## **Facilitator Guide**

Certificate I in Climate Change and Disaster Risk Reduction

## **Unit 9: CGCR0216**

Use traditional knowledge to build community resilience to disasters and climate change



Facilitator:
Organization:
Date:

## Before you get started...

Dear Facilitator,

This Facilitator Guide (together with the relevant Learner Guide) is aimed at facilitators/trainers who will be assisting learners wishing to complete the following unit:

Title:	Use traditional knowledge to build community resilience to disasters and climate change		
VQA code:	CGCR0216	VQA Level: 2	Credits: 6

This guide contains all necessary instructions to ensure that learners will attain the expected competencies required by the above-mentioned unit. This guide is designed to be used during the presentation of learning sessions for this unit. Learners are advised to read the unit of competency outline in their own time.

Please discuss the unit of competency outline with the learners to ensure that they understand what they must do to achieve the required outcomes of these units.

There are three guides, namely the Learner Guide, the Learner Workbook and the Facilitator Guide.

These guides have been developed to address specific aspects of the learning experience. Each of the guides complements the others.

#### Make this an enjoyable learning experience!

## Context of learning

Nowadays everyone is talking about climate change. A lot of information is available but is not always easy to obtain for people living in rural areas of Vanuatu. Some of us do not pay attention to the topic of climate change and some don't even believe that it is happening. But we are all aware of natural hazards that destroy our lives and our property - cyclones, earthquakes, volcanic eruptions, long periods of drought, floods, landslides, fires, etc. When the effects of a natural hazard become so great that the community cannot handle them by itself, and needs help from outside, the hazard becomes a "disaster".

This course of eleven units entitled "Climate Change and Disaster Risk Reduction" helps us to understand more about climatic changes and disasters that have affected us in the past and at present, and are likely to affect us in the future. Many people say that we cannot do much about these changes and disasters, but this is not true. We can do a great deal to reduce the impacts of climate change and natural hazards, both as individuals and in our local communities, and to adapt to these changes in the future. In fact our communities already have a lot of traditional knowledge that can help in reducing the risks and adapting to change. You will learn more about this in the present unit.

The first seven units are at Level 1. This ninth unit is the second of the four units at Level 2. It focuses on the use of traditional knowledge (TK) in preparing for climate change and disaster events. We shall define "traditional knowledge" and "resilience", and then examine some of the challenges in gaining access to TK. We will consider examples of how traditional knowledge has helped communities in Vanuatu to become more resilient to geological and hydro-meteorological hazards over hundreds and hundreds of years, looking at methods such as traditional weather indicators, traditional techniques of gardening and fishing, and traditional methods of food preservation and building design. We will learn how to demonstrate some of these traditional techniques to others. Finally we will find out more about the TK that already exists in a local community and look at ways in which it can be used to achieve greater resilience for everyone.

You, as the facilitator, have the challenge to ensure that the learning materials can be applied to the learners' own context, in other words, to their own situations, their own communities and their own islands. As much as possible, you must help them to refer to local examples of everything that is in the course.

The contextualization of the learning material is a very important step in facilitating the learning experience. You must ensure that enough time and effort is put into this.

## How to use this guide...

Throughout the guide information is given specifically aimed at you, the facilitator, to **assist** in the actual presentation of the learning material and/or facilitation of the learning process. Although this guide contains all the information required for attaining competency in this unit, references to additional resources, both printed and electronic, are provided for additional reference by the facilitator and further study by the learner.

Please note that the purpose of this information is merely to **guide** you, the facilitator, and is provided as a suggestion of possibilities. It remains the responsibility of every facilitator to re-assess the learner/s in each learning situation throughout the learning process in order to stay in touch with his or her specific learning needs. The needs of each learner must come first!

As you go through this guide, you will come across certain code words and boxes that will help you to facilitate learning more clearly. They are as follows:



Instructions regarding **activities**, whether to be done in a group or individually, will be provided in this type of box.



Facilitator's 'tip' to give you additional information or to help you and the learners with the answer.

y Notes… ′ou can use this box for your own notes/comments.)	
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## What will you be facilitating, and how will you do it?

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## The learning experience...

#### On completion of this unit, the learner will be able to:

- define traditional knowledge (TK) and resilience;
- explain some of the challenges in gaining access to traditional knowledge, and suggest how they might be overcome;
- describe examples of how traditional knowledge helps communities to become more resilient to hazards and climate change;
- demonstrate some traditional techniques that foster more resilience to risks from hazards and climate change;
- promote the use of traditional knowledge in a local community.

