

SECRETARIAT OF THE PACIFIC COMMUNITY

SIXTH REGIONAL MEETING OF
HEADS OF AGRICULTURE AND FORESTRY SERVICES (HOAFS)

(Port Vila, 16-20 October 2017)

UPDATED PACIFIC YOUTH IN AGRICULTURE STRATEGY

1.0 INTRODUCTION

A Pacific Youth in Agriculture Strategy (2010-2015) was launched following a decision by the HOAFS/MOAFS in 2008 to strengthen youth engagement with agriculture. There are 5 components to the Pacific Youth in Agriculture (YIA) Strategy; enabling environment, youth oriented agricultural extension, education and training, youth enterprise and entrepreneurship and Showcasing Pacific youth. **All these remain highly relevant.**

This paper recommends a number of elements to strengthen the Strategy and to lengthen the Strategy **timeframe to 2025**. Following broad agreement of these elements, **an updated Strategy will be published by the end of Quarter 1, 2018.**

2.0 PROCESS FOR UPDATE

A number of consultations, surveys have been undertaken since 2015 that will help inform an updated Strategy. Collectively, some of the consistent key messages are:

(i) Preference for cash crops

An SPC Survey (2015) (see Appendix 1) of youths in Vanuatu and Fiji showed that young farmers preferred cash crops which generated a substantial income in a short frame of time for example kava, taro, root crops, fruits and vegetables

(ii) Better organized networks, groups

There are many youth groups engaged in agriculture. However, there is a need for these groups to be better organized with regards to formalizing a structure, planning, extension and markets.

(iii) Stronger links among Government Agencies working with Youth

In Fiji, it was observed that the Ministry of Youth (MOY) implemented its own work plan with youth groups without any consultation with the Ministry of Agriculture. The converse was also true. Strengthening collaborative partnership between the two key ministries was needed and youth farmers would be greatly assisted.

(iv) Adoption and Usage of ICT and technology by Youth in Agriculture

The rapid use of ICT and technology by youth is evident worldwide and the Pacific is no different. Mobile phones present a simple way to engage youth and agriculture needs to further leverage this. The SPC Survey on youth showed that all interviewees owned a mobile phone. Further, most youth farmers (86 percent) used their mobile phones to call

and receive calls. All surveyed farmers did not access agricultural information using their mobile phones or were simply not aware that this was possible. There were also infrastructure and data limitations on phone usage including electricity and mobile coverage.

(v) Evidence base on Youth Participation in Agriculture

There is a need to strengthen the evidence base on youth and young farmers to ensure that all stakeholders have data on numbers of young people who are unemployed, skilled, unskilled, reside in rural areas, have access to land, etc. Since the YIA Strategy was developed, a new regional strategy to support evidence-based decision making in agriculture (“P-SPAFS”, the Pacific Regional Plan for Agricultural and Fisheries Statistics) has been developed by SPC and FAO. A simple core indicator that measures youth participation in agriculture through the P-SPAFS would be very useful, noting this data set is not present.

(vi) Climate Smart Agriculture and Disaster Risk Management

There is a need to actively involve youth in programs of climate smart agriculture and Disaster Risk Management (DRM). This involves training, targeted messaging and incentivizing youth to actively engage in these areas. DRM is one area where youth groups can be most useful. The key is empowering and incentivizing youth who can play a frontline role in assisting seed and plant distribution, managing nurseries and assisting farm rehabilitation following a disaster.

(vii) The Pacific Youth Development Framework 2014–2023

A new broad *Pacific Youth Development Framework* (2014-2023) was also developed since the YIA Strategy. The updated YIA strategy will integrate a number of key themes to promote synergies with the broader youth sector. The *Youth Development Framework* themes include:

- Increased engagement and commitment of all stakeholders – governments, development agencies and young people to focus on enhancing farming jobs for youth.
- key populations of young people who are marginalised from mainstream development efforts, and who would most benefit from the opportunity.

3.0 RECOMMENDATIONS

Officials and Ministers are asked to:

- (i) Agree to an *Updated Youth in Agriculture Strategy (to 2025)* incorporating the elements noted above together with an updated M&E or reporting framework. This is to be completed by Q1, 2018;
- (ii) Encourage countries to mainstream the Youth in Agriculture Strategy term into the national planning and national sector policies and request SPC and partners to assist with this;
- (iii) Note that more work is needed to strengthen the evidence base for youth participation in agriculture and to promote youth agribusiness. Thus request SPC and partners to consider;
 - (i) Assisting stronger youth participation data in national or regional agriculture surveys or statistics
 - (ii) Assessing the enabling environment for youth farmer organizations and agribusiness.

SPC/LRD/PWA 2017/Youth in Agriculture

October 2017

Appendix 1



**The Influencing Role of Information and Communication Technology (ICT) and
Information and Communication Management (ICM) on
Pacific Youth in Agriculture**



Pacific Agriculture Policy Online Project (PAPP) –
Youth, ICT and Agriculture
Land Resources Division
Secretariat of the Pacific Community

Mereseini Nagatalevu-Seniloli

November 2014-March 15

ABBREVIATIONS

ARDYIS	Agriculture Rural Development and Youth in the Information Society
CCCPIR	Coping with Climate Change in the Pacific Island Region
CTA	Technical Centre for Agriculture and Rural Cooperation
EU	Europe Union
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
ICM	Information Communication Management
ICT	Information Communication Tools
LRD	Land Resources Division
MPI	Ministry of Primary Industries
PAPP	Pacific Agriculture Policy Project
PNG	Papua New Guinea
SPC	Secretariat of the Pacific Community
TVL	Telecom Vanuatu Ltd.

EXECUTIVE SUMMARY

Vanuatu reported an increase in youths' participation and engagement in agriculture, forestry, and livestock over the years. Likewise, Fiji also reported an increase in youths' participation in agriculture according to the recent survey conducted by Pacific Agriculture Policy Project (PAPP).

However, these young farmers need all the technical, financial and mentoring support from all relevant partners and stakeholders. They also need capacity building in identified areas in order to be fully equipped in tilling and farming their land as a small business. Most importantly they need all the supportive advice from their families and communities in order to provide a sense of belonging and inclusion. Partners and stakeholders outside the family units will not be successful unless they rope in the support from youths' families and communities.

Youths and young farmers of today have access to and own Information Communication Tools (ICT) tools e.g. mobile phones. However, these are mostly used only for calling, receiving calls, texting and downloading music and movies video clips. They do know that agricultural information can be accessed by their ICT tools but did not have the interest to do so.

Usage of ICT tools has a big future amongst young farmers of today who are the adult farmers of tomorrow. The key in improving and sustaining the technical intervention is to present an attractive package of agricultural incentives, agricultural information, ICT tools with reasonable prices from relevant partners and network providers like Digicel, Telecom Vanuatu Ltd. (TVL), and Vodaphone.

1. INTRODUCTION

A new technical assistance program had been established by the Secretariat of the Pacific Community (SPC) Land Resources Division (LRD) and the Europe Union (EU) aimed at strengthening smallholder farmer livelihoods (SPC, 2014). The new technical assistance program known as the Pacific Agriculture Policy Project (PAPP) achieves its goal by promoting (i) stronger linkages to markets (ii) dissemination of information, research and learnings for sustainable crop production and (iii) evidence based policies that provide a coherent approach for production, research and development.

According to SPC (2014) PAPP has teamed up with the Technical Centre for Agriculture and Rural Cooperation (CTA) to promote the Agriculture Rural Development and Youth in the Information Society (ARDYIS) initiative in encouraging youth engagement in agriculture. The initiative places an emphasis on the usage of social media and other Information Communication Tools (ICT) that may be used to develop agricultural opportunities for youth. In result SPC LRD had conducted a series of regional trainings on usage of Web 2.0 tools for the Pacific Island countries since 2011 with the last one conducted in October in Vanuatu this year.

This report focuses on a study conducted in Vanuatu and Fiji to establish the role of ICT and Information Communication Management on the youth in agriculture. Tonga and Papua New Guinea are also recipients of the Web 2.0 trainings but excluded from the research exercise due to the limited timeline for the study.

1.1 Research Questions

The research questions included:

- a. What are the barriers that discourage young people from engaging in agriculture, forestry and other relevant sectors?
- b. What factors or strategies would attract young people to view agriculture, forestry and other relevant sectors as career worth?
- c. What ICT tools are commonly owned and used by young farmers?
- d. Are young farmers using ICT tools to promote agriculture, forestry and other relevant sectors?

1.2 Significance of Study

A survey conducted by SPC (2013) highlighted the fact that the Pacific is facing an aging farming population and their children are seeking other forms of employment other than of their farming parents. The survey findings revealed that jobs in agriculture and forestry are not seen as a career but as something “school dropouts” revert to as the last resort to earn income and support their families.

Youths view agriculture as dirty work and most are reluctant to “getting their hands dirty”. Working in agriculture is a noble and professional career as one can excels to become a plant pathologist, entomologist, weed scientist, plant protection specialist, an agronomist, plant breeder, etc. Youths are hardly exposed to such career paths that their thinking is narrowly focused on the hard labour their parents do daily on their farms.

