



SANMA PROVINCE SKILLS PLAN

2015 - 2018

Skills for Economic Growth



Australian
Aid 

CONTENTS

Abbreviations	2
Forward by the Sanma Province Secretary General	3
1 Introduction	4
2 Vanuatu Training Landscape	6
3 Purpose	8
4 Sanma Province	9
5 Agriculture and Horticulture Sectors	12
6 Forestry Sector	18
7 Livestock Sector	21
8 Fisheries and Aquaculture Sector	25
9 Tourism and Hospitality Sector	28
10 Construction and Property Services Sector	32
11 Transport and Logistics Sector	37
12 Cross Sector	40
Appendix 1: Employability and Generic Skills	46
Appendix 2: Acknowledgments	49

ABBREVIATIONS

BDS	Business Development Services
DARD	Department of Agriculture and Rural Development
FAD	Fish Aggregating Device
FMA	Fisheries Management Act
GESI	Gender Equity and Social Inclusion
MoET	Ministry of Education and Training
NGO	Non-Government Organisations
PSET	Post School Education and Training
PTB	Provincial Training Boards
TVET	Technical and Vocational Education and Training
VAC	Vanuatu Agriculture College
VCCI	Vanuatu Chamber of Commerce and Industry
VESSP	Vanuatu Education Sector Strategic Plan
VIT	Vanuatu Institute of Technology
VQA	Vanuatu Qualifications Authority
VQF	Vanuatu Qualifications Framework

FORWARD BY THE SANMA SECRETARY GENERAL - MR ZACHARIAH DANIEL LOY



It is with much pleasure that I present to you our second Skills Plan for Sanma Province; it specifically captures our training and learning development requirements for four years, commencing next year in 2015 and concluding in 2018. It will be a major role of the Provincial Training Board to ensure that we review, monitor and evaluate our skill development efforts each year.

It is with equal importance that I introduce this plan to coincide with the TVET Sector Strengthening Program Phase 3 support to the Sanma TVET Centre, which along with other stakeholders in our province, is energising the engagement of our community and productive sectors with the importance of training and lifelong learning.

It will be effective skill development that will assist us in improving and developing new infrastructure and human resources that will benefit all in the province and drive the efforts of the productive sectors seeking to achieve their commercial potential, in particular our agriculture and tourism sectors, both of which are seeking to improve productivity by having a skilled and qualified workforce.

It is of equal importance that we commence this journey with a commitment to our national training system, and where possible ensure our training is robust and of international quality by using Vanuatu Qualifications Authority developed endorsed training packages, linked to competency standards and delivered by registered ni-Vanuatu training providers.

This Skills Plan has been the effort of many provincial and national stakeholders, including the Provincial Training Board for Sanma Province, the members of which have contributed their best efforts to bring to bear macro and micro industry knowledge and intelligence impacting on the commercial objectives of the productive sectors.

In closing I ask that we ensure our skill development and training delivery includes all members of the Sanma Province community, in particular, enabling increased opportunities for women, and for those who are disadvantaged by the remoteness of their villages and islands, or for those who may have a disability. The responsibility for skill development sits with all of us, as employers, as stakeholders, as community leaders and the government.

Please take every opportunity to learn and grow as we implement the 2015 - 2018 Sanma Province Skills Plan.

Long Live Technical Vocational Education and Training development in Sanma Province.

To God be the Glory.

Secretary General – Sanma Province



1 INTRODUCTION

The Government of Vanuatu recognises skill planning as an essential element in the achievement of the objectives of its Priorities and Action Agenda. With Australian Government support, skills plans will be developed for all six provinces by the end of 2014.

The Skills Plans identify productive sector skill requirements that will underpin potential economic growth over a four year period. The information provided is based on analysis of statistics, survey and planning documentation including in-depth consultation with productive sector stakeholders and industry at provincial and national level.

The skill planning process is part of a larger workforce development vision for Vanuatu that is supported by the aims of the Government to create long term stability and economic development. This includes broad based growth, and improved welfare of the general population.

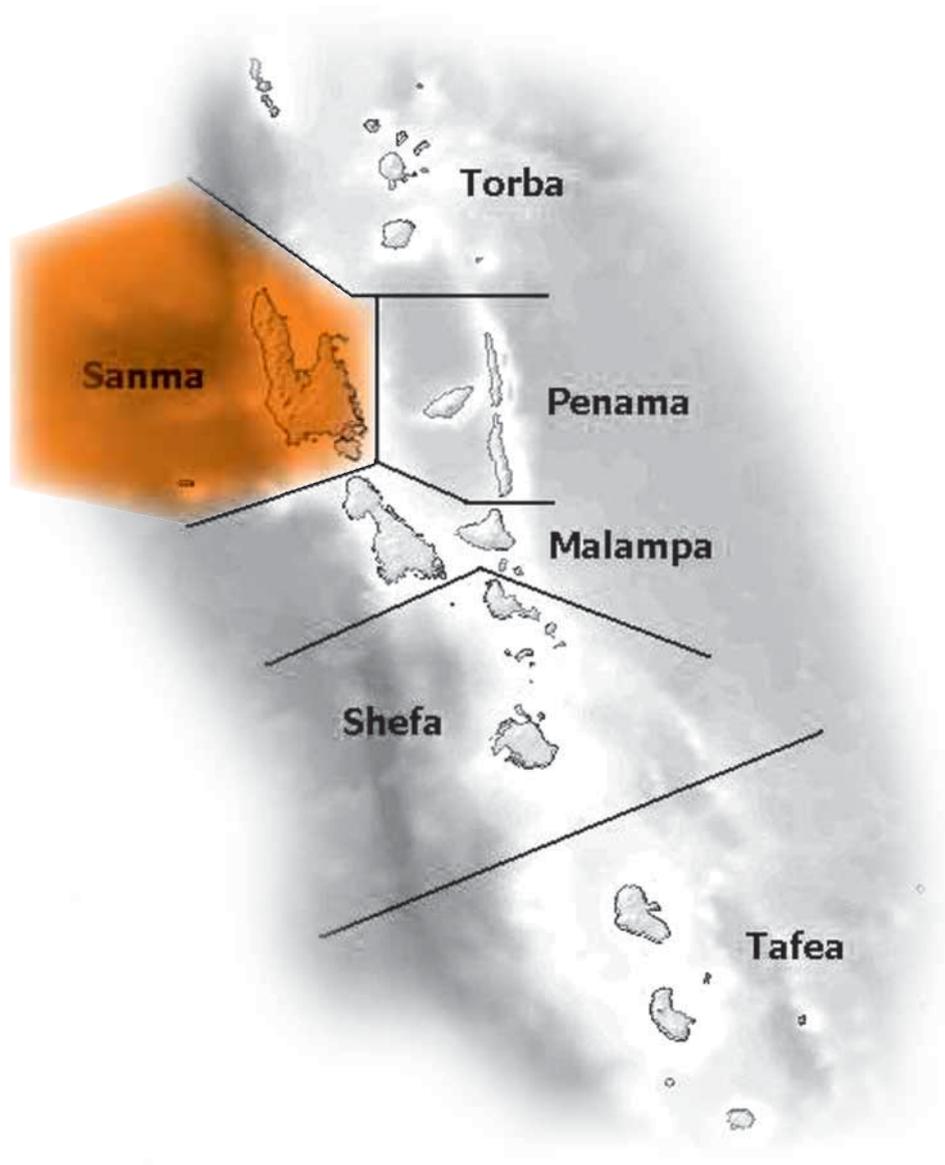
The national goals for provincial skill development and workforce planning are:

- ensure people benefit from training programs and resources to increase their employment opportunities and income, hence improving livelihoods
- empower women and people with a disability, including all aspects of Gender, Equity and Social Inclusion (GESI)
- strengthen partnerships between Technical and Vocational Education and Training (TVET) providers and the productive sectors including agriculture, livestock, fisheries, forestry, tourism, construction and transport

Critically, the provincial skills plans also reflect the objectives of the Vanuatu Qualifications Authority (VQA) as it implements the industry led training packages and qualifications framework within a training system where the skill demands of the productive sectors are the key driver.

It should be noted training requirements in the skill plans are estimates and continued planning, survey, monitoring and evaluation will be required to annually validate training requirements and to resolve evolving productive sector objectives and skill needs of the province.

The training requirements have been determined in the context of the potential demand for skill development for each productive sector, and provide a useful projected annual guide for training providers and TVET stakeholders to plan and develop programs and training delivery. The training requirements are found in each productive sector chapter and are linked to the priority economic activity for the sector.





2 VANUATU TRAINING LANDSCAPE

The Vanuatu training landscape has a complex and dynamic TVET system. This is reflected in the diverse range of training and learning options provided by:

- registered training providers offering accredited training
- non accredited training including programs by Non-Government Organisations (NGO)
- training programs by church based organisations
- informal and on the job training
- traditional learning of customs and culture

These training and learning modalities will all continue to have a place in the Vanuatu training landscape but a more coordinated national model is required. This national focus is being managed and implemented by the VQA and the Ministry of Education and Training, and more broadly with the support of other TVET, government, industry and training provider stakeholders.

Key to this focus is the implementation of the national training packages and their related competency standards. This will see a shift towards a consistent and accredited training system linking the diversity of all training providers and benefiting training recipients.

This Skills Plan has as its base the key objective of assisting the productive sectors in transitioning to the new system and addressing skill shortages with a national model that has regional and international relevance. Other important themes include:

- developing and engaging future productive sector leaders
- engaging disengaged and unemployed youth
- addressing the aging demographic of some sectors
- including employability skills within all training activity
- improving employment access for marginalised groups

- reviewing national and international education and training scholarship programs
- evaluating regional “out of country” employment programs
- resolving provincial infrastructure issues impacting on commercial and economic development

Employment growth requires a skilled and qualified workforce. The existing workforce and those seeking to enter the labour market require training that meets the needs and demands of industry. This is more easily quantifiable for those in the formal economy, which includes the small percentage of the Vanuatu workforce that is in paid employment.