#### Before starting this unit, the learner is expected to have:

- knowledge of hazards and climate change acquired through the completion of the previous eight Units;
- knowledge and experience of the impacts of climate change and of some of the measures already being taken to reduce the negative effects of these impacts;
- first-hand knowledge and experience of the dynamics of a local community (leadership, decision-making, cultural and religious practices, cooperative activities, negative social forces, positive social forces, etc. )
- basic skills in mapping and the interpretation and construction of graphs and diagrams.

## In general, upon completion of a unit at Certificate I level, the learner will be able to:

- perform a defined range of routine activities, usually under supervision;
- demonstrate basic practical skills;
- apply thinking skills such as induction and evaluation;
- participate in a team or working group;
- communicate effectively and convey information and ideas.

#### My notes:

## Time frame

Section of Unit	Hours allocated for tutorials (theoretical learning)	Hours allocated for practical activities and personal study	Hours allocated for field work	Total hours
Orientation	1	1	-	2
Introduction to Learner Guide	2	-	-	2
Section 1	1	2	-	3
Section 2	5	5	-	10
Section 3	9	14	4	27
Section 4	-	2	2	4
Section 5	2	2	9	13
Preparation for test	-	2	_	2
Summative test	-	1	-	1
Whole unit	20	29	15	64

## Facilitator's checklist

Use this checklist to ensure that you are properly prepared and have all the materials needed for the facilitation of successful learning:

Tick this box when you are ready

PREPARATION		45
Knowledge of the	I have familiarized myself with the qualification that the	
qualification	learners are aiming to obtain	
Knowledge of the unit	I have familiarized myself with the required level of this	
standard	unit standard	
Knowledge of the unit	I have sufficient knowledge of the unit content to enable	
content	me to facilitate with ease	
Application	I have done enough preparation to be able to deliver the	
	programme	
Contextualization	I am ready to include information that is specific to the	
	local community and to Vanuatu	

#### ABILITY TO RESPOND TO LEARNERS' BACKGROUND AND EXPERIENCE

Understanding of learners	I know something about my learners' gender, age,	
	background and experience and am ready to deliver the	
	programme accordingly	
Enthusiasm and	I am enthusiastic about this subject and am committed to	
commitment	creating an environment that motivates learning	

#### MATERIALS AND EQUIPMENT

$\sim$		
Learner guides	One for each learner	
Learner workbook	One for each learner	
Facilitator guide	One	
Copy of "Learning about	One Visual Guide (set of "toolkit" pictures)	
climate change the Pacific way"	One Teacher's Guide	
Copy of "Kastom Fasin blong	One copy	
Lukaotem Envaeronmen" (VKS)		
Writing materials	Notebook, pen, pencil, graph paper & rubber per learner	
Other materials	Clipboard for recording information during fieldwork	
Butcher paper	One roll. Alternatively, large sheets of flip chart paper.	
Whiteboard & pens	One whiteboard & set of coloured whiteboard markers	
Blackboard & chalk	One blackboard and coloured chalk	
Data projector	Optional. To be used for power point presentations	
Laptop	Optional. To be used for power point presentations and	
	internet connection. USB flash drive useful.	
Internet connection	Desirable but not always possible	
Attendance register	One	
Course evaluation	One sheet for each learner (copied from Learner workbook)	
Portfolio of evidence	One portfolio holder for each learner	
Summative test	One copy for each learner	

## Contextualization of content

At this stage, it will be useful for you to go through this Unit and think about the specific information and local examples that should be included in the learning.

Section	Specific examples from the local area, Vanuatu or the Pacific region
1	
2	
3	
4	
5	



Concepts 1.1 and 1.2		Time frame	Activities related to the concepts
1.1	Definition of traditional knowledge (TK) in the context of Vanuatu.	1½ hours	1.1a, 1.1b
1.2	Definition of resilience in relation to hazards and climate change.	1½ hours	1.2

#### Please allow learners to complete activities 1.1a and 1.1b in their workbooks:



Type of activity	Resources	
1.1a Definitions	Learner Guide	
Instructions to give to the learners		
Activity 1.1a: Write down a definition of each of the following in a way that you will be able to remember in the future. Try to use your own words		



Activity 1.1a

Term	Definition
Traditional knowledge	Information and beliefs about the relationship of living
-	things to one another and their surroundings. TK is
	based on an understanding of the local environment
	and has been passed on from generation to generation
	through stories, songs, ceremonies and rituals.
Resilience to disasters	The ability to survive and recover from the effects of
and climate change	disasters and climate change. A community is resilient
	if it has taken steps to prepare for disasters and climate
	change and can recover from their negative impacts
	without calling for help from outside the community.

