entrepreneurs with ICT-related trainings and tools to increase entrepreneurs' online visibility and market opportunities	Training report	Department of Trades, OGCIO		ECO 3.3

STRATEGIC OBJECTIVE **3** Integrate and support Innovation through collaborations between education institutions and industries.

Activity	Outputs / Indicators	Responsible	Timeframe	NSDP Policy Objective
3.1 Facilitate innovation programs between higher education institutions and the private sector including industry engagements	MOUs signed, students completed the program	USP, Technical institutions, Vlab, VCCI		ENV 2.1
3.2 Support the inclusion of innovation in education curriculums	Present drafted Innovation syllabus	USP, MoE, VCCI		SOC 2.4
3.3 Engage tertiary students in innovation projects	Project reports	USP, All sectors		SOC 2.4
3.4 Strengthen existing technical research institutions with resources and facilities to accommodate a wider spectrum of innovation	sponsored resources and facilities, MoU signed	VIT, Agriculture College, government line departments		SOC 6.4
3.5 Organize public events (such as innovation exhibitions and public forums) for tertiary institutions and industry stakeholders to share ideas, and to aspire potential innovators	Innovation Exhibition, Public Forums	USP, Representatives from all sectors, VCCI, OGCIO		ECO 4.9
3.6 Execute award-winning incentive programs to encourage innovation	Incentive programs executed	USP, OGCIO		ECO 4.1
3.7 Provide mentors to train aspiring entrepreneurs	Mentors engaged	USP, VCCI, Government Departments		ECO 4.1
3.8 Encourage cross-industry partnership	MOU signed, Project reports	USP, All sectors		ECO 1.4

# GOVERNANCE



Of the 15 Vanuatu NSDP Goals, strongly associated goals for this priority area are shown.

## STRATEGIC OBJECTIVE 4 Establish appropriate systems and framework to effectively administer, develop and protect innovations.

Activity	Outputs / Indicators	Responsible	Timeframe	NSDP Policy Objective
4.1 Establish a research and innovation working group that appraises project concepts requesting early-stage investment funds.	Working Group TOR approved	USP, All sectors		SOC 6.8
4.2 Establish agreements for Intellectual Property ownership and publication of research	MOU signed	USP, Intellectual Property Office, VCCI		SOC 6.9
4.3 Establish an innovation hub through which stakeholders can apply for innovation funds, build networks, and share research facilities and resources	Innovation hub	USP Emalus Campus Director		ECO 4.1
4.4 Increase stakeholders participation in innovation through efforts to integrate innovation initiatives into all sector policies	sector policies with innovation integrated	USP, All sector stakeholders		SOC 6.1
4.5 Assist in the development of a regulatory framework for Fintech (financial technology) to regulate financial transactions through technology	Fintech regulatory framework developed and approved	TRBR		ECO 2.9
4.6 Support government efforts to regulate internet costs by telecommunication operators	TRBR Report	TRBR, Telecom. companies		ECO 2.9
4.7 Assist government to setup innovation research and development centers	Innovation research and development centers established	OGCIO, USP, regional stakeholders		SOC 6.9
4.8 Seek to establish more innovation hubs within the country	innovation hubs established	OGCIO, USP, regional stakeholders		SOC 6.9
4.9 Facilitate affordable land-lease schemes for innovation projects	land-lease schemes approved	Department of Internal Affairs, USP, Department of Lands		ECO 4.8
4.10 Establish sponsorship schemes for entrepreneurs and innovators wanting to build knowledge and skills in high-demanding specific industry areas	graduands from this scheme	USP, Technical institutions		ENV 2.6
4.11 Support the development of policies and mechanisms that support local entrepreneurs and innovation	policy consultation meetings attended	USP, relevant government department		ECO 4.1

STRATEGIC OBJECTIVE **5** Integrate enabling technologies to increase innovation productivity and process efficiency.