The study attempts to look into issues youths face that stand as barriers towards getting engaged in agriculture. It also looks at various suggestions to increase youth engagement in agriculture. Using ICT tools e.g. mobile phones by youths are also looked at in relation to sourcing agricultural information.

1.3 Aim

The overall aim of the study is to establish the influencing role of ICT and ICM on the youth in agriculture.

1.4 Objectives

The study seeks to achieve the following objectives listed below:

- a. To explain the low engagement of youth in agriculture as documented in the Pacific youth in agriculture strategy
- b. To find more ways in engaging more youths into agriculture and forestry sectors of farming as a career
- c. To carry out a study and establish the influencing role of ICT and ICM on the youth in agriculture and forestry
- d. To find out if youths are using ICT to promote agriculture and forestry
- e. To ensure that the agriculture policy framework is youth inclusive

1.5 Rationale

The study explored firstly, the engagement of youths into agriculture. Answers to the following questions sought; Are youths really interested in agriculture? How can we attract youths in agriculture and forestry? What information are youths looking for to motivate them to engage in agriculture and forestry?

Secondly; the study explored the existence of youth groups actively engaged in agriculture. The following questions were asked: What are youth in agriculture activities or groups and programs exist in the Pacific? For such programs, what challenges do we face in engaging youth and how are these overcome? What youth organizations are out there doing agriculture?

Lastly; the study explored the usage of ICT tools to better engage young farmers in farming. Similarly, answers to the following questions: What social media and other ICTs are used to engage or educate them, such as training young farmers to better manage their agri-business? Are youths who develop software or mobile applications for agriculture known? Are youths interested in accessing agricultural and forestry information? If, so, how are they accessing the information? How can ICT and ICM improve access to agriculture and forestry information? What are the barriers in using ICT to access information on agriculture and forestry? What are the alternatives to the barriers?

Existing education/school policies for agriculture were looked at. The status of enrollment rates for agricultural colleges are also looked at to gauge the interests of youths in agriculture and forestry.



Figure 1. Tutu young trainee farmers listing agricultural production problems in farming

2.0 LITERATURE REVIEW

Pacific Region

The youth population (15-24 years old) made up on average eighteen percent of the whole Pacific population in 2005 according to UNICEF et al, 2005. A slight increase to about twenty percent was observed in 2010 (UNICEF et al, 2011) showing a significant youth bulge for the region. SDWG (2013) reported that the youth group accounts for nearly two million people, which is close to a fifth of the region's population and a third of the adult working age population.

These vulnerable members of the Pacific Island Countries (PICs) share similar challenges in dealing with their youths who face issues in increasing; school dropouts, unemployment amongst school leavers, substance abuse, exposure to STIs including HIV AIDS, teenage pregnancy, street dwellers youths, crime and civil unrest youth involvement, and suicide.

Vanuatu and Fiji

Vanuatu's youth population in 1999 was 19.8 percent of its population of 186,678. The youth population showed a slight decrease to 19.4 percent in 2010 of its estimated population of 234,023.

Similarly, Fiji's youth population in 1996 was 19.6 percent of its population of 775,077. The youth population decreased in 2010 to 18.3 percent of its estimated population of 847,793.

Both countries face a key issue of youth underemployment and need to provide income generating opportunities for young people who are unskilled, school dropouts, especially those who live in the rural areas (SDWG, 2013).

Farming Matters (2011) reported that farming is often regarded as a fall-back option, something to do if one does not find anything else in the Pacific. A survey conducted by Policy Agriculture Forestry Policy Network (PAFPNet) in 2009 revealed that many young people are engaged in farming and contributing significantly to the family's labour, food security and livelihood. The report stated that young people needed support if they were to see farming as a career option: they needed to have appropriate financial management skills, access land and credit and have control over the resulting financial returns for their activities.

ICT tools like mobile phones have become more relevant in the modern days and agriculture is one of the sectors that benefited from it (Shaffril, et al, 2009). Mobile phones can play a key role in disseminating

relevant information to farmers involved in agriculture and related sectors. Youths of today are always busy calling, receiving, and texting using their mobile phones especially in this era of globalization. A survey conducted by Shaffril and his team revealed that ICT tools like mobile phone without doubt is one of the main instruments that can help agriculture community especially to ease the communication process and agricultural community must be encouraged to utilize it wisely.

Richardson (1998) similarly focused on how agricultural extension can harness ICTs for improving rural livelihoods. He reported that any ICT intervention that improved the livelihoods of poor rural families will likely have significant direct and indirect impacts on enhancing agricultural production, marketing and post-harvest activities – which in turn can further contribute to poverty reduction. Richardson (1998) recognized that developing countries each have location-specific agricultural and rural development constraints and opportunities, and country-specific telecommunications constraints and opportunities. In other words, there are no blueprint approaches for ICTs or magic bullet ICTs that will automatically improve rural livelihood.

A study conducted by Meera, et al (2004) on ICT in agricultural development, comparing three projects from India found four policy implications which were: a) ICT projects to serve resource-poor farmers require qualified and well-motivated staff to serve as an interface as an interface with computer systems. Staff for agricultural extension projects should have adequate training in agriculture, b) Efforts should be made to ensure that farmers have little in the ICT project personnel and that they are committed to the goals of the project, c) Before ICT projects are established in a region, rapid rural appraisals should be done to assess the type of information most in demand, d) Government should reorient its policies in order to harness ICT personnel potential for contributing to agricultural development.

3.0 METHODOLOGY AND METHOD

3.1 Selection of Countries

Vanuatu and Fiji were selected depending on the criteria of the programme implementers in LRD and the restricted time frame within which the study had to be conducted. The other participating Pacific Island countries included Tonga and Papua New Guinea (PNG). A three working days period was allowed for study in each member country of Fiji and Vanuatu.

The selected countries provided two respective scenarios; a) A country whose selected representatives had received trainings in Web 2.0 tools (Vanuatu) and b) A country that whose selected participants had not received the concerned trainings (Fiji).

3.2 Research Process

Traditional and formal protocols were adhered to where necessary. The entry point of contacts were mostly the relevant ministries in the countries for example, Ministry of Agriculture, Livestock/Quarantine, Forestry, Fisheries and Ministry of Climate Change in Port Vila, Vanuatu and Ministry of Primary Industries in Taveuni, Fiji. Then follow up meetings were conducted with relevant stakeholders according to the recommendations of the key informants.

3.3 Methodology

A case study approach on youth in agriculture and ICT usage using exploratory research, inductive theory and induction process was used. Qualitative and quantitative data were gathered using the participatory principles and methodologies (Pretty et al, 1995). Similarly, qualitative and quantitative data were collected from using survey questionnaire which was used as an interview guide during face to face consultations or interview of key informants.

Focus groups were used to generate discussions on the poor engagement of young people in agriculture and ways in which youths can be attracted to perceive agriculture as a career.

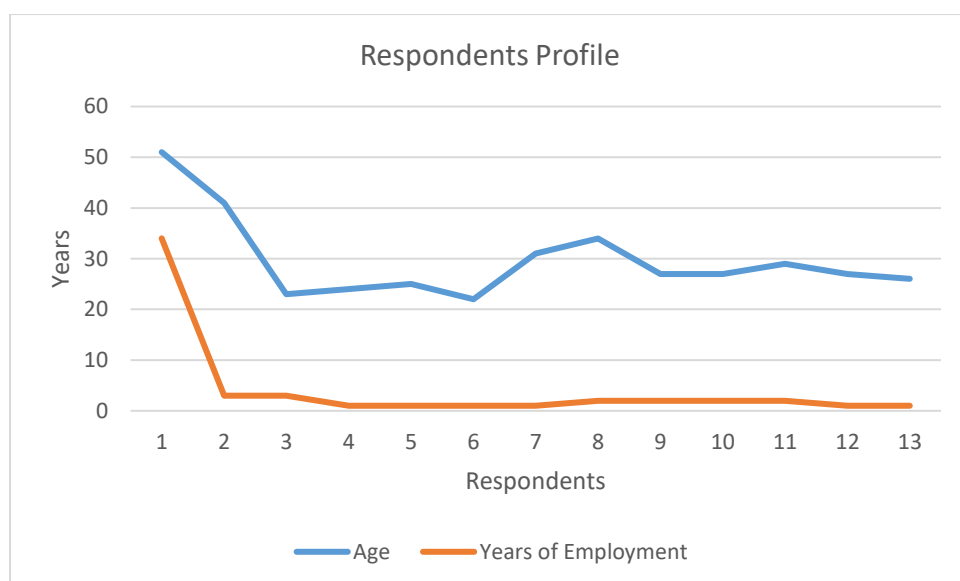
Fair representation of targeted population was ensured and selected respondents participated effectively in the surveys.