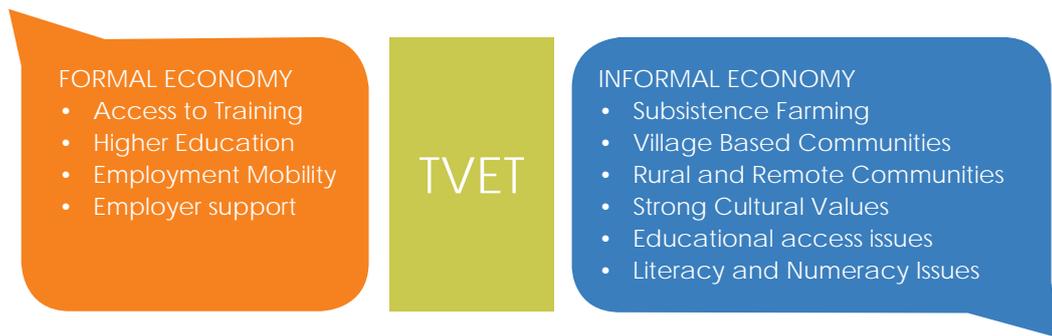


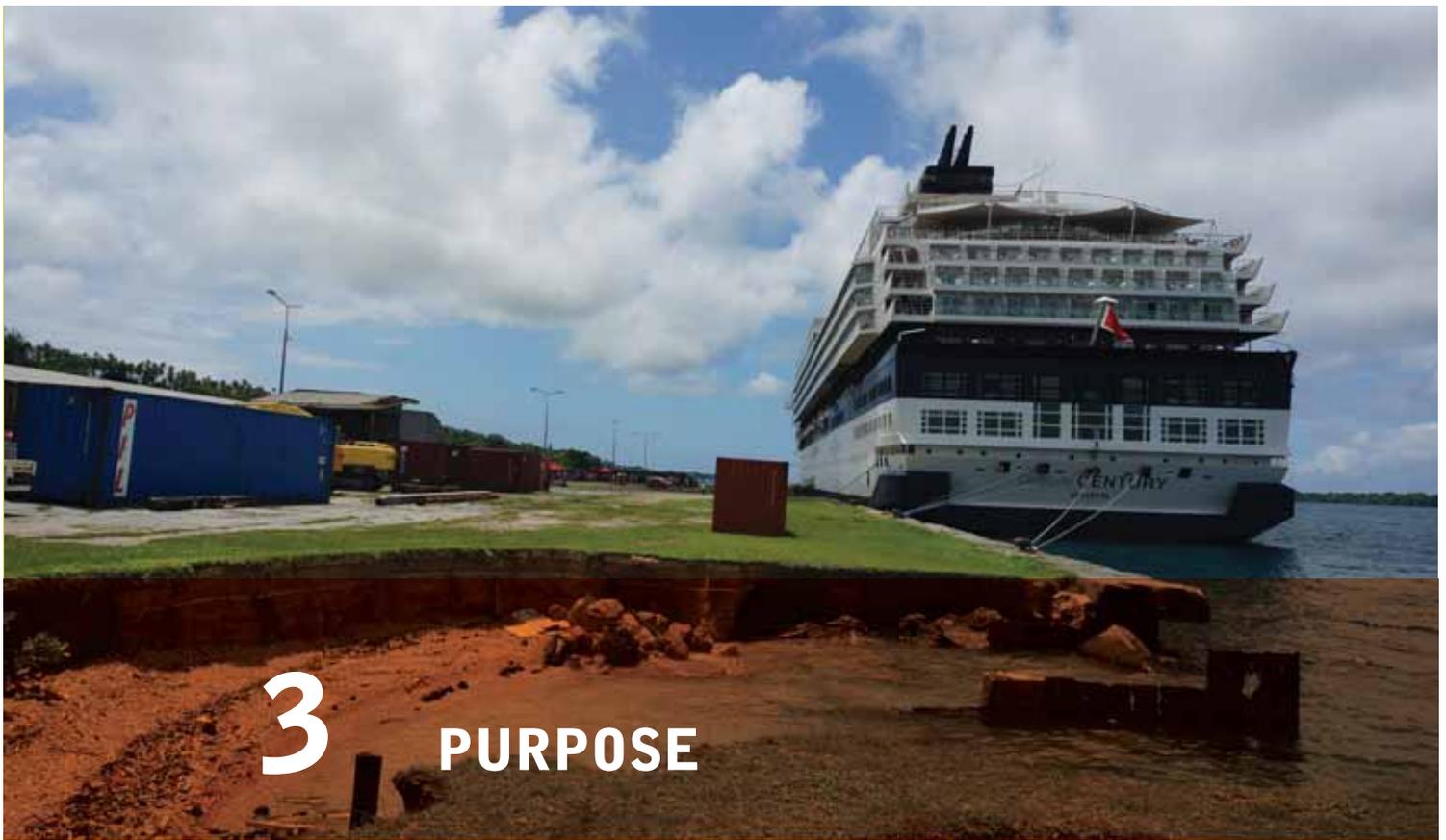
Figure 1: Formal Economy and Informal Economy

The informal economy accounts for a large percentage of each province’s population, with this primarily subsistence production group continuing to have limited access to employment and training opportunities.

A live / learn / earn program with a focus on employability skills, accredited training, work experience programs and mentored BDS (Business Development Services) will improve economic outcomes for trainees.

The informal economy and formal economy require a demand-driven TVET system that is responsive to the skill requirements of the productive sectors with a goal to improving productivity.

Future economic growth in the province will need to be supported by on-going skill and professional development for those already employed in these sectors and also for those seeking employment in the sectors. A skill development flow on effect will see opportunities for younger workers and jobseekers to transition to the formal economy.



3 PURPOSE

The Sanma Province Skills Plan will focus on the following productive sectors:

- Agriculture & Horticulture
- Forestry
- Livestock
- Fisheries and Aquaculture
- Tourism and Hospitality
- Construction and Property Services
- Transport and Logistics (including Maritime)
- Cross Sector

Each sector has been reviewed to identify:

- skills and training in demand
- workforce drivers (including barriers to skill development)
- potential numbers of people requiring training
- new national qualifications relevant for each productive sector

The information contained within the Skills Plan, with further analysis will be used to assist in the development of a National Skills Plan.

It should be noted that this plan addresses the skill needs and issues impacting on the key productive sectors of the province. It does not include the critical shortages and skill development needs of the professional and predominantly higher educated employees of the public service, including health, education and emergency services.



4 SANMA PROVINCE

Sanma is a northern province located of Vanuatu and covering a total area of 4,248 km². It has a population of 45,860 people (2009 National Census of Population and Housing) however the VNSO estimate the population is in the vicinity of 50,238. The capital of Sanma Province is Luganville located on the nation's largest island of Espiritu Santo.

SANMA PROVINCE	
Islands	Population
Aese	0
Aore	556
Araki	140
Bokissa	56
Espiritu Santo	39606
Malo	4273
Malokilikili	19
Mavea	207
Tangoa	394
Tutuba	609
Urelapa	0

Vanuatu 2009 Census Summary
Table 1: Sanma Province Islands and Population

Santo has a small urban population (13,500) who live in or near Luganville, but the majority of Sanma's population live in rural areas and on remote islands in village communities, where subsistence farming and fishing are the main sources of livelihood. Whilst agriculture, horticulture and fisheries are the primary employment activities of the province and have potential for further economic growth the following sectors also indicate potential for growth:

- tourism, including accommodation, sport and recreational tourism including water sports, hiking, diving, and tour support services
- increased livestock production of beef, pork, goat and poultry
- commercial tree plantations
- creative and cultural business development, including handicrafts and the link to retail tourism
- construction and building services
- maritime services
- cross sector, including retail, communications and business services

The service economy including retail and tourism sectors continue to account for the most active growth in percentage terms of the Sanma economy. The economic profile of other productive sectors continues to be unknown due to the limited availability of provincial data. Future improved monitoring of the productive sectors against the government's provincial development plans will assist in establishing provincial data collection useful for training and skill development planning.

The province's built infrastructure needs substantial attention, in particular for remote communities and islands, where roads, bridges and tracks require maintenance to allow for agricultural, forestry and fisheries sector economic growth, and to allow improved access to educational and training opportunities.

A focus of the skills planning process and skill development of the Sanma community in the next four years will target the needs of those marginalised in the employment market and seeking assistance to access training and learning opportunities, including women, people with a disability and entry level jobseekers. A substantial amount of training energy and resourcing must be invested in the informal economy for Sanma in the coming years.

The following diagram shows the connection between the province's broader strategic planning objectives, and what are the workforce drivers for the productive sectors (primarily in the agriculture and tourism sectors) and the flow on effect to what are the key skill development priorities for the next four years.

SANMA SKILL DEVELOPMENT OBJECTIVES - PRODUCTIVE SECTORS 2015 – 2018

- Making the Sanma Productive Sectors of agriculture, livestock, forestry, fisheries and tourism commercially viable and managed by a skilled and qualified workforce.
- Increasing annual production quantity and quality for local consumption
- Focus on growing markets
- Strengthening market segments with growth potential – including nuts, vanilla, spices, copra, sandalwood, beef and farmed fisheries

PRODUCTIVE SECTORS WORKFORCE DEVELOPMENT DRIVERS

Developing Sanma productive sector assets	<ul style="list-style-type: none"> • Managing bio diversity • Connecting the informal productive sector with the formal economy • Developing new agri - business opportunities • Establishing agri -tourism
Managing Change	<ul style="list-style-type: none"> • Climate change • Ensuring opportunities for farm business management including supply and value chains • Linking the productive sectors to growth sectors such as tourism and allowing visitors to meet local people and sample local produce
Strengthening our workforce capabilities including	<ul style="list-style-type: none"> • Strong industry leadership and collaboration at business, provincial and national levels • An industry commitment to skills development • Establishing sustainable agriculture, forestry, livestock and fisheries industries

SANMA - STRATEGIC SKILLS PRIORITIES - PRODUCTIVE SECTORS

Ensuring farmers, foresters, fisherman and tourism workers have new skills for the future growth of Sanma Province's productive sectors	<ul style="list-style-type: none"> • Productive sectors professional and operational skills are linked to strengthened management skills and technical skills • Investing in research • Training in establishing sustainable productive sector processes
Having appropriate and high quality training and training providers available to the sector	<ul style="list-style-type: none"> • Varied occupations across all sectors need to have individuals with a range of technical skills available • New skills are required to capture emerging Vanuatu and regional markets • Increased numbers of skilled productive sector industry personnel with trainer qualifications
Improving management, leadership and innovation in the sector	<ul style="list-style-type: none"> • Productive sector business skills are needed to develop, manage and grow the agricultural, livestock, forestry and fisheries sectors • Developing and upgrading training delivery methodologies to reflect market trends, product development and use of new technologies • Skills to enable collaboration between businesses and stakeholders at local levels • Employability Skills

Table 2: Sanma Skill Development Objectives



In general terms agriculture is the science or practice of farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other products. It also includes the cultivation of plants, fungi, and other life forms for fibre, biofuel, medicinal and other products used to sustain and enhance human life.