	Type of activity	Resources
E.E.	1.1b Short answer questions	Learner Guide. Own ideas
E E	Instructions to give to t	he learners
Do a se	Answer questions 1 and 2.	



#### Activity 1.1b

This can be done as an individual exercise or as pair work.

- 1. Six kinds of awareness and information that TK can contribute:
  - a) Seasonal changes in the environment, such as times when certain birds appear, or when certain plants flower and give fruit
  - b) Predicting weather events and their impacts by looking at changes in plants and in the behaviour of animals, fish, birds and insects; beliefs that certain people can control the weather.
  - c) Memories of past weather patterns and their impacts.
  - d) Food security how to produce extra food and preserve food.
  - e) Designing and constructing houses that can withstand cyclones, floods and other extreme events.
  - f) Ecosystems planting native trees to reduce erosion and prevent landslides; establishing traditional conservation or taboo areas.
- 2. Two ways in which TK has an important role to play:
  - a) Local observations of changes in weather patterns and ecosystems add more knowledge to weather statistics collected by VMGD and make weather forecasting more accurate.
  - b) Traditional ways of preparing for disasters can be used to help communities today to better adapt to climate change and to prepare for disasters.

#### Now allow learners to complete activity 1.2 in their workbooks:



	Type of activity	Resources	
	1.2 Pair work - questions on resilience	Learner Guide. Own ideas	
	Instructions to give to the learners		
	Activity 1.2:		
	State whether each of the following is a way of making a family or a community more resilient to		
2	the impacts of disasters and climate change. Tick YES or NO in the table.		

Endorsed date: 2016



#### Activity 1.2 YES NO Removing trees on steep slopes ٧ 2 ٧ Using traditional knowledge of house design and construction 3 Agroforestry ٧ 4 Listening to cyclone warnings on the radio ٧ 5 Building a strong water tank next to your house ٧ 6 Building your house close to the sea shore ٧ 7 ٧ Attending an awareness talk on the impacts of climate change √? 8 Asking a traditional kleva or using other traditional practices to try to prevent a cyclone hitting your island 9 ٧ Making an evacuation route to a safe place in case of a tsunami 10 Learning about traditional techniques of food preservation ٧ 11 Asking an old person about the height of flood levels in the past ٧ 12 Learning about changes in plants and in animal behaviour ..... ٧

#### My notes:

my notes.		
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## Examine the challenges in gaining access to traditional knowledge

Learner

Guide:

Page 17

After completing this section, the learner should be able to:

- 2.1 suggest reasons why traditional knowledge (TK) is disappearing in Vanuatu;
- 2.2 examine issues relating to the ownership and sharing of traditional knowledge;
- 2.3 differentiate between the types of traditional knowledge held by men and by women;
- 2.4 suggest possible ways of overcoming the challenges associated with traditional knowledge.

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	Concepts 2.1, 2.2, 2.3, 2.4	Time frame	Activities related to the concepts
2.1	Reasons why traditional knowledge is disappearing in Vanuatu.	2 hours	2.1
2.2	Issues relating to the ownership and sharing of TK - local taboos, transmission of secret knowledge, observing traditional protocols, policies of the Vanuatu Kaljoral Senta.	4 hours	2.2a, 2.2b
2.3	Different types of TK held by women and by men, and challenges in accessing this information.	2 hours	2.3
2.4	Ways in which challenges of access to TK might be overcome.	2 hours	2.4

#### Firstly, please allow learners to complete activity 2.1:



	Type of activity	Resources	
	2.1 Report on class discussion	Ideas from class discussion. Own ideas	
) }	Instructions to give to the learners		
	Activity 2.1: After discussing the questions on page 18 of the Learner Guide with your fellow-learners, write down your own thoughts on the issues raised.		



#### Activity 2.1

You must first facilitate the discussion between learners on the questions on page 18 of the Learner Guide. Then ask each learner to sit quietly and record his/her own thoughts in the table provided in the Learner Workbook. All answers are acceptable.