4.0 RESULTS/FINDINGS AND ANALYSIS

4.1 Case Study: Port Vila, Vanuatu

4.1.1 Profiles of Interviewees /Respondents

Figure 2. Years in age and employment of respondents



Fifteen percent of the respondents are above forty years of age, whereas eighty five percent are below thirty-five years of age (refer to Figure 1.). The youngest being a twenty –two years old male. Sixty-two percent of respondents are males and thirty-eight percent are females. About seventy- seven percent of the respondents are singles having never married. Eight percent of respondents had worked for more than thirty years, whereas the remaining ninety-two percent had worked for less than four years. Seventy five percent of those who have worked for less than four years aged between twenty-two and twenty-nine years showing a relatively young work force for the concerned sectors.

Forty-six percent of the respondents are University graduates followed by thirty-nine percent being high school graduates and fifteen percent have completed tertiary education.

Respondents (refer to Annex 1.) represented respective sectors which included, agriculture, forestry, climate change, livestock and youth. Thus, the study extended its sector consultation to include climate change, youth and livestock.

4.1.2 Engagement Youth in Agriculture, Forestry, Livestock and Climate Change

4.1.2.1 *Preferred trees, crops, livestock of youths*

Table 1. Youth's Preferred Production Choices

Youths' Preferences	Subsistence Production	Semi-Commercial / Commercial Production	Youths' Production Preferences
Forestry	¹ Canarium nut, Sandalwood Terminalia, Mahogany Whitewood	Canarium nut, Sandalwood Terminalia, Mahogany Whitewood	Sandalwood
Agriculture	Sweet potatoes, Yams, Wild kava, Cassava, Banana, Taro, Island taro, Pele leaves, Chinese cabbage, Tomato, Cucumber, Pumpkin, Eggplants, Wild Yams, Peanuts, Carrot	Taro, Yams, Tomato, Chinese cabbage, Lettuce, Banana, Cassava, Watermelon, Vanilla, Cocoa, Sweet potato, Peanut, Coconut, Kava, Coffee, Carrot	Taro, Kava, Watermelon Pineapple, Cocoa, Coffee, Chinese cabbage, Bananas, Yams
Livestock	Pigs, Goats, Chicken, Cattle	Beef cattle, Pigs, Chicken, Honey bees,	Chicken, Pigs, Cattle

Note: ¹ Scientific names of trees and crops are listed in Annex 2.

Results revealed that youths preferred cash commodities. Youths preferred to be engaged in production activities that generates income in a short term. In other words, youths prefer quick ways of getting money.

4.1.2.2 *Participation of youths in agriculture*

All (100 per cent) respondents stated that there is an increase of youth engagement in agriculture. The reasons for such increase are tabulated in Table 2.

Table 2. Reasons for the Increase in Youths' Engagement in Agriculture & other relevant sectors

Reasons	Economic	Technical Assistance	Social	Natural
Forestry	High demand of species on the international market	Forestry established 22 provincial government nurseries and private nurseries	School leavers need financial income for families	Seeing the adverse effects of climate change make them plant more trees
	Very high value e.g. sandalwood that boosts youth to plant, harvest, and purchase whatever they had dreamed of but never could have.	Provided a lot of trainings on nursery establishment and woodlot management across the country		
	To provide sustainable production for the future generations	Awareness materials were provided via media, DVD, flyers, posters, etc.		
Agriculture	Youths have come to realize the need and importance of agricultural production for their livelihood	With the climate change awareness that these youths had when attending the National Youth Summit, increased their knowledge on how they will help their crops adapt to our climate today	Linking to high unemployment rate, youths find agriculture as one main source of income generation for the households	To get resilient crop varieties for planting
	Planting commercial crops is the only way to sustain a living	Basic awareness program with partners on earning a living in agriculture	Most of the youths were dropouts from Classes 4-6 where their literacy level is low and have nothing to do	Youths are interested in learning new adaptation technologies to the impacts of climate change
	Young people have switched to growing more crops in addition to the work they are doing	New technology used in agriculture captured youths' interests	Vanuatu's population is increasing every year with a majority who are youth	
	Most youth live in rural areas thus engaging themselves in agriculture	Improved skills in agriculture via capacity building		
	Increased income			
	Source of income			
	Lifestyle is agriculture base			
Livestock	Increased interests in livestock farming due to improvement of livelihood	Awareness program	Less job opportunities in urban areas	
	Good price on livestock sales	Through awareness and training programs, youth involvement has increased		
	They as farmers can see the importance of livestock and also increase in price demand for the markets			

Some of the ways in which youths can be encouraged into agriculture are listed in Table ?. The suggested methods are grouped into five categories namely economic, training & awareness, financial support, social and natural. These are cross cutting categories across all sectors; agriculture, forestry, livestock and in general terms.

Table 3. Suggestions to encourage youths to get engaged in agriculture as a source of income

	Economic	Trainings & Awareness	Financial Support	Social	Natural
Forestry	Agro-forestry systems by which they can make money from other crops (short rotation) before selling their trees	More awareness materials to be produced especially documentaries on forestry	More funding needed	To maintain forest services and other livelihood needs that are obtained from forest production and resources	To fight against climate change we need more trees to be planted
	To plant more trees for future timber production	More trainings specifically targeting youths as a lot of youths have been establishing woodlots	Need funds to survey such woodlots providing facts and figures		
Agriculture	Agriculture activities that could help generate income	Youth Associations need to increase the participation and interest of young people to be involved in agriculture sector		Social youth groups can implement/ establish a plot and practice crop rotation as part of their social activities	
	Promote agricultural produce that generate fast and easy money	Youth symposiums that youths get to know and become aware of agriculture activities.			
	Dissemination of planting materials (of interest to youths) to kick start their involvement in agriculture	Dissemination of information via social media to promote agricultural produce such as kava, sandal wood, value-added products etc.			
		Provide more training in agriculture			
Livestock	Raising chickens which contributes to improving soil fertility for growing crops e.g. Chinese cabbage, cucumber, and other vegetables that are good sources of income	Awareness conducted to encourage young people to use livestock such as poultry which contributes to soil fertility	Provide the necessary funds and infrastructure to facilitate the markets		
	Engage interested youths in breeding programs			Engage interested youths in the annual livestock shows to motivate them	
General		Assist in identifying and providing market for their products	Utilize potential young farmers as lead or model farmers	Provide incentives e.g. funds to help youths start off production efforts	

		Provide more market opportunities for youth to sell their produce		Set up demonstration plots and farms	
		Provide attachments for interns on projects		Identify their interests, hobbies and skills and target them accordingly	
		Provide exchange programs where youths are exposed to different income generating agricultural projects			
		Provision of trainings and scholarships so youths can pursue agricultural studies			
		Provide good awareness to youths			
		Provide good trainings to youths			

Technical support would be provided through trainings and awareness activities for sectors' specific activities.

4.1.2.3 Youth Groups in Vanuatu Engaged in Agriculture, etc.

All youth groups in Vanuatu are engaged in agricultural activities to some extent due to their locations in the rural areas of Vanuatu including the islands. The Department of Youth provided the list of youth groups registered shown in Annex 3. The Ministry of Agriculture should work in collaboration with the Department of Youth as currently they work in isolation.

A total of three hundred and forty-nine youth groups are registered in Vanuatu (Table 4)

Table 4. Youth Groups in Vanuatu

Youth Council	No. of Youth Group Organizations
Tafea	79
Port Vila	34
Shefa	70
Malampa	80
Penama	27
Sanma	13
Luganville	25
Torba	21
Total	349

4.1.3 Adoption and Usage of ICT and ICM by Youth in Agriculture, Forestry, Livestock and Climate Change

All respondents have a mobile phone with sixty-two percent owning a Nokia brand phone in Vanuatu. The remaining thirty-eight percent owned Alcatel brand. All (100 per cent) respondents used their mobile phone to call and text or send messages. About thirty-percent of the respondents actually access Facebook social network on their mobile phones whereas sixty-two percent of them stated that young people are regularly accessing Facebook on their mobile phones. Seventy-seven percent of the people interviewed perceived that youths knew that they can access agricultural information on their mobile phones. Information sought by youths included; forestry information, media and daily newspapers, annual growth rate of a tree, silvicultural practices, radio programe which has a talk-back shows, alerts on animal production and alerts on farmers news in Vanuatu. The radio talk back shows allows youths to call, ask questions and seek answers on various topics including agriculture, forestry, livestock and climate change.

Twenty-three percent of the respondents stated that youths are not aware that they can access agricultural information using their mobile phones. Usage of mobile phones are limited due to the network coverage and reception in the rural areas where most young people dwell. In these areas the reception is weak, unclear transmissions, and at times network is unavailable at all. Network coverage is excellent in good weather conditions. Therefore not all young people access internet around Vanuatu leading to limited access to agricultural websites. Many young people lack the knowhow in using social network to access agricultural information. Youths who live in urban areas are more likely to access internet easily on a daily basis but would rarely search for information relation to agriculture, forestry, livestock and climate change.

4.1.4 Future of ICT and ICM Usage in Agriculture, Forestry, Livestock and Climate Change

Forty-six percent of the respondents have attended the Web 2 tools trainings conducted by SPC LRD in Vanuatu in October 2014. One these respondent had the opportunity to attend the Fiji training in 2013.