Horticulture is the branch of agriculture that deals with the art, science, technology, and business of plant cultivation. It includes the cultivation of fruits, vegetables, nuts, seeds, herbs, sprouts, mushrooms, algae, flowers, seaweeds and non-food crops such as grass and citrus trees and plants. It also includes plant conservation, landscape restoration, landscape and garden design, construction, maintenance, and arboriculture.

In Vanuatu food crops include root plants such as manioc, taro, kumala, banana and plantains and cash crops include rice, coconut, copra, cocoa, kava, nuts, vanilla and spices.

The main objectives of the Vanuatu Government policy in the development of agriculture are to:

- assist farmers and industry with production and processing to increase rural income
- assist farmers to improve productivity to sustain food security through the sustainable utilisation of land, research and training
- assist in organising and empowering small farm holders towards commercial agriculture
- manage climate change and establish disaster risk management strategies

Agriculture continues to be one of the key commercial activities for Sanma Province, with kava, copra, cocoa, vanilla and spices being generators of income; and commercial livestock farming being a major income generator in the province. Sanma was the first province in Vanuatu with commercial cattle farming; the standard of Santo beef is highly regarded and is of export quality. Unfortunately, cattle production on commercial farms has not grown in recent years. Low prices paid for cattle at the abattoirs in Port Vila and Santo are part of the reason for lack of recent or new investment on farms.

While the population of Sanma Province is increasing every year, the production of root crops and vegetables is declining. To compensate for this there has been an increase in the demand for imported food staples such as rice. Root and cash crops are mainly consumed by the growers, and any surplus is sold locally, with a small percentage on sold for further processing. It has been identified that food crops in the domestic market of Sanma Province should be the focus for meeting the national food security challenge.

Agri-business is promoted by the Vanuatu Chamber of Commerce and Industry (VCCI) to encourage sustainable commercial agriculture development. An agri-business training program is in the process of being accredited by the VQA for delivery in all provinces.

Sanma Province needs to renew the stock of aging coconut trees, and improve the quality of the copra drying process as a means to increase and strengthen the economic potential of this key provincial agricultural activity. Copra is a key source of rural income for the province, but is vulnerable to shifts in world prices, further investment and skill development in copra processing will assist in achieving improvements in product quality and will maintain and potentially increase the copra selling price. Kava production continues to be a primary income generating agricultural product for many rural households and will continue to have economic growth potential into the future

There continues to be a drive within Sanma Province to:

- improve connections between the sectors, in particular agriculture to tourism. As part of the drive to grow agri-business and improve value and supply chains, there is the potential opportunity in providing quality vegetable, fruit and meat products for hospitality services, in particular provisions for cruise ships seeking to replenish supplies with fresh locally sourced product.
- strengthen and improve domestic and international sales of Sanma beef

New and emerging commercial opportunities exist to expand recent agricultural growth areas that are providing high returns and are proven economic success stories, further support is needed to maximise economic opportunity, with a particular focus on:

- promoting vanilla production
- maintaining pepper production
- expanding nut production
- strengthening and further developing coconut oil production

The agriculture and horticulture sectors are a priority for Sanma Province and the following fourteen areas of progress should be addressed:

- implement new techniques and farming systems
- increase production of root crops and vegetables for sale locally to meet increasing population growth and tourism and hospitality growth
- renewed focus on cocoa production in East Malo followed by West Malo, South Santo and West Coast Santo, including renewal of old stock and improving quality of cocoa beans to meet international quality standards
- Santo business and commercial operations require on-going skill development and training support to take a leading role in the development of managing private sector-led growth of agriculture
- assistance to strengthen the capacity of producers' cooperatives which provide advice and support to the sector
- continued support for farmers involved in rice growing and evaluation of the programs and the possible establishment of additional processing units
- improve the capacity of commercial processing for root crops
- provide access to agribusiness training programs
- strengthen and identify market opportunities, including upgrading market facilities, field days and fairs
- extend processing knowledge to include conservation techniques
- increased skill development of agriculture machine maintenance

- improved knowledge of soil fertility and sustainability
- programs aimed at setting up on-farm nurseries to extend and improve the coconut development industry including copra and improved drying process methods
- support and training in coconut oil production as an option for coconut farmers

SKILLS IN DEMAND FOR AGRICULTURE & HORTICULTURE

- Understanding and managing bio-security and bio-diversity
- Increased knowledge to implement new and improved crop varieties through propagation methods:
 - new root stock for citrus with specific emphasis on grafting
 - creation and monitoring of on-farm nurseries for future grafting of citrus trees
 - specifically lettuce, tomatoes, potatoes, carrots, cabbage, cucumbers, courgettes, aubergines, and other vegetables to meet the changing Ni - Vanuatu and tourist demands
 - coconut oil production
 - cocoa production, husbandry and post-harvest techniques, including organic certification requirements
 - pepper varieties, post-harvest handling and processing in Santo
 - vanilla planting, husbandry and post-harvest in Malo
 - nuts (nangae, navel, natapoa) collection and processing with increased husbandry practices and processing skills
- Increased knowledge to implement crop and vegetable propagation methods
- New skills to maintain and improve soil fertility
- Increased knowledge on the processing and preservation of food
- Business development to strengthen marketing capabilities and identify marketing opportunities concentrating on training delivery of potential households that are able to sell more than 50% of their production
- New programs to establish, install, maintain and manage food crop processing equipment, specifically
 - to process starch out of root crops and plantains
 - manioc flour production
 - rice drying and whitening
 - nut processing
 - coconut oil production
- Conduct programs that will equip farmers with new kava knowledge, including:
 - drying information
 - kava varieties, post-harvest handling and processing
- Employability and Generic skills (refer Appendix 1)

WORKFORCE DRIVERS

- Linking agriculture and horticulture in Sanma Province to new and emerging economic growth areas such as tourism and the service sector
- Improved infrastructure to :
 - encourage the commercial potential of the sector
 - upgrade market facilities
 - move produce to markets, in particular roads and shipping
- Strengthening industry leadership within the agricultural sector
- Industry research into crop and root crop production
- An industry need to renew stock of old coconut trees, and improve the quality of the copra drying. A number of hot air dryers are in a deteriorating or non-operational condition which is impacting on the quality of copra.
- Funded development of training programs and business development support, including mentoring Sanma farmers
- Commercial opportunities and market demand for new nut varieties and the need for industry and government support for nut farming infrastructure
- Supporting the strategic objectives of the Sanma provincial Governments vision for the sector
- Promotion of examples of agricultural / horticultural models of best practice and leadership, for example, spice and vanilla producer Venui

Table 3: Agriculture and Horticulture - Skills in Demand and Workforce Drivers

The following tables identify the area of skills required in the agriculture and horticulture sectors and the number of participants that may require training or further training and development over the next four years.

SANMA AGRICULTURE SECTOR							
Priority economic activities	Sub- Sectors	Priority skills need	2015	2016	2017	2018	Total
Agri-business education	All crops	Best husbandry practice	90	70	50	50	260
		Post-harvest handling	90	70	50	50	260
		Grading	90	70	50	50	260
		Understanding market demands	90	70	50	50	260
		Packaging	90	70	50	50	260
		Product transformation	90	70	50	50	260
		Transporting	90	70	50	50	260
		Pricing	90	70	50	50	260
		Storage	90	70	50	50	260
Financial management and budgeting	Commercial crops (rice, kava, copra)	Financial management & budgeting	60	60	40	40	200
Farm Management	Commercial crops (rice, kava, coconut)	Farm management	90	70	50	50	260
Setting up a nursery and plant propagation	Fruit Trees	Nursery, grafting, planting & harvesting	50	50	50	50	200
Setting up a nursery and plant propagation	Pepper	Nursery, planting, harvesting, drying & processing	50	50	50	50	200
Setting up a nursery and plant propagation	Cocoa	Nursery, planting, harvesting, drying & processing	50	50	50	50	200

Table 4: Agriculture – Training Requirements 2015 - 2018

SANMA HORTICULTURE SECTOR							
Priority economic activities	Sub- Sectors	Priority skills need	2015	2016	2017	2018	Total
Home and community gardening	Mixed cropping and flora-culture	Home gardening	90	70	50	50	260
		Small scale commercial gardening					
Improved Farming System	Soil fertility enhancement	Mulching and composting	90	70	50	50	260
		Agro forestry	90	70	50	50	260
		Alley cropping	90	70	50	50	260
		Slope farming	90	70	50	50	260
		Crop rotation	90	70	50	50	260
Dry kava processing	Kava	Kava processing and drying	20	20	20	20	80
Food Security Bio-security	All crops	Planting program skill Breeding skills Pest and diseases control Seed management	60	60	60	30	210
Food Processing -Value Adding	All crops including nuts	Harvesting, processing, packaging and marketing	60	60	60	30	210

Table 5: Horticulture – Training Requirements 2015 - 2018

The following tables identify the VQA training package domains available for the agriculture and horticulture sectors. For further details visit www.vqa.edu.vu.