Question	Your ideas
Do you think that elderly people and those who	Yes.
hold traditional knowledge are passing on this	Young people have left the
knowledge to young people in the same way as	village. Young people are not
was done in the past? Why or why not?	interested.
Do some parents think that traditional knowledge	Yes. They think that western
is no longer important in the modern world?	education is more important.
What makes them think like this?	
Why are many young people not interested in	They do not think it is relevant to
learning about traditional knowledge today?	modern living.
How do the following affect the handing down of	Urbanization. People move away
traditional knowledge from generation to	from their custom roots.
generation: Urbanization? Education? Influence	Education. Not much TK in the
of Western culture? Religion?	curriculum.
	Influence of Western culture.
	Emphasis on material wealth
	Religion. Some churches teach
	that kastom beliefs contradict
	biblical teachings.
Should we take steps to encourage young people	Yes. Visits to their home
to learn more about the TK available in their	communities. TK taught in
communities? How could this be done?	schools.

My notes:		
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#### Now please allow learners to complete activity 2.2a:



Type of activity	Resources	
2.2a Individual analysis and reflection	Learner Guide. Own ideas	
Instructions to give to the learners		
Activity 2.2a: Answer questions 1 and 2 on page 6 of your Learner Workbook.		
Activity 2.2a		



- 1. Questions on the photograph (Fig. 1):
  - a) trochus, lobster, turtle, dugong, sea cucumber, fish, greensnail, octopus, dolphin, megapode, megapode eggs
  - b) Yes, because placing a taboo will allow stocks of these species to be replenished.
- 2. All ideas are acceptable.

Regarding the first issue, the Vanuatu Kaljoral Senta says that a person wishing to place a taboo on an object or place should:

- explain to the community that the taboo is being placed because a resource is • decreasing, and get the community's agreement for this;
- consult with men, women, youth and elderly people to see why the resource is decreasing, and what can be done;
- clarify how he will share the benefits of the taboo with the community;
- use traditional protocols when placing the taboo;
- explain the boundaries of the area on which a taboo is being placed;
- control the harvesting of resources after the taboo has been lifted;
- make sure that there are alternative resources for people to use while the taboo is being enforced.

(VKS, undated, in Kastom fasin blong lukaotem envaeronmen, VKS/UNDP)

My notes:	

#### Now please allow learners to complete activity 2.2b:



Type of activity	Resources	
2.2b Discussion in pairs - short answer questions	Learner guide. Own ideas	
Instructions to give to the learners		
Activity 2.2b: Read pages 20-22 of the Learner Guide, then answer questions 1-4.		

#### Activity 2.2b

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- 1. Because with the addition of local TK about weather indicators it will be possible to make better forecasts of future weather and climate patterns.
- 2. Knowledge about:
  - certain plants that are useful for medicinal or magic purposes;
  - natural signs about forthcoming weather events;
  - special powers relating to the control of winds, rain and other natural forces;
  - other things that are not normally spoken about.
- 3. Any of the following challenges:
  - The owner of TK may not want to share his knowledge.
  - It is difficult to find out who are the owners of TK.
  - If there are many owners, it may be hard to know who has the right to share TK.
  - Kastom protocols must be known and followed.
  - The TK needs to be verified with another reliable source.
- 4. Because the VKS field worker may have obtained this secret TK on the understanding that it is not shared with anyone else.

#### My notes:

#### Now please allow learners to complete activity 2.3:



	Type of activity	Resources	
2.3	Report on class discussion - TK held by men and by women	Ideas from class discussion. Own ideas.	
	Instructions to give to the learners		
Activity 2.3: After your class discussions, write down your own thoughts on the issues raised.			
Activity 2.3			
You must first facilitate the discussion between learners on the questions on page 24 of			



You must first facilitate the discussion between learners on the questions on page 24 of the Learner Guide. Then ask each learner to sit quietly and record his/her own thoughts in the table provided in the Learner Workbook. All answers are acceptable.

Question	Your ideas
On your island, do men have different kinds of TK to	Ideas will depend on the island, on
women?	the community and on the
What kinds of TK are held by women?	knowledge that the learners
What kinds of TK are held by men?	already have about different TK
Do you think that TK should be shared freely between	owned by women and men.
men and women in your community? Why/why not?	