All (100 percent) of the respondents envisaged the increased use of ICT tools like mobile phones in future by youths engaged in agriculture, forestry, animal husbandry and climate change activities. Such perceptions are based on the assumption that the network coverage provided by the two telecommunications companies; Telecom Vanuatu Ltd. (TVL) and, Digicel is greatly improved and broadened its service areas in Vanuatu.

Table 5.0 lists the recommended types of information that are supposedly relevant, readily available and easy to access by ICT tools.

Table 5. Suggested relevant information for easy access by ICT tools

	Biological	Management	Markets	Adaptation	Technical Experts	Awareness Materials
Forestry	Recommended tree species for different climatic environment	Management of forestry plantations	Market value or prices on timber species (soft and	Impacts of climate change on these tree species and		

			hardwood) and available markets	guidance to adapt if necessary		
	Forestry species information	Nursery establishment and woodlot management	Estimation of trees based on 1 hectare			
	Information on pests and diseases of trees and control measures	Maps (vegetation, soil, topographic)	Sawmilling enterprises and costs			
		Tree planting practices and management	Processing costs to markets			
		Clearing of trees practices				
Agriculture	Websites of recommended crops and varieties	Seasons to plant crops (best time to plant and harvest)	Markets available for youths to access	Rainfall, temperature readings, high and low tide, sea level rise, weather forecast	Contact details of specialists e.g. Vanuatu Agricultural Research Technical Centre (VARTC)	Agriculture extension materials (booklets, leaflets)
	Information on economic pests, diseases and control measures	Recommended husbandry practices for selected crops	Available market opportunities	Adaptation techniques to planting	Research results	Upcoming agriculture trainings
	New crop varieties resistant to climate change impacts		Market price		Actual trend in agriculture development	
Livestock		Simple information on husbandry & management of livestock	Price of materials and animal stock			
		Pasture improvement and management	Market prices for livestock products			

Seventy-seven percent of the respondents knew that they could access agricultural information using their mobile phones. Twenty-three percent of the respondents did not know that they could access agricultural info on their mobile phones. Table 6. exhibits suggested techniques by which youths' understanding of ICT usage in accessing relevant information for agricultural production purposes be improved and increased.

Table 6. Suggested ways to increase understanding of usage of ICT amongst youths in farming communities

	Trainings	Awareness	Information	Telecom Network	IC Tools
Community members (inclusive of youths & farmers)	Conduct trainings on specific poverty issues affecting them economically and environmentally	Create awareness on specific poverty issues affecting them economically and environmentally	Information has to be simplified and conveniently translated into the vernacular language	Increase network coverage to remote rural areas as farmers and youths live in such areas	Use other sources of energy to charge mobile phones e.g. solar, windmills

	Train youths/ farmers on usage of ICT tools in rural remote areas	Create Facebook network to share information amongst youths in relevant sectors regularly		Rural stakeholders to work with telecom companies to produce a tool for effective transfer of information to them	
Technical Staff (Forestry, Agriculture, Livestock, Climate Change, Youth)	More ICT trainings because most of them are based on the islands and provincial centres	Increase number of awareness workshops	Increase time and effort to produce relevant information for dissemination	Increase and improve network coverage to all the islands of Vanuatu	Use of renewable energy (solar) in remote areas
	Conduct trainings on knowing the capacity an ICT tool has – getting to know their mobile phones	Departments of Agriculture, Forestry, Livestock to work with Department of Youth to support youths' engagement in agriculture, etc.	Upgrade existing capacity within the information unit to provide quality information	Improve good coverage in rural remote areas	
	In-house trainings on ICT for all relevant Departments	Create awareness to Department of Youth staff on ICT usage	Create Principal Agriculture Information Centres in the Provinces where famers and young farmers can access relevant information	Work in partnership with TVL and Digicel to improve coverage, reception and better utilization of ICT to attract youths into agriculture	
	Conduct onsite follow-up to monitor and evaluate progress on usage of ICT	Create more awareness amongst youth networks and public at large			
		Involve Departments of Agriculture, Forestry and Livestock in National Youth Summits			
		MOU to be signed between Department of Youth and Departments of Agriculture, Forestry and Livestock to facilitate partnership activities			
Ministry of Education	Usage of ICT by youths in agriculture be included in the curriculum				
	Scholarships be allocated for interested youths to pursue study in agriculture				

4.1.5 Video Clips

Two video clips were taken in Vanuatu where a Forester and a Climate Change Project Assistant discussed their own experiences in working with youths in agriculture utilizing the ICT tools.



Figure 3. Mr. Isso Nihmel, Project Assistant explained how he had established his Blog site to discuss his experiences in using climate change adaptation measures as a young farmer.

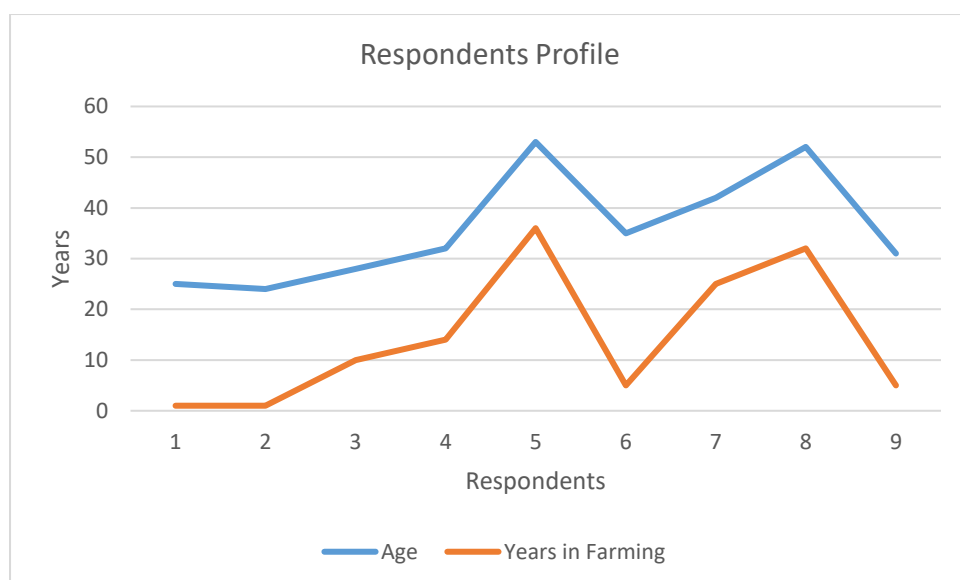


Figure 4. Mr. Jude Tabiwusu, Regional Forest Officer explained the importance of using mobile phones to access information on trees in young farmers' established woodlots

4.2 **Case Study: Taveuni, Fiji**

4.2.1 Profiles of Respondents

Figure 5. Years in age and farming of respondents



One third of the respondents are more than forty years old. The remaining two thirds aged less than thirty-six years with the youngest age of twenty-four years (refer to Figure 2.).

All (100 percent) of respondents are males of which forty-four percent are Fijians and fifty-six are Indo-Fijians full time farmers. About seventy-eight percent of these male farmers are married with children. Forty-four percent of the farmers have been engaged in agriculture for a period of five years. Fifty-six percent of the farmers have been engaged in farming for a duration of ten years with the longest serving farmer had been farming for thirty-six years.

Twenty-two percent of the farmers had completed high school education, thirty-three percent had completed primary school and the majority comprising of forty-four percent had completed kindergarten.

All respondents (refer to Annex 4) are fully engaged in both subsistence and commercial farming on the island of Taveuni. Fijian respondents are located in Qeleni whilst their Indo-Fijian colleagues dwell and farm in Qila.

4.2.2 Engagement of Youth in Agriculture

4.2.2.1 Preferred crops of youths

Young farmers tend to have a high preference for cash crops which generates quite a substantial income in a short frame of time. These are listed in Table 7. alongside the subsistence and commercially grown crops.

Table 7. Preferred young farmers' crops

	Subsistence crops	Commercial crops	Preferred youths' crops
Root crops	Cassava, dalo dina, kava	Dalo tausala, cassava, kava	Dalo tausala, kava, cassava
Tree crops	Plantain (vudi), banana, breadfruit		
Vegetables	Bele, eggplant, cucumber, beans, other vegetables	Other vegetables	

Fruits	Pineapple		
--------	-----------	--	--

Young farmers preferred quick cash crops like dalo tausala, kava, and cassava. Dalo tausala and cassava are annual crops and generate good income. The growing and harvesting of kava usually takes 4 – 5 years and fetches a better price than the other two commodities.

4.2.2.2 Participation of youths in agriculture

Seventy-eight percent of the interviewed farmers stated that engagement of youths into agriculture is taking momentum and increasing steadily. The reasons for such an increase can be seen in Table 8.