SUBFIELD: Agriculture			
Certificate Level	One	Two	Three
Domains	<ol style="list-style-type: none"> 1. Nursery 2. Landscape 3. Machinery 4. Conservation 5. Horticulture 6. Seeds 7. Irrigation 8. Animal husbandry 9. Chemical and Safety 10. Horse 11. Cocoa production 12. Vanilla production 13. Tamarind production 	<ol style="list-style-type: none"> 1. Crop establishment 2. Farming skills 3. Agricultural vehicles & machinery 4. General agriculture practices 	<ol style="list-style-type: none"> 1. Equipment farming skills (Dressing) 2. Agricultural resource maintenance 3. General agriculture practices 4. Pest/Diseases control

Table 6: VQA for Agriculture

SUBFIELD: Horticulture			
Certificate Level	One	Two	Three
Domains		<ol style="list-style-type: none"> 1. Establish crops (Nursery) 2. Crops and plants 3. Horticulture operation 4. Horticulture production 	<ol style="list-style-type: none"> 1. Establishment 2. Horticulture production management 3. Horticulture soil resources management 4. Plant and garden 5. Vegetable production 6. Horticultural operation

Table 7: VQA for Horticulture



6

FORESTRY SECTOR

The forestry sector includes the natural forest, managed forest wood plantations and the establishment of nurseries to increase forest stock.

Vanuatu has natural constraints that limit substantial increases of forestry products, even though some 40% of the country is forested, much of this is unsuitable for commercial forestry practices due to the quality of the timber and accessibility issues.

However, market opportunities have been identified that if managed correctly, and supported with skill development could see Vanuatu emerge as a centre of timber growing in the Pacific. The native whitewood is widely sought after for high value uses, such as panelling and furniture, and as a structural timber for local use, and whitewood is suited to forestry plantation and production.

Across Vanuatu skill development is required for workers to implement silviculture, which is the practice of controlling the growth, composition, health, and quality of forests to meet a range of societal, economic and environmental needs. Given its rapid growth and stable value as a construction timber, whitewood is one of the favoured species. Sandalwood and other “hardwood” timber species (Mahogany, Natapoa and Nangai) should also be planted, for their long-term economic value.

Sanma Province depends mainly on natural forest stocks, however after years of exploitation of the natural forest stocks, ten areas of environmental and industry development should be addressed:

- replant trees at a rate equal to the volume being harvested
- increase the awareness of communities and landowners of the challenges of a sustainable exploitation of the forest
- concentrate on forestry extension programs
- establish nurseries to improve forest product, include increasing the number of nurseries for whitewood, sandalwood¹, and other valuable species

- increase the production of community and government nurseries
- increase the number of trained portable sawmill operators
- improve the felling, maintenance and sawing techniques of saw-mill operators
- implement supply chain management
- improve market access and trade opportunities
- increase value adding options and facilities

Landowners are becoming increasingly interested in planting trees for the future. This increased community and forestry sector industry environmental concern, linked to the areas identified above will aid in the increase of sustainable productivity and income levels.

In addition to skill development for the forest sector growth aspect of the industry, there is commercial potential for value adding by improved milling processes, and end product including construction timber and local timber furniture manufacturing for both local and regional use. Additionally this would benefit the tourism sector (accommodation providers) seeking locally designed and manufactured furniture, and for the government sector in refurbishing infrastructure including schools and health facilities.

SKILLS IN DEMAND FOR FORESTRY

- Business management and volumetric skills
- Nursery, planting, husbandry, grafting and propagation
- Establishment of woodlots
- Logging, felling and saw maintenance techniques
- Training for the establishment of large scale plantations
- Value added processing
- Employability and Generic skills (refer Appendix 1)

WORKFORCE DRIVERS

- There is a high demand from farmers for seedlings and this will require support from forestry extension officers
- Climate change awareness
- Improved infrastructure to move forest product for shipping
- Community and landowner awareness of the challenges of non-sustainable exploitation of the forest
- Strengthening industry leadership within the forestry sector

Table 8: Forestry - Skills in Demand and Workforce Drivers

¹ VANWODS continues to fund forest wood business ventures, in particular for women to plant sandalwood in Sanma Province. Seeds will be provided by the organisation, and training for nurseries, planting and husbandry of sandalwood should be provided.

The following table identifies the area of skills required in the forestry sector and the number of participants that may require training or further training and development over the next four years.

SANMA FORESTRY SECTOR							
Priority economic activities	Sub- Sectors	Priority skills need	2015	2016	2017	2018	Total
Setting up a Nursery	Sandalwood	Nursery establishment Planting and husbandry skills Seed management	60	40	40	30	170
	Whitewood		60	40	40	30	170
	Mahogany		60	40	40	30	170
	Nangai		60	40	40	30	170
	Natapoa		60	40	40	30	170
Nursery Propagation	Fruit trees and Sandalwood	Crafting skills Proper storage skills	60	60	60	30	210
Wood Lot	Forest Plantation	Management training Plantation restoration	50	40	40	30	160
Logging practices	Sawmilling Small sawmill operators	Management skills Equipment maintenance Tree felling skills Occupational health and safety	60	60	60	30	210
	Timber Grading	Grading	40	40	30	30	140
		Treating	40	40	30	30	140
		Stacking	40	30	20	20	110
		Pricing	30	20	15	15	80
		Marketing	30	20	15	15	80
Value Adding	Furniture	Wood work & joinery skills	30	30	30	30	120
		Further value adding	30	25	20	15	90

Table 9: Forestry – Training Requirements 2015 - 2018

The following table identifies the VQA training package domains available for the forestry sector. For further details visit www.vqa.edu.vu.

SUBFIELD: Forestry			
Certificate Level	One	Two	Three
Domains	<ol style="list-style-type: none"> Nursery Forest establishment Seeds Forest operation management Chemical Tree felling Chainsaw operation Log scaling Seasoning 	<ol style="list-style-type: none"> Forest establishment Chemicals Forest mensuration Grading Forest operation management Forest operation management Communication Forest harvesting Chainsaw operation Forest silviculture operations 	<ol style="list-style-type: none"> Forest establishment Forest harvesting Forest mensuration Forest operation management Log making Tree felling Machine operation Chainsaw operation Non-commercial forest skills Chemical Tool maintenance

Table 10: VQA for Forestry



7 LIVESTOCK SECTOR

The livestock production sector includes small animal farming of chickens, eggs, pigs, goats and ducks, cattle farming and bee keeping.

Investment in this sector for Sanma Province will yield economic benefits for both producers and local consumers; annual increases in imported processed farm goods, including chicken, eggs and meat have diminished the capacity and output of local producers. This could be reversed with renewed management and farmer skill development, and there is a demand for local livestock end product, but availability has fallen in recent years.

Improvement in the capacity of farmers and their communities to produce, process and sell livestock will have a positive effect on farmers' incomes, and extends the supply chain to include butcheries, processing and transport services. Additionally it improves and increases the level of food security and safety in rural communities, and promotes the consumption of local livestock product (meat, eggs diary) whilst reducing imported products.

On larger farms in Sanma Province, the cost of investment is sometimes hindered by uncertainty over land-ownership, and for smaller households it has often been due to better cash opportunities in forestry products or kava planting that has reduced the attraction of livestock farming.

Sanma Province has one of the most conducive environments in Vanuatu for raising beef cattle. Domestically the production of beef, pork, and poultry for local consumption form an essential part of the provinces economy. Six areas of progress should be addressed:

- improvement of pastures
- new farming practices to drive economic gain
- improved cattle breeding practices

- improved piggery farm management techniques
- improved small animal farming based on growing demand for produce in the province and the expanding hospitality and tourism sector demands.
- identifying livestock opportunities

Extension services for livestock development in Sanma Province provide technical advice, health services, and quarantine regulations enforcement. With limited resources, the capacity of the few extension service officers in the province to follow up on cattle farm management is limited.

Egg production and sales have been impacted on by regional trade agreements that have lowered taxes on some food imports. With training support there are opportunities for local farmers to lower their production costs and sell their eggs profitably in Luganville.

SKILLS IN DEMAND FOR LIVESTOCK

- Business development to increase the processing and marketing of livestock
- Business and farm management
- Pasture and field management
- Animal husbandry and animal welfare
- Breeding and feed formulations for pigs and chickens
- Managing bio-diversity within livestock breeds
- Understanding and developing new market opportunities including bee keeping
- Employability and Generic skills (refer Appendix 1)

WORKFORCE DRIVERS

- Climate change awareness
- Improved infrastructure to move produce to markets, in particular roads and shipping
- Improving supply and value chains
- Strengthening industry leadership within the livestock production sector

Table 11: Livestock - Skills in Demand and Workforce Drivers

The following table identifies the area of skills required in the livestock sector and the number of participants that may require training or further training and development over the next four years.

SANMA LIVESTOCK SECTOR							
Priority economic activities	Sub- Sectors	Priority skills need	2015	2016	2017	2018	Total
Starting and managing a livestock project, including animal welfare	All livestock	Skills in starting and managing a livestock project.	60	60	40	40	200
Identifying the best pastures, legumes and animal feed preparations for increasing production of livestock	Cattle	Skills in identifying the best pastures, legumes and other animal feed preparation.	40	30	30	20	120
Breeding and reproduction (cattle, pig, poultry, duck and goat)	All livestock	Skills in breeding and reproduction (cattle, pig, poultry, duck and goat).	40	30	30	20	120
Animal husbandry and animal health	All livestock	Skills in animal husbandry and animal health.	40	30	30	20	120
Livestock housing and construction including fencing	All livestock	Chicken house Pig Sty Bee hives	25	25	25	25	100
Meat inspection and hygiene (slaughtering)	All livestock	Meat inspection, butchery and hygiene skills.	40	30	30	20	120
Livestock as a business	All livestock	Skills in livestock as a business (profit and loss).	60	40	30	30	160
Record keeping of farm animals	All livestock	Skills in record keeping of farm animals.	25	25	25	25	100

Table 12: Livestock – Training Requirements 2015 - 2018

The following table identifies the VQA training package domains available for the livestock sector. For further details visit www.vqa.edu.vu.

SUBFIELD: Livestock			
Certificate Level	One	Two	Three
Domains	<ol style="list-style-type: none"> 1. Poultry hatchery 2. Poultry husbandry 3. Poultry management 	<ol style="list-style-type: none"> 1. Poultry hatchery 2. Poultry husbandry 3. Poultry management 4. Pig health and nutrition 5. Pig husbandry 6. Piggery management 7. Cattle/goat health and nutrition 8. Cattle/goat husbandry 9. Cattle/goat management 10. Cattle/goat handling 11. Bee health and nutrition 12. Bee operation 13. Bee management 	<ol style="list-style-type: none"> 1. Poultry husbandry 2. Poultry management 3. Pig health and nutrition 4. Pig husbandry 5. Piggery management 6. Cattle/goat health and nutrition 7. Cattle/goat husbandry 8. Cattle/goat management

Table 13: VQA for Livestock



8

FISHERIES AND AQUACULTURE SECTOR

The fisheries and aquaculture production sector includes all activities associated with farming of fish, including shellfish. Aquaculture is fresh water fish and prawn farming.