Activity	Outputs / Indicators	Responsible	Timeframe	NSDP Policy Objective
5.1 Create an online information management system to manage potential Intellectual Property and Innovation information	information management system launched	OGCIO, USP		ECO 2.9
5.2 Enable a virtual collaboration space for potential innovators to share resources and knowledge, interact with experts and market their innovation to potential donors	Virtual space created and effective collaboration recorded	USP, OGCIO		ECO 2.1, ECO 2.9
5.3 Support the government's efforts to promote online education	Stakeholder meetings, update reports	TRBR, OGCIO		SOC 2.1
5.4 Create low-tech labs to accommodate cost-effective and relevant low-tech innovations	low-tech labs established	OGCIO, USP, NEXT Limited		ECO 4.1



The work plan, composing of 3 priority areas and 5 strategic objectives, are supported by a range of outputs / performance indicators that have been delegated to various stakeholders across the different sectors.

The proposed work plan provides monitoring elements to enable periodic evaluations. Stakeholders involved in certain activities will develop their relevant work plans and will report on status on a quarterly basis. The timelines will be included after a stakeholder validation workshop.

The Campus Director and the Innovation hub Coordinator will monitor the overall performance and will produce the results in USP's annual report. A steering committee will also be established to provide guidance to the innovation hub and oversee the implementation of this plan.

Periodic evaluations may be necessary in assessing a specific work group, priority area or a strategy. The evaluation information would be crucial for internal decision making.

A mid-term review of the work plan in 2023 will be required to re-adjust any priority areas and objectives, re-evaluate set targets and/or re-allocate resources.

## STAKEHOLDERS

The survey questionnaire (see sample on next page) was sent to all the following stakeholders however the ones highlighted in red indicate those who did not respond.

Key:

**Text in red:** Stakeholder who did not respond to the given questionnaire

### Government Organisations

- Cultural Center
- Department of Agriculture
- Department of Biosecurity
- Department of Civil Status
- Department of Education (Services and Higher Education)
- Department of Energy
- Department of Environment
- Department of Fisheries
- Department of Forestry
- Department of Industry
- Department of Lands
- Department of Livestock
- Department of Meteorology and Geo-hazards
- Department of Strategic Planning and Aid Coordination
- Department of Youth and Sport
- Ministry of Health
- Ministry of Trade and Industry
- Ministry of Youth and Sport
- National Statistics Office
- Office of the Government Chief Information Officer (OGCIO)
- Public Service Commission
- Vanuatu Cultural Center and National Library
- **Department of Cooperative**
- **Department of Customs and Inland Revenue**
- **Department of Geology and Mines**
- **Department of Tourism**
- **Department of Women's Affairs**
- **National Disaster Management Office**
- **National Tourism Office**
- **Vanuatu Qualifications Authority**

### Education Institutions

- Central School
- Emalus Campus
- **Vanuatu Institute of Technology**

### Non Government Organisations

- Wan Smol Bag Theater Group
- World Vision Vanuatu
- Youth Challenge Vanuatu
- Care International
- Oxfam
- **Red Cross Vanuatu**
- **Vanuatu Skills Partnership**
- **Vanuatu Society for Disability**

### Private Sector

- Chamber of Commerce and Industry
- NEXT Limited
- Pacific Horticulture and Agriculture Market Access Plus Program
- SH Products and Services
- Tanna Coffee
- Tek Tok
- The Kavahouse
- V-Lab and Yumiwork
- **Vodafone**
- **Digicel**

### Statutory Authorities

- Reserve Bank of Vanuatu
- Telecommunications, Radiocommunications and Broadcasting Regulator
- Vanuatu Bureau of Standards
- Vanuatu National Provident Fund
- **Utilities Regulatory Authority**



1. GENERAL INFORMATION

Gender		Age		Country		Organization	
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2. UNDERSTANDING INNOVATION IN THE LOCAL CONTEXT

- a. Give an example of existing initiative(s) in your country that you believe have aspects of innovation.  
.....
- b. What are those aspects of innovation?  
.....
- c. Why are those aspects important for understanding innovation in your local context?  
.....  
.....

3. SUPPORTING INNOVATION IN THE LOCAL CONTEXT

- a. Give an example(s) of your country's strengths on innovation.  
.....
- b. In what way(s) can those strengths be supported in the local context?  
.....  
.....
- c. Give an example(s) of local stakeholders who should be able to support those strengths?  
.....
- d. In what ways do you expect PRIN to support innovation in the local context?  
.....  
.....

4. WAY FORWARD

- a. What would you like to see happen in terms of innovation at the country level?  
.....  
.....



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