Table 8. Reasons for the Increase of Youth Engagement in Agriculture

Economic	Social	Land	Education	Livelihood
Good source of income and livelihood	Got interested seeing brother's land cultivated	Easy to lease land from landowners	Completed school and turn to farming as a source of income	Young farmers have built houses, bought vehicles and have good living conditions for their young families
Readily available markets	Influenced by peers who are now married and farming		A plantation of 400 plants 4-5 years old kava generates income that meets the tuition fees at the University of the South Pacific (USP)	
Farm produce like dalo and kava are in high demand	Increased social commitments of youths			
Youths are attracted to farming because of the substantial amount of income earned	Enjoys farming			
	School dropouts are also turning to farming for livelihood			

Twenty-two percent of respondents reported otherwise giving the following reasons as to youths less involvement in agriculture; a) Lack of stability in youths' families, b) Lack of mentoring and valuable advice, c) Abusive consumption of kava and *suki* (homemade cigarettes), d) Laziness having a layback style of living fully dependent on parents. Suggestions as means of encouragement to youths to be engaged in agriculture overcoming the above listed barriers are seen in Table 9.

Table 9. Suggestions to encourage youths to get engaged in agriculture as a source of income

Economic	Trainings & Awareness	Financial Support	Social	Education
Increase youth participation in farming leads to increase in agricultural production	Strengthen encouragement of youth to farm via awareness trainings	Provide incentives and funds	Improve mentorship of youths	Provide education opportunities for youths e.g. 500 kava plants will

				pay for USP fees for a child in Form 5
	Conduct a lot of awareness trainings on farming	Provide technical assistance and subsidies	Youths needs to be engaged in group farming which will be more effective than individual farming	400 kava plants will pay for USP fees for a child in Form 3
	Need some eye-opening trainings for youths to be exposed to			
	Fijian young farmers need training in financial management and planning			
	Create awareness through media outlets and advertisements			
	Showcase the benefits of farming in order to attract youths to farming			

4.2.2.3 Tutu Young Farmers Trainees Focus Groups

Twenty-two students from Tutu Rural Training Centre (TRTC) participated in focus group discussions and shared their thoughts on; a) Why aren't youth keen to be engaged in agricultural activities? b) Suggestions or methods to encourage youths into farming. These focus groups' results' are shown in Table 9.

Table 9. Focus groups discussions results

Focus Groups	Why aren't youth keen to be engaged in agriculture?	Suggested ways to encourage youths' engagement in agriculture
1	Youths are lazy	Discourage abusive consumption of kava
	They do not really care about their own livelihoods	Be responsible and matured to make good decisions
	Lack of setting goals or vision in life	Develop programs to engage youths e.g. mentorship
	Peer pressure	Be strong, matured and independent
	Lack of land available for farming	Lease land
	No guidance provided to youths	Request technical advice from MPI
2	Peer pressure	Share successful stories to peers
	Lack or no programs to engage young people	Be a good example in conducting good agricultural practices
	No dreams or vision for the future	Develop programs to help setting of goals
	No or lack of supportive guidance from home	Develop mentoring programs
	Immaturity	Manage your farm well and be responsible for it
	Too much dependency	Be a good example of managing your time wisely
3	Farming is tiring and dirty work	Have competitive farming or hold competition on who has the best farm
	Peer pressure	Revive and strengthen you groups via field trips, training workshops, etc.
	Youths prefer white collar jobs	Organize role models of successful young farmers
	Lack of patience and persistence amongst youths	Develop mentorship programs
	Weak physically not able to do physical work on farms	Adopt traditional group farming where group members will all participate in farming on each member's farm

	Many youths desire quick money or fast cash	Farm for a purpose/ objective e.g. to build a house, buy a vehicle or boat
	Many youths work only when the boss is around	Train on accountability
	Many youths desire jobs that require travelling a lot	Advertise or promote the good/best youth farmers

Peer pressure and lack in having a vision or goal in life stood out to be the main issues youths face today. Mentorship programs need to be developed, established so youths can receive some guidance and advice.

4.2.2.4 Youth Groups in Taveuni, Fiji engaged in agriculture

All youth groups in Taveuni are engaged in agriculture. However, there is a need that these groups are better organized in their farming activities. The Ministry of Youth (MOY) implements its own work plan with the youth groups without any consultation with the MPI. Similarly, MPI works in isolation with its youth clients without partnership with the MOY. Strengthening collaborative partnership between the two key ministries is needed and youth farmers would be greatly assisted. The names of registered youth groups' organizations actively engaged in agriculture are listed in Table 10.

Table 10. Youth Group Organizations in Taveuni, Fiji

District	Village /Settlement	No. of Youth Groups
Vuna	Navakawau	2
	Nakorovou	1
	Waimaqera	1
	Delaivuna	2
Cakaudrove	Tavuki	1
	Waica Settlement	1
	Lovonivonu	1
	Somosomo	4
	Vuniwai Settlement	1
	Burotu Settlement	2
	Lamini	2
	Welagi	1
Wainikeli	Naselesele	1
	Qeleni	3
	Navakacoa	1
	Waitabu	2
	Vidawa	1
	Korovou	2
	Lavena	1
	Naiviivi	1

Laucala	Kocoma	2
	Dreketi	2
	Togo	1
	Yanuca	1
	Naqelevu	1
Total		38

Source: Ministry of Youth, Youth Coordinator, Mr.

4.2.4 Adoption and Usage of ICT and ICM by Youth in Agriculture

All (100 percent) interviewees owned a mobile phone mostly of Nokia (48 percent) and Alcatel (48 percent) brands. Majority of the farmers (86 percent) used their mobile phones to call and receive calls. One farmer uses his mobile phone to download music, games and get into the Facebook social network.

All (100 percent) farmers do not access agricultural information using their mobile phones. Farms that are located in Qeleni up in the mountains lack electricity supply leading to no internet services with no available network. Accessing agricultural information will only be possible when there is electricity and available wifi network. A question of meeting the costs of internet or accessing and downloading agricultural information was raised by one of the farmers.

Network coverage by Vodaphone and Digicel is poor in the mountains where most of the farms are located. Electricity is not available in upland farms, so charging mobile phones is an issue.

A couple of farmers demonstrated a fear of technology in their inability to fully use the mobile phones according to its capacity. In other words, they are ignorant of the capacity of their mobile phones and lack knowledge on proper usage of the ICT tools.

All farmers are ignorant of the fact that they can access relevant agricultural information on their mobile phones.

4.2.5 Future of ICT and ICM Usage in Agriculture

None of the farmers had ever attended a workshop on the usage of ICT to access agricultural information.

All farmers envisaged an increasing usage of ICT by youths in agriculture. However, raised the issue that he protects his teenage children from accessing internet while attending high school. He will only give his teenage children a mobile phone when they attend USP.

None of the farmers knew that he could access agriculture information via his mobile phone. They suggested that more trainings and awareness should be conducted in order to address; firstly, the fear of using ICT tools by getting to know the details and capacity of the tools; secondly, the ways in accessing agriculture information from respective sources.

Table 10. lists the types of information that are supposedly relevant, readily available and easy to access by ICT tools.

Table 10. Suggested relevant information for easy access by ICT tools

	Biological	Management	Markets	Adaptation	Technical Experts	Awareness Materials
Agriculture	Soil and manure recommendations	Breakdown in financial management	Market prices for dalo, kava and other commercial crops	New planting methods	Technical advice on growing crops	Relevant agricultural information
	SMART farming techniques	Networking with suppliers, middlemen, etc.	Costs of fertilizers		How to test the soil for fertility	New agricultural ideas
						Exchange of information

4.2.5 Video Clips

Three video clips were recorded in Taveuni with two young people sharing their experiences in using ICT tools. An agricultural technical officer shares his views on ICT usage in the sector.



Figure 6 Abhishek Sapra, young farmer in Ura, Taveuni uses his Samsung tablet for GPS and search for agricultural and livestock information from the internet.

5.0 CONCLUSION

The study revealed that the main barriers that discourage young people from engaging in agriculture, forestry and other relevant sectors are; a) peer pressure, b) lack of vision, goals in life, c) lack of supportive guidance from home and relevant stakeholders, d) silent exclusion by community elders, e) misconceived ideas about agriculture as a career field, and f) lack of technical and financial support to help kick start youths' engagement in agriculture.

Strategies that would attract young people to view agriculture, forestry and other relevant sectors as career worth would include: a) Revisiting the school curriculum to include agriculture, forestry units from primary/elementary to secondary/high schools, b) Creating awareness on agriculture as career worth to final year students of high schools encouraging them to pursue college or university studies in agriculture, c) Strengthening collaboration amongst partners and relevant stakeholders in enticing youths to be engaged in agriculture whether in the formal or non-formal sector, d) Coordinating successful young farmers as role models to his/her peers demonstrated by his/her farm during field days or national youth summits, and, e) Providing technical and financial support to young farmers to successfully engaged in agriculture, forestry, etc.

The study has revealed that the ICT tools commonly used by young farmers are mobile phones to call, receive calls, text messages etc.

A lot more awareness trainings are needed for youths to improve the usage of mobile phones to access relevant agricultural information. A marginal number of youths are currently using ICT tools to promote agriculture and forestry.



Figure 7 Rohit Lal of MPI Taveuni stated that more work has to be done in engaging youth in agriculture and usage of ICT tools by young farmers.