Efforts at raising rural income from fishing has had mixed success. Continued lack of adequate storage facilities, inadequate access to markets and the high cost of credit have been identified as factors holding back growth of the sector. As a result seafood exports from Santo Province remain low and are stagnant with domestic demand increasingly met by imports, including canned fish.

The supply of fish from in and around Santo and Malo does not satisfy provincial demand. High prices for deep sea fish prevent many potential buyers, as does the lack of organized commercial fishermen in the province. Increased emphasis on the management of non-commercial coastal fisheries is a skill demand area needing support, as it offers a greater contribution to rural income, nutrition and self-reliance. Training for fishery wardens and fisherman is essential to establish sustainable management and conservation of resources and maintain the marine biodiversity, whilst building the capacity of the custodial fishing sector community.

Increasing demands for seafood from the tourism and hospitality sector present commercial opportunities for fisheries and aquaculture. Potential cruise ship arrivals in the province will drive further demand for seafood product with likely purchase of quality product by cruise ship companies, and increased demand from international arrivals staying in Sanma hotels and resorts.

The Fisheries Department maintains policies to support groups of fishermen, rather than individuals, because groups (whether they call themselves an association, or a co-operative, or otherwise) can absorb the costs of ice making equipment, the costs of transport and the costs of training by sharing such resources.

In many Santo communities, lack of processing facilities, including freezing capabilities will limit the commercial opportunity of this sector. Extensive industry support will be required to expand the commercial opportunities, including new infrastructure such as wharf rebuilding and seafood processing facilities.

The only working group or collective group of commercial fishermen in the community of Port-Olry are participating in - on-going training and skill development to improve the commercial viability and economic growth of their fishing operations, and are benefiting from tourism growth in the Port Olry area.

A need has been identified to improve fisheries and aquaculture production for the local community, six areas of progress should be addressed:

- emphasis is now being placed on fish-handling techniques, rather than catching techniques, with fish handling and processing proving to be the missing link in the supply chain
- dormant or new cooperatives will be encouraged through training to participate in accredited training programs including business management and conservation
- the preference of the Fisheries Department is to concentrate on fishing groups rather than individuals, specifically BanBan Association, Malo Island Association and South Santo Association
- establishing new fishing associations in Big Bay, Port Olry, Banban
- protecting marine resources
- expansion of aquaculture including fresh water farming of tilapia and fresh water prawn farming providing a new and additional income source for farmers and villages, this has followed on from recent successful developments in South and West Santo that has increased economic benefit with minimal investment, but requires on-going training support to roll out program to other locations

SKILLS IN DEMAND FOR FISHERIES AND AQUACULTURE

- Improve fish handling techniques
- Business management and development skills for fishing associations
- Business management of protected fishing areas
- Establish programs to expand, maintain and manage farming specifically :
 - aquaculture for Tilapia
 - fresh water prawn farming
- Employability and Generic skills (refer Appendix 1)

WORKFORCE DRIVERS

- Climate change awareness
- Marine biodiversity and conservation
- Improved infrastructure including a market place and seafood storage including freezer facilities
- Industry support to move fisheries product to export market
- Strengthening industry leadership within the fisheries and aquaculture production sector

Table 14: Fisheries and Aquaculture - Skills in Demand and Workforce Drivers

The following table identifies the area of skills required in the fisheries and aquaculture sector and the number of participants that may require training or further training and development over the next four years.

SANMA FISHERIES AND AQUACULTURE SECTOR							
Priority economic activities	Sub- Sectors	Priority skills need	2015	2016	2017	2018	Total
Fisheries Management Act (FMA)	Fishing cooperatives FMA Project	Management and marketing skills	80	60	60	40	240
		Understanding the FMA					
Management	FMA Project	Seaman safety skills	40	40	40	40	160
		Business management skill	35	35	20	20	110
		Asset management	30	30	30	30	120
		Boat, equipment, storage and refrigeration maintenance	40	40	40	40	160
		Fishing and fish handling skills	30	30	30	30	120
		Fish aggregating device (FAD) construction and use	30	30	30	30	120
		Quality assurance skills	30	25	20	20	95
Breeding and Conservation biodiversity	Coconut crab trochus and lobsters turtle endangered species	Breeding, conservation and management skills Farming skills	80	60	60	40	240
Aquaculture	Tilapia and prawn farming	Construction and maintenance of freshwater ponds	80	60	60	40	240

Table 15: Fisheries and Aquaculture – Training Requirements 2015 - 2018

The following table identifies the VQA training package domains available for the fisheries and aquaculture sector. For further details visit www.vqa.edu.vu.

SUBFIELD: Fisheries and Aquaculture			
Certificate Level	One	Two	Three
Domains	<ol style="list-style-type: none"> Safety, Laws and Regulations Fishing skills Gearing up Maintenance Operation Aquaculture Tilapia farming Prawn farming 	<ol style="list-style-type: none"> Safety Fishing skills Gearing up Maintenance Fishing operation Food processing Aquaculture skills Aquaculture operations 	<ol style="list-style-type: none"> Safety, Policy and Legislation Gearing up Fishing operation Aquaculture Aquaculture maintenance and operations support

Table 16: VQA for Fisheries and Aquaculture



9 TOURISM AND HOSPITALITY SECTOR

Tourism and hospitality includes all activities associated with recreational and business travel, both the internal domestic and international market. It covers a number of subsectors including:

- accommodation (including bungalows, guest houses, travel lodges and home stay)
- land, sea and air transport, including cruise ship visits
- tours and tour guiding
- delivery of hospitality services
- handicrafts - the handicraft sector requires renewed and sustained local market opportunities and on-going skill development (sewing, weaving, traditional cooking, fabric painting, floral art, wood carving), existing and new techniques should be more widely made available to women and people with disabilities, that will also enhance their reach to the tourist market
- cultural activities

Tourism for Sanma Province has continuing and substantial opportunity for growth, but this requires investment in human capital management and skill development support. With training support, issues concerning inadequate accommodation for high income tourists, meagre marketing campaigns and lack of community awareness relating to tourism as an economic driver could be overcome with systematic training programs for tourism personnel.

Tourism continues to have potential as a growth industry for Sanma. Many visitors continue to be attracted by the world-class Coolidge dive site, and are encouraged by direct flights between Santo and Australia

There is a need to develop and strengthen skills to meet a demand for handcraft products and further development of cultural experience tours within the tourism market and for the local community. This will also encourage maintaining traditional skills and fostering cultural awareness.

A number of potential growth areas have been identified in tourism and hospitality. Seventeen areas of progress should be addressed:

- an increasing need for qualified staff in all hotels, resorts and bungalows
- understanding new and emerging tourism requirements and demographics, including soft adventure travel and backpacking
- expected increases in cruise ship arrivals and passenger visits to Sanma Province
- improved staff qualifications and standards of accommodation
- improved facilities and infrastructure for cruise ship operations
- improved facilities and infrastructure to enable an increase in tourist numbers to access Vatthe National Conservation area, Millennium Caves, Sarakata, villages of Jimmy Stevens and ViVil, the President Coolidge dive site, Million Dollar Point and other WWII sites
- develop targeted Sanma tourism publicity and promotional strategies
- training of land, sea transport, and airline workers at all port arrival areas, including airports in Sanma, to provide better arrival services for visitors
- opportunities for tour operators are growing in Sanma offering visitors quality tours and activities in the villages
- handcraft sector to maintain sustainable market growth (sewing, weaving, cooking), existing and new techniques should be further developed with training for women both in the rural and urban areas, that will improve their reach to the tourist market. For handcraft skill development refer to the VQA cross sector domain, Creative Arts
- expanded business development support and business management skills for small boat operators, bungalow owners and tour guides
- training in understanding new business and entrepreneurial opportunities in the tourism and hospitality sectors
- training to improve awareness of visitors safety
- landscaping around accommodation
- establishing e-commerce and social media networking capacity and understanding
- provision of improved food quality at markets, for the local community and tourists
- youth employment opportunities and programs in the tourism sector for Sanma Province dis-engaged exit school leavers

SKILLS IN DEMAND FOR TOURISM AND HOSPITALITY

- Hospitality skills, including customer service and front office
- Improve levels of English literacy
- Business management skills
- Accredited scuba diving qualifications
- Supporting cultural traditions and handicrafts including, textiles, weaving, cultural events and dance
- Training in new business and entrepreneurial opportunities:
 - spa treatments
 - hair braiding
- Delivery of recognised qualifications in the areas of:
 - first aid
 - water safety
- Landscaping (refer to Section 10 – Construction and Property Services sectors)
- Employability and Generic skills (refer Appendix 1) with a specific emphasis on information technology and social media (eg Trip Advisor)

WORKFORCE DRIVERS	
<ul style="list-style-type: none"> • Climate change awareness • Strengthen industry awareness • Impact of changes to cruise ship arrivals to Sanma 	<p>Assessment of the Economic Impact of Cruise Ships to Vanuatu Report 2014</p> <ul style="list-style-type: none"> • Infrastructure for example local transport and roads, wharf accessibility, water and electrical availability, and telecommunications • Requests for a component of the Port Vila Tourism Ambassadors program that focuses on improved transport services and improved local tourism knowledge • Continued support of Luganville tourism office • Pekoa airport is the gateway to other islands and provinces and requires continued upgrading to maintain its reputation as a leading domestic and international gateway to the region

Table 17: Tourism and Hospitality - Skills in Demand and Workforce Drivers

The following table identifies the area of skills required in the tourism and hospitality sector and the number of participants that may require training or further training and development over the next four years.