#### Now please allow learners to complete activity 2.4:



	Type of activity	Resources	
2.4	Report on class discussion - overcoming the challenges of gaining access to TK	Ideas from class discussion. Own ideas.	
Instructions to give to the learners			
Acti	vity 2.4:		

After your class discussions, write down your own thoughts on the issues raised.



#### Activity 2.4

You must first facilitate the discussion between learners on the questions on page 25 of the Learner Guide. Then ask each learner to sit quietly and record his/her own thoughts in the table provided in the Learner Workbook. All answers are acceptable.

Question	Your ideas
What traditional protocols should be observed if you	Ideas will depend on the island and on
want to collect TK from your local community?	the community
What exactly would you say to an owner of secret	"Your knowledge is going to help the
TK about the environment in order to persuade him	whole community to better prepare
to share this information?	for a disaster - not just you."
Should a payment be made in exchange for TK	Learners can answer yes or no. Ask
about climate change and/or resilience to hazards?	them to justify their opinions.
Why is it important to use the local language in	Because a lot of TK can only be
trying to access to TK?	expressed in the local language.
How can women access TK held by men? How can	Learners' ideas
men access TK held by women?	

Ay notes:	
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Examine ways in which traditional knowledge builds resilience to hazards and climate change

Learner	After completing this section, the learner should be able to:		
Guide:	3.1 provide examples of traditional knowledge that help communities in Vanuatu to become more resilient to geological and hydro-		
Page 26	meteorological hazards; 3.2 produce a traditional calendar for the local community.		

	Concerto		
	Concepts	Times from a	Activities related to
	3.1 and 3.2	1 ime frame	the concepts
3.1	Examples of traditional knowledge that help communities in Vanuatu to become more resilient to geological and hydro-meteorological hazards: reading traditional signs of forthcoming drought, storms, earthquakes, etc.; using traditional calendars.	4 hours	3.1a, 3.1b
3.1	Examples of traditional knowledge that help communities in Vanuatu to become more resilient to geological and hydro-meteorological hazards: traditional food crop gardens; traditional methods of cultivation and animal husbandry.	7 hours	3.1c, 3.1d
3.1	Examples of traditional knowledge that help communities in Vanuatu to become more resilient to geological and hydro-meteorological hazards: traditional methods of fishing; traditional methods of food preservation.	6 hours	3.1e, 3.1f
3.1	Examples of traditional knowledge that help communities in Vanuatu to become more resilient to geological and hydro-meteorological hazards: traditional building designs; protection from erosion on slopes; traditional taboos and conservation areas; traditional community support systems.	5 hours	3.1g, 3.1h
3.2	Traditional calendar for the local community.	5 hours	3.2

#### Please allow learners to complete activity 3.1a:



Type of activity	Resources		
3.1a Individual exercise - short answer questions Learner Guide. Own ideas.			
Instructions to give to the learners			
Activity 3.1a: Read pages 26-27 in your Learner Guide, then answer questions 1 and 2.			



#### Activity 3.1a

- 1. A. When cicadas call in unison at night, in a shrill manner, rain will fall before daybreak.
  - B. When mackerel hide on the sea floor, even in calm and sunny weather, heavy rain will fall in less than one week.
  - C. If red non-biting ants are seen to be especially active for several weeks, a long wet period is expected.
  - D. When mynah birds sit together on the grass and fly in large groups around the village, then rain will soon come.
- 2. Traditional weather and climate indicators in the learners' area:

Traditional indicator	What kind of weather or climate?
Traultional multator	

Answers will depend on the learners' knowledge. They may wish to consult others in the community before filling up the table.

#### Now allow learners to complete activity 3.1b in their workbooks:



Type of activity	Resources		
3.1b Individual exercise - analysis of traditional calendars	Learner Guide. Own ideas		
Instructions to give to the learners			
Activity 3.1b: Read pages 28-29 of the Learner Guide. How do you think that a traditional calendar helped to make communities more resilient to disasters in the past? Give some examples from the calendars for Mota Lava and Tanna.			



#### Activity 3.1b

By following a traditional calendar, people would know the kind of weather most suitable for planting various crops so as to get the greatest yields. For example, on Tanna, yams were planted in August, during the cool, dry season and would be harvested the following March at the end of the wet season. They would also know when droughts and cyclones were expected, so would be able to preserve foods for use during these periods. The calendars would also provide information about wild life. For example, on Mota Lava, the time to eat palolo worms was in November, not before!