5.1 RECOMMENDATIONS

All suggested recommendations are included in all the specific tables of findings throughout the report. However, the major recommended strategies and actions are as follows:

- a) Establish a mentoring system for youths to guide them in setting goals in their lives.
- b) Community elders to educate and translate traditional knowledge, etc. to the younger generation via intervention and encouragement from Government.
- c) Create a lot of awareness on agriculture as a career option both in the formal and informal sectors via media outlets, etc.
- d) Revisit the curriculum and include the usage of ICT tools within the agriculture curriculum.
- e) Awareness programs in School to encourage students to enroll in agriculture/forestry
- f) Conduct more training on the usage of ICT tools in partnership with the network providers in the countries.
- g) Create attractive packages with network providers on using ICT tools in agriculture specifically targeting the young people.

- h) Strengthen collaboration and partnership amongst network providers, relevant government departments, donors, registered youth groups and communities in encouraging young people to do farming.
- i) Promoting interns/youths in the ministries e.g., graduates with Ministry of Agriculture/Forestry
- j) Promoting youth in agriculture work to students – engaging them by using role models from various organisations

Please, note that the survey results revealed that youths feel excluded from communities, lack a sense of belonging and lack a sense of purpose which have to be addressed first before any other intervention can work.



Figure 8 Taro plantation of young farmers Mosese Waibuta (left) Iosefa Veresa (right) in their makeshift home, in Qeleni.

REFERENCES

- Farming Matters (2011). Reclaiming Agriculture for Pacific Youth, Youth and Farming – An Enabling Environment, PAFPN, SPC.
- Meera, S. N., Anita, J., and Rao, D. U. M. (2004). Information and Communications Technology in Agricultural Development: A comparative Analysis of Three Projects from India, AgREN Network Paper No. 135, January

- Pretty, J. N., Gujit, I., Thompson, J. and Scones, I. (1995). Participatory Learning & Action, A Trainer's Guide, IIED Participatory Methodology Series, Sustainable Agriculture Programme, International Institute for Environment and Development, 3 Endsleigh Street, London WC1H 0DD, UK
- Richardson, D. (1998). How can Agricultural Extension Best Harness ICTs to Improve Rural Livelihoods in Developing Countries?, Gartner Lee Limited, Canada
- SDWG (2013). The Significance of Youth in Sustainable Development in the Pacific, Sustainable Development Brief, Sustainable Development Working Group, March.
- Shaffril, H. A. M., Hassan, Md. S., Hassan, M. A., D'Silva, J. L. (2009). Agro-based Industry, Mobile Phone and Youth: A Recipe for Success. European Journal of Scientific Research, Vol. 36 No.1, pp41-48
- SPC (2014). Terms of References for Short-Term Consultant, page 5
- SPC (2013). http://www.spc.int/lrd/pafnet-publications/cat_view/137-all/136-pafpnet/313-youth-development-documents, Accessed on November 20 2014
- UNICEF, SPC, UNFPA (2005) *State Pacific Youth Report 2005*, UNICEF Pacific, Suva, Secretariat of the Pacific Community, Noumea & UNFPA Office for the Pacific, Suva
- UNICEF & SPC (2011) *State Pacific Youth Report 2011*, UNICEF Pacific, Fiji and SPC Noumea.
- VNSO (2014). <http://www.vnsso.gov.vu/index.php/census-and-surveys/censuses#census-comparision>, Accessed on November 20 2014

ANNEX 1

LIST OF PEOPLE INTERVIEWED AND CONSULTED IN PORT VILA, VANUATU

NAMES	EMPLOYMENT	LOCATION
Jude Tabiwusu	Regional Forest Officer South, Forestry Department	Tagabe, Port Vila, Shefa
Phyllis Kamastela	Forest Officer, Mapping, Forestry Department	Tagabe, Port Vila, Shefa
Frank Joery	Salary Clerk	Tagabe, Port Vila, Shefa
Isso Nihmei	Project Assistant, SPC-GIZ, Ministry of Climate Change	Port Vila, Shefa
Donalyne Naviti	Intern – Agriculture/Food Security, SPC-GIZ, Ministry of Climate Change	Port Vila, Shefa

Shavin Vile	CCA Training Officer, Save the Children Fund	Port Vila, Shefa
Rebecca Solomon	Senior Training Officer, Department of Youth	Xfol, Port Vila, Shefa
Reginald Kipe	Senior Youth Officer, Department of Youth	Xfol, Port Vila, Shefa
Antoine Raw	Principal Agriculture Officer – Extension, Department of Agriculture	Tagabe, Port Vila, Shefa
Rolyn John	Principal Livestock Officer, Department of Livestock	Tagabe, Port Vila, Shefa
Robert Iapatu	Livestock Farm Hand, Department of Livetsock	Tagabe, Port Vila, Shefa
Kenny Suna	Livestock Officer, Department of Livestock	Tagabe, Port Vila, Shefa
Rojet Kon	Volunteer, Vanuatu National Youth Council	Xfol, Port Vila, Shefa

ANNEX 2

BOTANICAL NAMES OF TREES, CROPS AND LIVESTOCK

COMMODITIES	COMMON NAME	BOTANICAL NAME
TREES	Canarium nut	<i>Canarium indicum</i>
	Sandalwood	<i>Santalum paniculatum</i>
	Terminalia	<i>Terminalia sp.</i> ,
	Mahogany	<i>Sweitenia sp.</i>
	Whitewood	<i>Endospermum medullosum</i>
CROPS – Root Crops	Sweet potatoes	<i>Ipomoea batatas</i>
	Yams	<i>Dioscorea esculenta</i>
	Wild kava	<i>Piper sp.</i>
	Cassava	<i>Manihot esculenta</i>
	Taro,	<i>Colocasia esculenta</i>
	Wild Yams	<i>Dioscorea sp.</i>
	Island taro	<i>Cyrtosperma sp.</i>
	Kava	<i>Piper methysticum</i>
CROPS – Tree Crops	Banana	<i>Musa sp.</i>
	Plantain	<i>Musa sp.</i>

	Breadfruit	<i>Artocarpus altilis</i>
	Cocoa	<i>Theobroma cacao</i>
	Coconut	<i>Cocos nucifera</i>
	Coffee	<i>Coffea arabica</i>
CROPS - Vegetables	Pele leaves	<i>Hibiscus manihot</i>
	Chinese cabbage	<i>Brassica chinensis</i>
	Tomato	<i>Solanum lycopersicum</i>
	Cucumber	<i>Cucumis sativa</i>
	Pumpkin	<i>Cucurbita maxima</i>
	Eggplants	<i>Solanum melongena</i>
	Peanuts	<i>Arachis hypogaea</i>
	Beans	<i>Phaseolous vulgaris</i>
	Carrot	<i>Daucus carota</i>
	Lettuce	<i>Lactuca sativa</i>
CROPS -Fruits	Pineapple	<i>Ananas comosus</i>
	Watermelon	<i>Citrullus lanatus</i>
CROPS - Spices	Vanilla	<i>Vanilla sp.</i>
LIVESTOCK	Pigs	<i>Sus scrofa</i>
	Goats	<i>Capra aegagrus hircus</i>
	Chickens	<i>Gallus domesticus</i>
	Cattle	<i>Bos indicus</i>
	Honey Bees	<i>Apis mellifera</i>

ANNEX 3

DETAILED LIST OF REGISTERED YOUTH GROUP IN VANUATU

YOUTH COUNCIL	YOUTH GROUP	AREA COUNCIL	ISLAND
SHEFA	AOG Youth	Vermaul	Epi
	Bahai Youth	Mele Maat	Efate
	Bethany Youth	North	Efate
	Bethel Youth	West	Efate
	Blacksands AOG	Tanvasoko	Efate
	Bonkovio Presbyterian	Vermaul	Epi
	Bonkovio AOG	Vermaul	Epi
	Brisbane SDA	Vermaul	Epi
	Burumba Youth	Vermaul	Epi
	CMC	North East	Efate
	Damascus Youth	East	Efate
	Devine Youth	Tanvasoko	Efate
	Ebenezer Youth	North	Efate
	Emua Youth	North	Efate
	Etas Youth	Eratap	Efate
	Etil Branch Youth	Erakor	Efate
	Eton Presbyterian	North East	Efate
	Eton SDA	North East	Efate
	Fokona Youth	Tanvasoko	Efate
	Hights 2 Youth	Eratap	Efate
	History Makers	Tanvasoko	Efate
	Hitrati Youth	Mele Maat	Efate
	Ifmore Youth	Mele Maat	Efate
	Imere Youth	Mele Maat	Efate
	JKF Youth	Vermaul	Epi
	Kaweriki Youth	Tanvasoko	Efate
	Langwor SDA	North West	Efate
	Lelepa Presbyterian	North West	Efate
	Lelepa SDA	North West	Efate
	Lokopui Youth	Varsu	Epi
	Lopalis Youth	Yarsu	Epi
	Lopatu Youth	Mele Maat	Efate
	Macedonia Youth	North	Efate
	Mafilau Youth	Vermaul	Epi
	Malafau Youth	North West	Efate
	Malvasi Youth	Vermali	Epi
	Mangaliliu Youth	North West	Efate
	Maranatha Temple	Vermaul	Epi
	Masou Youth	Vermaul	Epi