SANMA TOURISM AND HOSPITALITY SECTOR							
Priority economic activities	Sub- Sectors	Priority skills need	2015	2016	2017	2018	Total
Tourism accommodation standards and hospitality	Hospitality	Customer services	40	50	50	40	180
		House keeping	25	20	15	20	80
		Front office	15	10	10	10	45
		Hospitality management	25	20	15	20	80
		Food & beverage	40	50	50	40	180
		Food safety and hygiene	40	50	50	40	180
Visitor and tours product, safety and service standards development	Product development	Product standards	25	20	15	20	80
		Waste management	50	30	30	50	160
		Tour operators	25	20	15	20	80
		Tour guiding	25	20	15	20	80
		First aid	50	30	30	50	160
		Water safety	50	30	30	50	160
		Tour packages	10	10	5	5	30
		Product pricing	10	10	10	10	40
		Basic computing skills including use of social travel media	50	50	25	25	150
		Marketing and sales skills	25	25	15	15	80

Table 18: Tourism and Hospitality – Training Requirements 2015 - 2018

The following tables identify the VQA training package domains available for the tourism and hospitality sectors. For further details visit www.vqa.edu.vu.

SUBFIELD: Tourism			
Certificate Level	One	Two	Three
Domains	<ol style="list-style-type: none"> 1. Working industry 2. Accommodation services 3. Customer service 	<ol style="list-style-type: none"> 1. Working industry 2. Client and customer service 3. Inventory 4. Customer service 5. Visitors information 6. Tour operations 7. Tourism sales and operations 8. Venue and facility operation 9. Holiday parks and resorts 10. Cultural services 	<ol style="list-style-type: none"> 1. Working industry 2. Inventory 3. Tour sales 4. Travel sales 5. Reservations 6. Tour guiding 7. Events

Table 19: VQA for Tourism

SUBFIELD: Hospitality			
Certificate Level	One	Two	Three
Domains	<ol style="list-style-type: none"> 1. Working industry 2. Kitchen operation 3. Catering and cooking 4. Food and beverages 	<ol style="list-style-type: none"> 1. Working industry 2. Inventory 3. Accommodation services 4. Visitors information 5. Restaurant services 6. Bar services 7. Sales 8. Laundry 9. Housekeeping 10. Food preparations 	<ol style="list-style-type: none"> 1. Working industry 2. Hospitality operations 3. Front office services 4. Laundry 5. Housekeeping 6. Restaurant 7. Bar 8. Kitchen operations 9. Food preparations 10. Catering operations 11. Patisserie

Table 20: VQA for Hospitality



10 CONSTRUCTION AND PROPERTY SERVICES SECTORS

This sector represents the workforce training and skills development needs of the construction and property services industries. It includes all aspects of commercial and civil construction.

The building sector in Santo in the context of projects, employment and skill development has slowed in recent years. Most rural dwellers continue to build their houses with available village resources and little outsourced input. Scheduled projects, including civil infrastructure and tourism related (waiting to be built resorts, and expansion of existing resorts and bungalows) including the proposed WWII museum in Luganville will drive a need for skilled workers and create new employment opportunities in the next few years.

Both foreign and domestic investment is required for the construction sector, and flow on effect to property services to foster economic growth in Sanma.

The sector is one of the larger casual employer groups in Vanuatu, and within Sanma Province provides short term employment for a number of men and women from both the formal and informal sectors. Together these workers and companies contribute greatly to improving and maintaining the provinces fragile infrastructure that is essential for economic growth and social growth.

Opportunities exist for new businesses and for those with construction skills in the building sector including construction contractors, joiners, carpenters, plumbers, electricians, tile setters and painters. Businesses working in construction and property services are committed to implementing accredited training to meet current skill shortages and the future demand for a skilled workforce.

A number of potential growth areas have been identified in the construction and property service sectors, including welding, eight areas of progress should be addressed:

- improvements to existing and new civil infrastructure projects, including the Luganville Wharf, upgraded market place and water front parkland renewal projects
- maintenance and repairs to existing facilities and public sector structures, including the hospital and health stations, schools and government buildings, both in Luganville area, and critically in the non-urban rural and remote villages and islands of Santo
- skill recognition of existing workers with some skills via recognition of prior learning to allow assessment and awarding of a recognised accredited qualification
- improved school and post education industry career guidance for this sector to engage younger jobseekers into the construction industry
- industry support for scholarship and professional development opportunities both within Vanuatu and the Pacific region
- opportunities for new businesses in the building sector will be made available to existing and future construction contractors, joiners, carpenters, plumbers, electricians, tile setters and painters
- qualified and skilled welders
- landscaping and gardening skills for civil and private sector developments

SKILLS IN DEMAND FOR CONSTRUCTION AND PROPERTY SERVICES

- Project management
- Construction management
- Civil construction and works (road, bridge, etc)
- Concreting
- Carpentry and joinery
- Electrical
- Plumbing, solar, roofing and drainage
- Block work and rendering
- Plastering
- Painting
- Landscaping
- Welding
- Employability and Generic skills (refer Appendix 1)

WORKFORCE DRIVERS

- Provincial government strategic plan and vision
- Population growth
- Community and business expectations on improved infrastructure
- Needs of the tourism sector - bungalow and accommodation construction and maintenance, including landscaping and gardening services
- Cruise ship industry expectations re safety and value for money
- Civil construction including hospitals, schools and public facilities
- Strengthening industry leadership within the sector

Table 21: Construction and Property Services - Skills in Demand and Workforce Drivers

The following table identifies the area of skills required in the construction and property service sectors and the number of participants that may require training or further training and development over the next four years.

SANMA CONSTRUCTION AND PROPERTY SERVICES SECTORS							
Priority economic activities	Sub- Sectors	Priority skills need	2015	2016	2017	2018	Total
Construction Industry management	Project Management	Project management	15	10	5	5	35
		Construction management	25	15	10	10	60
Built Environment Priority Economic Activity	Construction	Concreting	30	25	20	15	90
		Carpentry and joinery	35	25	20	15	95
		Block work and rendering	15	15	5	10	45
		Tiling	15	10	5	5	35
		Plastering	15	10	5	5	35
		Painting	15	10	8	5	38
		Landscaping / gardening	12	8	8	5	33
	Power	Electrical	20	15	15	10	60
	Plumbing	Plumbing, solar, roofing and drainage	20	15	15	10	60
	Welding	Construction Welding	12	8	8	5	33

Table 22: Construction and Property Services – Training Requirements 2015 - 2018

The following table identifies the VQA training package domains available for the construction and property services sector. For further details visit www.vqa.edu.vu.

SUBFIELD: Building Construction				
Certificate Level	One	Two	Three	Four
Domains	1. General Construction	1. General Construction 2. Steel Fixing 3. Concreting	1. Blocklaying 2. Carpentry 3. Concreting 4. Painting and Decorating 5. Solid Plastering 6. Steel Fixing 7. Wall and Ceiling lining 8. Wall and floor tiling 9. Formwork 4. Wall & Ceiling lining (Plasterboard) 5. Metal roofing and cladding	1. Building Construction

Table 23: VQA for Building Construction

SUBFIELD: Plumbing			
Certificate Level	One	Two	Three
Domains		1. Concreting 2. Drainage 3. Irrigation 4. Mechanical 5. Piping 6. Roofing	

Table 24: VQA for Plumbing

SUBFIELD: Joinery, Furniture and Cabinet Making			
Certificate Level	One	Two	Three
Domains	<ol style="list-style-type: none"> Design and Construct Rattan Cane Furniture Rattan Cane Furniture Making Rattan Cane Furniture Tools Furniture Making (Wood Machining) Flooring Technology Upholstery Soft Furnishings Picture Framing Interior Design & Decoration Mattress and Base Making Glass and Glazing Blinds and Awnings Furniture Finish Furniture Making 	<ol style="list-style-type: none"> Furniture Making Furniture Finish Blinds and Awnings Glass and Glazing Mattress and Base Making Interior Design & Decoration Picture Framing Soft Furnishings Upholstery Flooring Technology Coopering 	<ol style="list-style-type: none"> Furniture Making Furniture Finish Furniture Making (Cabinet Making) Furniture Making (Wood Machining) Joinery Blinds and Awnings Glass and Glazing Interior Design & Decoration Soft Furnishings Flooring Technology

Table 25: VQA for Joinery, Furniture and Cabinet Making

SUBFIELD: Electrical and Electronic Engineering			
Certificate Level	One	Two	Three
Domains	<ol style="list-style-type: none"> Electro Technology 	<ol style="list-style-type: none"> Renewable Energy Winding and Assembly Computer Assembly and Repair Electronic Assembly Electro Technology Business equipment servicing 	<ol style="list-style-type: none"> Business Equipment Computer Installation and Repairs Switch Gear and Control Gear Installation of Security Equipment Fire Installation Electronic Installation Renewable Energy

Table 26: VQA for Electrical and Electronic Engineering



11 TRANSPORT AND LOGISTICS SECTORS

The transport and logistics sector includes maritime, which is the prime transport sub sector for Sanma Province. The full sector includes road and air transport, including taxi services and public transport.

Training of seafarers is managed by the Vanuatu Maritime College in Luganville, Santo. They currently offer a range of internationally accredited training services to the Vanuatu shipping sector, including safety and maintenance for small boat operators.

Shipping is a major activity in Santo, the hub for all shipping activities in the northern islands of Vanuatu, employing in excess of 100 seamen. There is, however, a salary scale problem, while qualified masters get decent salaries in accordance with their qualifications, qualified engineers get much lower salaries on the domestic vessels, which is a disincentive for skills development of engineers. As a consequence the number of qualified engineers in the shipping industry continues to fall, with some ships being operated by unqualified personnel.

There is a constant demand for skilled mechanics in Santo and Malo, in particular upgrading of skills in the maintenance and repair of small engines and farming machinery. Fortunately in Santo, the biggest automotive operator is ASCO Motors Ltd the official dealer for Toyota cars and Yamaha marine motors. All staff benefit from internal training programs.

Businesses in transport, agriculture, trade, and manufacturing run diesel engines, and a number of cars run with gas engines. Demand is high, both with businesses and individuals, to train diesel engine mechanics.

Skill development for Sanma Province in the transport and logistics sub-sector of maritime also needs to focus on small boat operators who provide community transport and tourism services, and for the fishing sector, specifically operating between Malo, Aore, and Luganville, and along the West Coast and in Big Bay.