Now please ask learners to complete activity 3.1c by going into the field, then recording their observations in their workbooks:

	Type of activity		Resources		
3	3.1c Group work - field investigation of a traditional food garden		Own observations.		
2	Instructions to give to the learners				
A Fo in ol	Activity 3.1c: Form groups of 3-4 learners. Then go and visit a traditional food garden in your area. Find out the information requested on page 10 of the Learner Workbook, then each of you should record your observations in the table provided.				
A Y it n h	Activity 3.1c You should make sure that the groups all vi ts own garden, or else can visit the garden nade in the field, then transferred to the ta nours for this activity.	sit different gar of a local farme able in the Learr	dens. Each group can choose r. Observations should be ner Workbook. Allow about 2		
	What crops are being grown in this garden?	Answers depend	d on garden		
	What traditional techniques are being used?	Answers depend	d on farmer and garden		



Iy notes:	

#### Please allow learners to complete activity 3.1d:

NDS NDS	Type of activity	Resources		
	3.1d Pair work - questions on traditional cultivation techniques	Learner Guide. Own ideas.		
	Instructions to give to the learners			
A A S	Activity 3.1d: Read again pages 30-34 in your Learner Guide, then answer questions 1-5.			



#### Activity 3.1d

- 1. Five reasons why traditional food gardens were a good way of maintaining food security:
  - The system maintained soil fertility
  - It prevented soil erosion.
  - It prevented the build-up of plant pests and diseases.
  - It allowed people to farm their land for long periods.
  - It allowed people to have an intimate identity with their land, i.e. to know the ground very well and look after it carefully.
  - Large surpluses of food could be produced, either for consumption or for ceremonies.
  - The large variety of crops meant that not all would fail at the same time, and there would always be some food.
- 2. The best land, near the coast, is now used for cash crops, so food gardens must be made on the steeply sloping land behind the coast. And because of population growth, a farmer's land area is now much smaller than before. So he will have to return to the same plot after it has only had a few years' of fallow, so the soil has not had enough time to regain its fertility. Consequently crop yields will be much less, and crops like yams, which require fertile soils, may not be able to grow at all. (Continued on the next page)

#### Activity 3.1d (continued)

3. Long pieces of wild cane or bamboo are used to support the yam vines. This gives a trellis-like structure over the whole garden plot.

Similar techniques are used throughout Vanuatu today, but they require: a) a lot of care and time spent on erecting the cane structure, and b) soils fertile enough to grow yams.

(Note: if the learners cannot see the photograph in the Workbook clearly, you can show them a large copy of this photo that appears as Fig. 1 on page 22 of this Facilitator Guide.)

- 4. Advantages of using the traditional technique of irrigated terraces:
  - The irrigated terraces last for many years and there is no need to shift to another plot of ground.
  - The risk of soil erosion is reduced because the slopes are terraced.
  - The technique costs nothing, as the water is free!

(Note: a large photo of irrigated taro gardens in Santo Bush is shown as Fig. 2 on page 23 of this Facilitator Guide.)

- 5. Probably not, because:
  - Only some islands have the necessary streams that flow all year round. People on Ambae and in the dry zones of Efate, Santo, Malakula and Tanna would not be able to grow water taro like this.
  - The traditional technique of making terraces is only known to some communities.
  - Making these terraces requires a lot of time and effort, and some farmers would not be willing to do this.

Other reasons can be given

Is it useful for adapting to climate change? Yes, if at all possible, because the terraces slow down soil erosion. But perhaps not in areas without streams.

#### My notes:





Version: 01/2016

Reviewed date:



#### Fig. 2: Irrigated taro garden near Forchenale, Santo Bush

Reviewed date:

#### Now please allow learners to complete activity 3.1e in their workbooks:



Type of activity	Resources	
3.1e Individual work - description of traditional fishing techniques	Learner Guide. Own knowledge.	
Instructions to give to the learners		
Activity 3.1e: In the boxes provided on pages 12 and 13 of your Learner Workbook, describe and draw some of the traditional fishing techniques that are still being used on your island at the present time. An example of one such drawing appears on page 14 of the Workbook.		
Activity 3.1e		

Encourage the learners to use their own knowledge to describe and draw some of the traditional fishing techniques that they know about already. If they don't know any, they will need to go out and find fishermen who can tell them. They can get ideas from the Learner Guide, pages 35 and 36.