	Matantopua Youth	Tanvasoko	Efate
	Mate Youth	Varsu	Epi
	Mauta Youth	North West	Efate
	Mele Youth	Mele Maat	Efate
	Mele Maat Youth	Mele Maat	Efate
	Molika Youth	Vermali	Epi
	Moriu Youth	Varsu	Epi
	Mulveah Youth	Varsu	Epi
	Nagon Youth	Pango	Efate
	Narkalep Youth	North East	Efate
	Nikaura Youth	Varsu	Epi
	Niku/Baia Youth	Varsu	Epi
	Nivenue Youth	Varsu	Epi
	Nulnesa Youth	Yarsu	Epi
	Nuvi Youth	Varsu	Epi
	Olwi Youth	Tanvasoko	Efate
	Pango AOG	Pango	Efate
	Parua Youth	Vermali	Epi
	Paunaggisu NTM	North	Efate
	Port Kalia Youth	Vermaul	Epi
	Presbyterian Youth	Vermaul	Epi
	Refugee Temple Youth	Vermali	Epi
	Respect Youth	Eratap	Efate
	Revenga Youth	Tanvasoko	Efate
	Ruwo Youth	Vermali	Epi
	Saama Youth	North	Efate
	Touma Dark Bush	Eratap	Efate
	Valeyo Youth	Vermali	Epi
	Victory Family Center		Efate
	Wenia Youth	Vermali	Epi
	Yopuna Youth	Vermali	Epi
TAFEA	A.S.S Youth	Anietyum	Anietyum
	Music Club Youth	Anietyum	Anietyum
	P.F.T Youth	Anietyum	Anietyum
	Presbyterian Youth	Anietyum	Anietyum
	SDA Youth	Anietyum	Anietyum
	Women Soccer Team	Anietyum	Anietyum
	A.L.M Youth	Aniwa	Aniwa
	Aniwa Potters Youth	Aniwa	Aniwa
	Aniwa Presbyterian Youth	Aniwa	Aniwa
	Isa Sports Club	Aniwa	Aniwa
	Living Water Youth	Aniwa	Aniwa
	Marsowi Youth	Aniwa	Aniwa
	Fatanais Youth	Futuna	Futuna
	Ihluga Sports Club	Futuna	Futuna
	Nafonu Sports Club	Futuna	Futuna
	Nakaruai Youth	Futuna	Futuna
	Sunapaka Sports Club	Futuna	Futuna
	Tokomarino Sports Club	Futuna	Futuna

	Breakthrough Ministry Youth	East	Tanna
	Sulphur Bay Youth	East	Tanna
	Unity John Youth	East	Tanna
	Whitesands Youth	White Sands	Tanna
	Fatumine Youth	White Sands	Tanna
	Bahai Youth	Middle Bush	Tanna
	C.O.C Youth	Middle Bush	Tanna
	Day Spring Youth	Middle Bush	Tanna
	Lamanien Youth	Middle Bush	Tanna
	Laukaru Youth	Middle Bush	Tanna
	Middle Bush Youth	Middle Bush	Tanna
	Midmid Mission Youth	Middle Bush	Tanna
	Mitmit Boxing Club	Middle Bush	Tanna
	Nalokan Youth	Middle Bush	Tanna
	Naluken Youth	Middle Bush	Tanna
	Namas Youth	Middle Bush	Tanna
	Namtahin Youth	Middle Bush	Tanna
	Nuelenaim Youth	Middle Bush	Tanna
	Olympic Youth	Middle Bush	Tanna
	Presbyterian Youth	Middle Bush	Tanna
	Tukurkak Youth	Middle Bush	Tanna
	CornerStone Youth	North	Tanna
	Hebron Youth	North	Tanna
	Naka Session Youth	North	Tanna
	Presbyterian Youth	North	Tanna
	United Football Club	North	Tanna
	Green Point Youth	South	Tanna
	Imaki Catholic Youth	South	Tanna
	Kwamera Presbyterian Youth	South	Tanna
	Kwansiwi Youth	South	Tanna
	Kwaraka Youth	South	Tanna
	Lapatua Youth	South	Tanna
	NTM Youth	South	Tanna
	Presbyterian Youth	South	Tanna
	Bangor Youth	West	Tanna
	Bethel Youth	West	Tanna
	Harvest Youth	West	Tanna
	Imasu Youth	West	Tanna
	L.D.S Youth	West	Tanna
	Leneai Youth	West	Tanna
	Loukatai Youth	West	Tanna
	Lounapiktuan Youth	West	Tanna
	Catholic Youth	South East	Tanna
	Horary Youth	South East	Tanna
	Iatapu AOG Youth	South East	Tanna
	Imaio Presbyterian Youth	South East	Tanna
	SDA Youth	South East	Tanna
	Presbyterian Youth	South East	Tanna
	Urumapor Youth	South East	Tanna

	4 Square Youth	South West	Tanna
	Army Boxing Youth	South West	Tanna
	Catholic Youth	South West	Tanna
	Fanpen Youth	South West	Tanna
	Iatapu AOG Youth	South West	Tanna
	Kipanu VolleyBall Club	South West	Tanna
	Namilo Soccer Club	South West	Tanna
	OKY Soccer Club	South West	Tanna
	Rouwa Soccer Club	South West	Tanna
	SDA Youth	South West	Tanna
	Side River Youth	South West	Tanna
	Tapan Soccer Club	South West	Tanna
PORT VILA	Alua Youth	Northern Ward	
	Bilran Futsal Club	Fresh Water / Tasiriki	
	Buninga Youth	Southern Ward	
	CLC Youth	Fresh Water / Tasiriki	
	Champaigne Youth	Fresh Water / Tasiriki	
	Commissioners Youth	Fresh Water / Tasiriki	
	CornerStone Youth	Northern Ward	
	Epauto Youth	Fresh Water / Tasiriki	
	Erasa Youth	Southern Ward	
	Evangel Temple Youth	Northern Ward	
	Faith Futsal Club	Northern Ward	
	Faith VolleyBall Club	Northern Ward	
	Fresh Water 4 Ass	Fresh Water / Tasiriki	
	Fresh Wind Presbyterian	Northern Ward	
	Fresh Wind AOG	Northern Ward	
	Fresh Water 1 Youth	Fresh Water / Tasiriki	
	George Pompidou Youth	Central Ward	
	Ginias BasketBall Club	Fresh Water / Tasiriki	
	Living Water Youth	Fresh Water / Tasiriki	
	Malasitapu Youth	Fresh Water / Tasiriki	
	Matakeru Youth	Northern Ward	
	Mautoa Youth	Fresh Water / Tasiriki	
	Pakaroa Youth	Northern Ward	
	Scouth Youth	Fresh Water / Tasiriki	
	Seven Star Youth	Northern Ward	
	Six Star Futsal Club	Northern Ward	
	Stade United Basketball Club	Fresh Water / Tasiriki	
	Tepo Youth	Fresh Water / Tasiriki	
	TMS Futsal Club	Northern Ward	
	Vao Youth	Fresh Water / Tasiriki	
	Walarano Youth	Fresh Water / Tasiriki	
	We Care Ministry Youth	Southern Ward	
	Young Neighbourhood	Fresh Water / Tasiriki	
	Youth Justice	Fresh Water / Tasiriki	
MALAMPA	Endu Presbyterian	South East	Ambrym
	Zion		Ambrym
	Akam Pres Youth	South West	Malekula

	Benenaveth	North West	Malekula
	Bethel	North East	Malekula
	Burbar	South East	Malekula
	Christian Life Center	North East	Malekula
	CMC Nesro	Central	Malekula
	CornerPoint	Central	Malekula
	Dravail	South	Malekula
	Emmanuel		Malekula
	Espigles Bay	North West	Malekula
	Fathers House	Central	Malekula
	Glorious	Central	Malekula
	Jordan	North East	Malekula
	Laruath	Central	Malekula
	Lavalsal	North East	Malekula
	Lawa	South West	Malekula
	Litzlitz	Central	Malekula
	Lowet	South East	Malekula
	Mahe	North East	Malekula
	Malua Bay	North West	Malekula
	Maluakal	South West	Malekula
	Mormon	Central	Malekula
	Najara	South West	Malekula
	Nohvetbo	South West	Malekula
	Norsup Catholic	Central	Malekula
	Norsup Compine	Central	Malekula
	Norsup SDA	Central	Malekula
	Norsup	Central	Malekula
	One Tok	South East	Malekula
	Orap Protestant	North East	Malekula
	Penpa	South East	Malekula
	Pinalum	North East	Malekula
	PRV	Central	Malekula
	Rambeck	North West	Malekula
	Rano SDA	North East	Malekula
	Rano	North East	Malekula
	Rerep SDA	South East	Malekula
	Rerep	South East	Malekula
	Rory	North East	Malekula
	Saint Paul Scout	North East	Malekula
	Seaside	South East	Malekula
	Smith Memorial	North West	Malekula
	St Therese Dixoa	South West	Malekula
	Tautu AOG	Central	Malekula
	Tautu SDA	Central	Malekula
	Tautu Presbyterian	Central	Malekula
	Tenmaru SDA	North West	Malekula
	Tenmaru	North West	Malekula
	Tuturu	North East	Malekula
	Unmet	North West	Malekula