A number of potential growth areas have been identified in the transport and logistics sectors, including maritime, eight areas of progress should be addressed:

- achieving national government and industry growth objectives expected of provincial agencies, including improved road, air and sea services to remote communities
- addressing provincial infrastructure issues impacting on transport and logistics including roads, bridges, wharfs and airport facilities
- increasing vehicle and boat reliability and safety
- improving mechanical awareness and repair capacity of operators
- skill development in the context of connecting the sector with growth areas such as tourism and the service sector
- taxi boats - safety and boat maintenance
- the need to improve the quality and safety of the Vanuatu domestic shipping industry should be at the heart of training delivery in this sector. Both cargo ships based in Santo, and small boats carrying mainly passengers around Santo and Malo should be offered training
- there is a constant demand for skilled mechanics, including upgrading of existing skills in the maintenance and repair of engines for vehicles and boats.

SKILLS IN DEMAND FOR TRANSPORT AND LOGISTICS
<ul style="list-style-type: none"> • Accredited maritime and seafarers qualifications for local, regional and international employment opportunities • Safety and first aid • Small boat operations • Small boat repair and maintenance • Vehicle repair, safety and maintenance • Employability and Generic skills (refer Appendix 1)
WORKFORCE DRIVERS
<ul style="list-style-type: none"> • Sanma Provincial Government strategic plan and vision • Needs to evaluate and upgrade transport and logistics infrastructure to allow provincial economic growth, including: <ul style="list-style-type: none"> - Wharf reconstruction - Lighthouse and sea / land navigation safety - Road and bridge restoration and civil works • Climate change awareness • Strengthening industry leadership within the transport and logistics sector

Table 27: Transport and Logistics - Skills in Demand and Workforce Drivers

The following table identifies the area of skills required in the transport and logistics sectors and the number of participants that may require training or further training and development over the next four years.

SANMA TRANSPORT AND LOGISTICS SECTORS							
Priority economic activities	Sub- Sectors	Priority skills need	2015	2016	2017	2018	Total
Maritime	Small Boat Operations	Safety Certificate	45	35	25	20	125
		Small Boat Operations, including hull and engine maintenance	35	25	20	20	100
Transport	Vehicles	Vehicle and farm machinery, maintenance, servicing and repairs	35	25	20	20	100

Table 28: Transport and Logistics – Training Requirements 2015 - 2018

The following table identifies the VQA training package domains available for the transport and logistics sectors. For further details visit www.vqa.edu.vu.

SUBFIELD: Mechanical Engineering			
Certificate Level	One	Two	Three
Domains	<ol style="list-style-type: none"> 1. Metal Production 2. Boating services 	<ol style="list-style-type: none"> 1. Metal Production 2. Boating services 3. Marine Services 4. Air Conditioning 	<ol style="list-style-type: none"> 1. Production system 2. Machine & Process Operation 3. Fabrication 4. Marine 5. Marine craft Construction 6. Boating Services 7. Refrigeration and air conditioning

Table 29: VQA for Mechanical Engineering

SUBFIELD: Automotive Engineering			
Certificate Level	One	Two	Three
Domains	<ol style="list-style-type: none"> 1. Servicing 2. Automotive Repairs 3. Automotive Sales 	<ol style="list-style-type: none"> 1. Administration Clerical 2. After Market Operation 3. Welding 4. Drive line 5. Exhaust fitting and Repair 6. Radiator Repair 7. Steering Suspension & Wheel Alignment 8. Heavy and light Tyre Fitting and Repair 9. Servicing 10. Vehicle Body Detailing and Glazing 11. Vehicle Body Dismantling 12. Vehicle Body Panel and Paint Preparation 13. Electrical Accessory Fittings 	<ol style="list-style-type: none"> 1. Automotive Administration 2. Electrical Technology 3. Electronic Systems 4. Brakes 5. Engines, Systems and Transmission 6. Fuel Systems 7. General Mechanical 8. Automotive Vehicle Body 9. Paint and Refinish

Table 30: VQA for Automotive Engineering



12 CROSS SECTOR

The core productive sector skills are normally the focus of skill development, but many of the skills needed are linked to multi-sector industry (and are generic skills) that are found in the domain of what is known as cross sector skills, and a new key sub-sector of this domain known as employability skills (Refer to Appendix 1).

They are the primary responsibility of the provincial co-operatives and training providers to ensure skill development and training for business planning, starting a business, business management, book keeping, general management and computer skills. These skill sets are required for a number of existing Sanma workers, and for those seeking entry level employment in the province. In addition the need to train industry specific trainers that meets the requirements of the province will be critical in meeting the skill demands and expectations of businesses and employers.

Constantly changing economic and business conditions are seeing employers expecting cross-sector skills in workers, including behavioral competencies such as teamwork, time management, communication and management skills, as well as basic technical skills and emerging multidisciplinary skills. Current training delivery has been slow to adapt and still focuses on specifics or functional skills to training rather than a multidisciplinary approach that includes cross sector skill development. Enhancing these skill-sets across all sectors is a priority.

Industry support in strengthening cross sector skills is managed by the Office of the Registrar of Co-operatives and Business Development Services. The Sanma Co-operatives Office works closely with its provincial stakeholders and training providers, including the TVET Centre in building the skills needed by the province.

The coordination of implementing training that supports the cross sector skills will be the responsibility of all of the provinces educational and training stakeholders. The Sanma TVET Centre will be a portal to training and skill support for all of the community seeking to improve the critical skill sets that make up the cross sector skill domains.

The Sanma TVET centre will promote the implementation of VQA training package qualifications via a range of accredited training providers, and business development support programs that will assist in strengthening peoples cross sector skill capacity and the impact the skills have on economic growth.

A number of potential growth areas have been identified in the co-operative and cross sector skill domains, including employability skills, eight areas of progress should be addressed:

- community governance and leadership
- strengthening industry leadership through improved co-ordination and partnerships with stakeholders and sector associations
- public sector skill development of provincial civil and government agency officers and management
- encouraging and supporting traditional cultural and creative arts and linkages to other sectors including tourism and manufacturing
- encouraging entrepreneurial skills supported by business planning skills for those who want to start a business
- business management for those who already run a business
- book keeping and accounting skills including commercial IT accounting software use; for example MYOB and Quicken basic computer training, including social media for business
- training for trainers including implementing VQA accredited training qualifications to increase the number of industry specific trainers within Sanma Province

SKILLS IN DEMAND FOR CROSS SECTOR

- Leadership development – Future Leaders
- Financial management skills
- Information technology
- Using social media for business advantage
- Encouraging entrepreneurship supported by business planning skills
- Creative arts and cultural heritage
- Train the trainer programs
- Employability and Generic skills (refer Appendix 1)

WORKFORCE DRIVERS

- National and Provincial Government commitment to skill development and workforce planning
- Implementation of Sanma Province's strategic plans objectives
- Funding for training participation, in particular for women and people with a disability
- Climate change awareness

Table 31: Cross Sector - Skills in Demand and Workforce Drivers

The training of trainers with industry expertise will be a critical area of training in the next four years, as limited availability of recognised and qualified trainers is a significant factor impacting on the roll-out of training provision across the province.

Port Vila based trainers who are attached to the major training providers have limited opportunity to deliver in the provinces, they are often only available when off duty from their regular class based training delivery. There is a need for these registered institutions to affiliate with industry and train new trainers for the provision of training on the job and at the workplace in the province to meet the demands of the productive sectors.

The following table identifies the area of skills required in the cross sector and the number of participants that may require training or further training and development over the next four years.

SANMA CROSS SECTOR							
Priority economic activities	Sub- Sectors	Priority skills need	2015	2016	2017	2018	Total
Cooperative	All Sectors	Community governance and leadership	25	25	15	15	80
		Fraud awareness	25	20	15	10	70
	Consumer and Marketing	Financial management skills	35	35	15	15	100
		Marketing skills	25	20	15	10	70
		Business planning	25	20	15	10	70
	Savings and Loan	Financial management skills	15	12	8	6	41
		Business planning	15	12	8	6	41
	Producers	Marketing skills	25	15	10	10	60
		Value adding	15	15	10	10	50
	Fisheries	Sustainability	25	15	15	10	65
		Value adding	25	15	15	10	65
	Small Business	Retailers	Financial management skills	15	15	15	15
Business planning			15	15	15	15	60
Marketing skills			15	15	15	15	60
Handicraft		Traditional craft and weaving	25	15	15	10	65
		Textiles and sewing	25	15	15	10	65
		Performing arts including custom dances and songs	25	15	15	10	65
Information technology		Basic computer skills including word processing, spreadsheets and business use of social media	60	50	40	40	180
Construction		Project management	15	10	5	5	35
		Construction management	25	15	10	10	60
Employability Skills Appendix 1	All sectors	Initiative	50	40	30	30	150
		Communication	50	40	30	30	150
		Teamwork	50	40	30	30	150
		Information Technology	50	40	30	30	150
		Problem Solving	50	40	30	30	150
		Self-Management	50	40	30	30	150
		Planning	50	40	30	30	150
		Learning	50	40	30	30	150
		GESI	50	40	30	30	150

Table 32: Cross Sector – Training Requirements 2015 - 2018

The following table identifies the VQA training package domains available for the cross sector. For further details visit www.vqa.edu.vu.

SUBFIELD: Business			
Certificate Level	One	Two	Three
Domains	<ol style="list-style-type: none"> 1. Business administration services 2. Business culture and environment 3. Business relationship 4. Human resource management 5. People development and coordination 	<ol style="list-style-type: none"> 1. Business administration services 2. Business information management 3. Business information processing 4. Business culture and environment 5. Business relationship 6. Quality management 7. System and resource management 8. Small and micro business 	<ol style="list-style-type: none"> 1. Business administration services 2. Micro business operations 3. International trade/business 4. Business law 5. Business relationship 6. Human resource management 7. Project management 8. Quality management 9. Sales and marketing 10. Procurements

Table 33: VQA for Business

SUBFIELD: Finance			
Certificate Level	One	Two	Three
Domains	<ol style="list-style-type: none"> 1. Superannuation 2. Accounting 3. Credit administration 	<ol style="list-style-type: none"> 1. Accounting 2. Business culture and environment 3. Credit management 	<ol style="list-style-type: none"> 1. Business relationship 2. Banking 3. Financial services 4. General insurance 5. Insurance services 6. Life insurance 7. Insurance broking services 8. Financial services administration 9. Taxation 10. Superannuation 11. Personal injury 12. Accounting 13. Credit management 14. Personal trust administration 15. Mercantile services

Table 34: VQA for Finance

SUBFIELD: Computing			
Certificate Level	One	Two	Three
Domains	<ol style="list-style-type: none"> 1. Computer Operations 	<ol style="list-style-type: none"> 1. Computer Operations 2. Computer Management 3. Computer Support (Software/Hardware) 4. Security 5. Community support 	<ol style="list-style-type: none"> 1. Computer Operations 2. Computer Management 3. Computer support software/hardware 4. Data Base 5. Website 6. Programming 7. Network 8. Multimedia

Table 35: VQA for Finance

SUBFIELD: Communication Technology			
Certificate Level	One	Two	Three
Domains		<ol style="list-style-type: none"> 1. Cabling 2. Telecommunications Network engineering 3. Working industry 4. National Broadband 5. Network Construction: Cabling 6. National Broadband 7. Network Construction: Compliance 8. National Broadband 9. Network Construction: Occupational Health & Safety 10. Digital Reception Technology: Cabling 11. Digital Reception Technology: Radio-frequency networks 12. Digital Reception Technology: Compliance 13. Digital Reception Technology: Occupational Health & Safety 14. Fixed Wireless and rigging Installation: Cabling 15. Telecommunications Cabling: Cabling 16. Telecommunications Technology: Telecommunication Engineering Network 17. Telecommunications: Project Management 18. Telecommunications rigging Installations 19. Data and Voice Communication 20. Antenna Equipment 	<ol style="list-style-type: none"> 1. Broadband wireless networks 2. Telecommunications engineering network 3. Cabling 4. Telecommunications rigging installation 5. Work industry 6. Telecommunication: Education 7. Telecommunication: Work Industry 8. Telecommunication: Cabling 9. Telecommunications: Radio frequency networks 10. Telecommunication: Telecommunications engineering network 11. Telecommunications Cabling: Cabling 12. Telecommunications Cabling: Digital Reception Technology 13. Telecommunications rigging information 14. Broadband and Wireless Network 15. National Broadband Network construction: Cabling 16. Data and Voice Communication

Table 36: VQA for Communication Technology

SUBFIELD: Creative Arts				
Subfield	Performing Arts	Visual Arts and Crafts	Graphic Design Studies	Communication and Media Studies
Domains	<ol style="list-style-type: none"> 1. Music 2. Drama and Theatre Studies 3. Dance 4. Vanuatu Performing Arts/Custom Dances / Songs 	<ol style="list-style-type: none"> 1. Fine Arts (including Vanuatu's fine Arts) 2. Photography 3. Crafts (including Vanuatu's crafts) 4. Poetry 5. Jewellery Making 6. Floristry 	<ol style="list-style-type: none"> 1. Graphic Arts and Design Studies 2. Textile Design 3. Fashion Design 4. Weaving 	<ol style="list-style-type: none"> 1. Audio Visual Studies 2. Journalism, Communication and Media Studies 3. Written Communication 4. Verbal Communication

Table 37: VQA for Creative Arts

APPENDIX 1 - EMPLOYABILITY AND GENERIC SKILLS

Generic skills are a set of recognised skills that are transferable within the workforce. In the past, 'hard skills', or discipline specific skills were considered more important than 'soft skills' now known as employability skills. Employers are seeking evidence of soft skills that are transferable to different jobs and different industries, rather than the technical or discipline specific skills.

Employers, stakeholders and training providers have indicated that existing workers and critically the next generation of workers need to establish and strengthen their core generic skills. Employability skills typically include the following theme areas:

SKILL	DEFINITION
<p>Initiative is the ability to assess and initiate things independently. Workers who can use their imagination and common sense to see an opportunity and act on it without direction have initiative.</p>	<p>Here are some ways to show initiative:</p> <ul style="list-style-type: none"> • adapting to new situations • developing a strategic long-term vision • being creative • identifying opportunities not obvious to others • translating ideas into action • generating a range of options • initiating innovative solutions
<p>Communication is the sharing or delivering of information or news. Effective communication is more important in some jobs than in others. Poor communication can cause safety issues in some workplaces.</p>	<p>Communication might be verbal or non-verbal and includes:</p> <ul style="list-style-type: none"> • speaking clearly and directly • writing to the needs of the audience • understanding the needs of internal and external customers • persuading effectively • establishing and using networks
<p>Teamwork is the combined actions of a group of people. Teamwork in the workplace means working together to achieve a goal or complete a task.</p>	<p>Good teamwork in the workplace may be demonstrated in the following ways:</p> <ul style="list-style-type: none"> • working with people of different ages, gender, race, religion or political persuasion • working as an individual and as a member of a team • knowing how to define a role as part of a team • applying teamwork skills to a range of situations eg, crisis • identifying strengths of team members • coaching, mentoring, and giving feedback

SKILL	DEFINITION
Information Technology is the use of IT knowledge to achieve practical outcomes.	<p>In the workforce this might mean:</p> <ul style="list-style-type: none"> • having a range of basic IT skills • applying IT as a management tool • using IT to organise data • being willing to learn new IT skills • having the occupational health and safety knowledge to apply technology • having the appropriate physical capacity
Problem solving is using your skills, knowledge and/or experience to formulate a solution to a problem.	<p>In the workplace this might include:</p> <ul style="list-style-type: none"> • developing creative, innovative solutions • developing practical solutions • showing independence and initiative in identifying problems solving problems in teams • applying a range of strategies to problem solving • applying problem-solving strategies across a range of areas • resolving customer concerns in relation to complex project issues
Self-management means being able to operate largely unsupervised to complete a job or tasks.	<p>Evidence that you have good self-management skills might include:</p> <ul style="list-style-type: none"> • having a personal vision and goals • evaluating and monitoring own performance • having knowledge and confidence in own ideas and vision • articulating own ideas and vision • taking responsibility
Planning is deciding on or arranging for something in advance.	<p>In the workplace, this might mean:</p> <ul style="list-style-type: none"> • managing time and priorities – setting timelines, coordinating tasks • being resourceful • taking initiative and making decisions • establishing clear project goals and deliverables • allocating people and resources to tasks • participating in continuous improvement and planning • developing a vision and a proactive plan to accompany it • understanding basic business systems
Learning means gaining new skills and knowledge.	<p>In the workplace, good learning skills can be:</p> <ul style="list-style-type: none"> • being able to manage your own learning • contributing to the learning community at the workplace • using a range of learning options – mentoring, peer support, networking • applying learning to technical issues and people issues • having enthusiasm for ongoing learning • being willing to learn in any setting, on and off the job • being open to new ideas and techniques • being prepared to invest time and effort in learning new skills
GESI (Gender Equity and Social Inclusion)	<ul style="list-style-type: none"> • supporting and working with employees with a disability • valuing and supporting women in the workplace and equal opportunity for all employees • access and equity for training opportunities for all workers • mentoring younger workers and entry level employees • valuing and respecting older workers • respect of cultural, social, religious values and political persuasion differences

Table 38: Employability and Generic Skills

The following table identifies the VQA training package domains available for employability skills / generic skills. For further details visit www.vqa.edu.vu.

SUBFIELD: Generic skills			
Certificate Level	One	Two	Three
Domains	<ol style="list-style-type: none"> 1. Operations 2. Communication 3. Co-operation 4. Development of behavioural practice 5. Social competence 6. Health and safety in the workplace 7. Occupational health and industrial hygiene 8. Occupational safety 9. Work Environment 10. Ergonomics (OHS) 11. Company knowledge 12. Organisation at work 13. Technology 14. Working environment 	<ol style="list-style-type: none"> 1. Communication 2. Health and safety in the workplace 3. Occupational safety 4. Work Environment 5. Ergonomics (OHS) 6. Quality assurance 7. Working environment 	<ol style="list-style-type: none"> 1. Co-operation 2. Trainings and Up skilling 3. Development of behavioural practice 4. Social competence 5. Time management and Planning 6. Health and safety in the workplace 7. Work Environment 8. Company knowledge 9. Organisation at work

Table 39: VQA for Generic Skills

APPENDIX 2 - SANMA PROVINCE ACKNOWLEDGEMENTS

The following key stakeholders and industry leaders have provided valuable input into the development of the Sanma Province skills plan.

Provincial Training Board Members

- Mr Zachariah Daniel Sanma Provincial Government and Chair PTB
- Mr Tari Molisale Department of Agriculture
- Mr Ian Baniuri Department of Tourism
- Mr Clentine Ronson Department of Cooperatives
- Mr Glen Alo Department of Fisheries
- Mr Allan Vira Department of Forestry
- Mr Stephen Boe Department of Livestock
- Mr Thompson Paul Department of Education
- Mr Kalmer Vocor Sanma Provincial Tourism
- Ms Anna Blessing Dolasa Women's Handicraft Representative
- Mr Christian Tukunamoli Save the Children Fund
- Mr Joel Daniel Matahi RTC / Nadiutu Secondary School
- Mr Neman Tangis Sanma Province Youth Officer
- Ms Juliet Sumbe Sanma Province Women's Group
- Mr Richard Coleman Vanuatu Maritime College
- Mr Moulin Tabouti Sanma TVET Centre/PTB Secretariat

In addition to the contribution of the members of the Sanma Provincial Training Board the Sanma Province Skills Plan reflects the inputs, advice and participation from government officers, officials, industry leaders and experts from both the public and private sectors.

Sanma Province:

Agriculture and Rural Development Division
Co-operatives and Rural Business Development Services
Provincial Forestry, Fisheries and Livestock Officers
Department of Tourism
Sanma TVET Centre

The Republic of Vanuatu:

Prime Minister's Office
Ministry of Agriculture, Livestock, Forestry, Fisheries and Bio-Security
Ministry of Education and Training
Ministry of Finance and Economic Development
Ministry of Infrastructure and Public Utilities
Ministry of Tourism, Trade, Commerce and Ni-Vanuatu Business

National Stakeholders:

Chamber of Commerce and Industry
National Statistics Office
Vanuatu Qualifications Authority
Vanuatu Rural Development and Training Centres Association



Ministry of Education
and Training