	Unua	South East	Malekula
	Uripiv COC	Central	Malekula
	Uripiv LDS	Central	Malekula
	Uripiv NTM	Central	Malekula
	Uripiv Presbyterian	Central	Malekula
	Uripiv SDA	Central	Malekula
	Vekas	North West	Malekula
	Victory Temple		Malekula
	Vinmavis AOG		Malekula
	Vokof	Central	Malekula
	Walla Catholic	North East	Malekula
	Walla Presbyterian	North East	Malekula
	Willack	North West	Malekula
	Win	North West	Malekula
	Winn SDA	North West	Malekula
	Wintua	South West	Malekula
	Wurarie	North East	Malekula
	Hingal	South	Paama
	Kelai	South	Paama
	Liro Presbyterian	North	Paama
	LiroNessa Presbyterian	North	Paama
	LiroNessa SDA	North	Paama
	Tevali Presbyterian	North	Paama
	Tevali SDA	North	Paama
	Vauleli Presbyterian	South	Paama
	Vauleli SDA	South	Paama
	Vitekai Presbyterian	South	Paama
	Ranoli Youth	Nobul	Ambrym
PENAMA	Aligu Youth	East	Pentecost
	Aute Youth	East	Ambae
	Baubau Traufiguration Youth		Pentecost
	Calvary Home Youth		Maewo
	Garogai Leo Youth		Pentecost
	Hurilau Youth		Pentecost
	Lauvi Youth		Maewo
	Leo Youth		Pentecost
	Lewameme Youth	Central 2	Pentecost
	Lolovenue Youth	North East	Ambae
	Lolovoli Youth	North	Ambae
	Lolowai Youth	East	Ambae
	Lohavola Youth		Pentecost
	Lombaha Youth	North	Ambae
	Lovanualeikoutu Youth	West	Ambae
	Maewo Region Youth		Maewo
	Navonda Youth	East	Ambae
	Point Cross Youth		Pentecost
	Saratamata Youth	East	Ambae
	St Mark Youth	East	Ambae
	Surubo Kot Youth	Central 1	Pentecost

	Surukavian Youth Tqulotas Youth Vanuebulu Youth Vatumaui Youth Waimasara Youth Waimbulu Youth	Central 1 West North West East North East	Pentecost Maewo Ambae Ambae Ambae Ambae
SANMA	AOG Youth Araki Youth Burning Bush Youth Calvary Temple Youth Fimele Youth Mesileo Youth Narango Youth Patvatu Youth Salom Youth Side River Youth Tastambe Youth Turtle Bay Youth Wailapa	South East South Area 2 South Area 2 Loplop South Area 2 South Area 2 South Area 2 South Area 2 South East South Area 2 Malo East South Area 2	
LUGANVILLE	Calvary Temple Youth Centenary Youth Chapius Ascension Youth Chapius Presbyterian Youth Church of the Holy Spirit Youth Global Harvest Lamelis Youth Malpa Youth Navara Youth Olian Youth Omeli Youth Pepsi Cell Youth Pepsi Times Youth Queros Banyan Youth Revival Youth Saint Michel Youth Sarakarta SDA Youth Side River Soccer Club Solway Youth St Andrew Mango Youth Tahi Youth UB 30 Youth VCF Youth Vunamelem Youth Yapusani Youth	Ward 1 Ward 2 Ward 4 Ward 4 Ward 2 Ward 4 Ward 2 Ward 4 Ward 4 Ward 1 Ward 4 Ward 2 Ward 2 Ward 4 Ward 1 Ward 1 Ward 2 Ward 1 Ward 2 Ward 1 Ward 4 Ward 2 Ward 4 Ward 3 Ward 2	
TORBA	Anglican Youth Anglican Youth Family Christian Home Lehali Youth Leserepla	Merelava Motalava Vanualava Ureparapara Ureparapara	

	Lesereplag	Ureparapara	
	Liwotqei	Mota	
	Mosina	Vanualava	
	Mosina	Mota	
	NTM Youth	Vanualava	
	Pillar of Fire	Motalava	
	Rah Youth	Motalava	
	Salon Youth	Vanualava	
	Seaside Youth	Vanualava	
	Shalon Youth	Vanualava	
	Shalon Anglican Youth	Vanualava	
	Tawa	Vanualava	
	Vanua	Motalava	
	Vatrata	Vanualava	
	Vureas Bay	Vanualava	
	Wasaga	Vanualava	

ANNEX 4

LIST OF PEOPLE INTERVIEWED AND CONSULTED IN TAVEUNI, FIJI

FARMERS

NAMES	AGE (YRS)	LOCATION	YEARS IN FARMING
Iosefa Veresa	25	Qeleni, Nacogai	1
Mosese Waibuta	24	Qeleni, Nacogai	Not stated
Joape Drauna	28	Qeleni, Nacogai	10
Sosiceni Tubalevu	32	Qeleni, Nacogai	14
James Venkat Swamy	53	Qila	36
Harish Chand Rattan	35	Qila	5
Gajen Prasad	42	Qila	25

Mohammed Hussein	52	Qila	32
Abhishek Sapra	31	Ura	5

TECHNICAL STAFF

NAMES	EMPLOYMENT	CONTACTS	TEL. NO.
Aloesi Rasaciva	Assistant Roko Taveuni, Ministry of Regional Development	arasaciva@yahoo.com	8880047/ 9909614
Anare Sikoa	Taveuni Youth Coordinator, Ministry of Youth	anaresikoa@yahoo.com	9532651/ 8880047
Milika Saunivalu	Temporary Agriculture Assistant (AA), Ministry of Primary Industries (MPI)	milikasaunivalu@ymail.com	
Ashiana Shazna	Fieldman, MPI	shazna_47@yahoo.com	9077886
Timaima Masinamo	Fieldman, MPI		
Maika Cama	AA, MPI	maikacamampi@gmail.com	
Saula Tavetani	Acting Agricultural Technical Officer (ATO), MPI	nakidakidasaulatavitani@gmail.com	8394127
Lote Atama	Extension Field Officer, MPI	atamalote@gmail.com	9292305/ 838943
Waisea Railumu	AA, MPI	railumuwisea@yahoo.com	
Rohit Lala	Agricultural Officer (AO)	rohitlalmpi@gmail.com	9487996

TUTU YOUNG FARMERS

NAMES	MOBILE PHONES BRAND
Sulio Bulavakarua	FORME
Liqorio Tuvisa	NOKIA
DaJoape Tawaguilecavi	HUAWEI
Selesitino Baniusa	NOKIA
Matia Tusaqa	SONY ERRICCSO
Paulo Isoa	G. TIDE

Mikaele Tabua	None
Atunaisa Vunivalu	BLACK BERRY
Belagio Rara	ALACATEL ONE TOUCH
Paulo Vuata	SAMSUNG
Laisenia Savuleka	NOKIA
Arthur Tikoilabasa	NOKIA
Joseph	G. TIDE
Sinio	G. TIDE
Elia	G. TIDE
Vaniqui	VODAPHONE
Reve	ALCATEL
Tusili	ALCATEL
Sepo	VIDO
Pesa	FORME
Wane	NOKIA
Larry	SONY

YOUTH GROUPS IN TAVEUNI, FIJI

DISTRICT	VILLAGE/ SETTLEMENT	YOUTH ORGANIZATIONS
Vuna	Navakawau	Gaunavou Youth Club
		Navakawau Catholic Youth
	Nakorovou	Indigenous Lanaless Youth Club
	Waimaqera	Taveuni Sanatan Youth Club
	Delaivuna	Mataniwai Organic Youth
		Delaivuna Brothers Organic Youth
Cakaudrove	Tavuki	Manatadra Youth Club
	Waica Settlement	Waica Organic Youth
	Lovonivonu	Sokula I Rabe Youth Club
	Somosomo	Veisana Active Youth Club
		Welitoa Youth Club
		Lost Tribe Youth Club
		Somosomo MYF Youth
	Vuniwai Settlement	Vure ni Veilomani Youth
	Burotu Settlement	Promise Land Youth Club
		Burotu Tovolea Mada Youth
	Lamini	Senivuga Youth Club
		Nasawa Youth Club
	Welagi	Nasuva Youth Club
Wainikeli	Naselesele	Naselesele Catholic Church
	Qeleni	Vadrataiga Youth Club
		Rumisa Youth Club
		Cagilaba Youth Club
	Navakaoa	Navakaoa Youth Club
	Waitabu	Vatuloa Youth Club
		Vuanimakita Youth Club
	Vidawa	Lekutu Youth Club
	Korovou	Delaima Youth Club
		Tavoro Youth Club
	Lavena	Wainisairi Youth Club
	Naivivi	Waibulu Youth Club
Laucala	Kocoma	Silatale Youth Club
		Kocoma Youth Club
	Dreketi	Vuanisinu Youth Club
		Dreketi SDA Youth
	Togo	Vuanicau Youth Club
	Yanuca	Ring Gold Youth Club

	Naqelelevu	Lawedua Youth Club
--	------------	--------------------