#### Next, please allow learners to complete activity 3.1f in their workbooks

<b>S</b>	Type of activity	Resources	
<b>ctio</b>	3.1f Individual work - description of traditional methods of food preservation	Learner Guide. Own knowledge.	
Jo R	Instructions to give to the learners		
	Activity 3.1f: In the box provided on page 15 of your Learner Workbook, describe some of the traditional methods of food preservation that are being used on your island today. If possible you can also draw pictures of these techniques.		
	Activity 3.1f		

Encourage the learners to use their own knowledge to describe and draw some of the traditional methods of food preservation that they know about already. If they don't know any, they will need to go out and find people in the local community who can tell them. They can get ideas from the Learner Guide, pages 37-38.

My notes:	

#### Next, please allow learners to complete activity 3.1g in their workbooks:



Type of activity	Resources	
3.1g Individual work - drawing a picture of a traditional building	Learner Guide. Own ideas	
Instructions to give to the learners		
Activity 3.1g:		
Read pages 39-40 of your Learner Guide. Then draw a picture or pictures on a large sheet of paper		
to show a traditional building / traditional buildings on your island. Label the features of the		
building that make it resilient to hydro-meteorological and/or geological hazards. Then pin your		
picture on the wall.		



#### Activity 3.1g

You must provide each learner with a large piece of paper and drawing materials or paints. Encourage the learners to go out of the classroom and find a house or building in a nearby village that they can draw. The building does not have to be a private house: it can be a nakamal or other traditional building.

After drawing a building, the learner can add labels to show its features. An example is given below (Fig. 3).

All pictures should be displayed on the classroom wall so that everyone can see them.





#### Finally, please ask learners to complete activity 3.1h:



Type of activity	Resources		
3.1h Discussion in small groups	Learner Guide. Own ideas		
Instructions to give to the learners			
Activity 3.1h:			
Form small groups of 3-4 learners and discuss this question: "What are some of the ways			

Form small groups of 3-4 learners and discuss this question: "What are some of the ways in which traditional community support systems make a community more resilient to disasters and climate change?" Report your ideas to the whole class.



#### Activity 3.1h

Help the learners to form small groups of 3-4 persons. Each group should discuss the question and then report back to the whole class. Walk around the room to help learners to remain on task.

All ideas are acceptable. However, one of the main points should be that by having a support system whereby everyone is linked to everyone else through family ties or customary obligations, then when a hazard arrives, everyone will naturally want to help everyone else to overcome any difficulties - making preparations for the hazard, sharing food, sheltering each other, looking after small children, helping vulnerable members of the community to get to a safe place, rebuilding damaged houses, planting emergency food crops like fast-growing kumala, etc.

#### My notes:

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#### Now please invite the learners to complete activity 3.2:



Type of activity	Resources		
3.2 Group work - creating a traditional calendar for the local community	Learner Guide. Own ideas		
Instructions to give to the learners			
Activity 3.2: Form small groups of 3-4 learners. Then each group should create a traditional calendar that can be used by one of the communities living close by. Follow the steps given on page 16 of the Learner Workbook.			

Reviewed date:



#### Activity 3.2

Learners should follow the steps indicated on page 16 of the Learner Workbook.

Each group should end up with a large, colourful and attractive calendar that can be pinned on the classroom wall. If it is appropriate, some calendars can be pinned up on the noticeboards of nearby local communities. However, you may feel that it is more appropriate to ask the learners to do this later, when completing activity 5.2.

#### My notes:

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## Demonstrate traditional techniques that foster resilience

Learner Guide:

Page 42

After completing this section, the learner should be able to:

4.1 demonstrate traditional techniques that build resilience to risks from hazards and climate change.

Concepts 4.1	Time frame	Activities related to the concepts
4.1 Demonstration of traditional techniques that foster resilience to hazards and climate change.	2 hours	4.1

#### Please ask learners to complete activity 4.1:



	Type of activity	Resources	
4.1	Group work - demonstration of some traditional techniques	Local traditional knowledge	
Instructions to give to the learners			
Activity 4.1:			
Form five groups, with 3-4 learners in each one. Each group should choose one of the			
follo	wing traditional techniques:		
1.	<ol> <li>Reading natural indicators of weather, climate, earthquakes and volcanoes - changes in plants, animal and insect behaviour, etc.</li> </ol>		
2.	Food preservation.		
2	Desilations also investore at a second second		

- 3. Building design and construction.
- 4. Cultivation and fishing.
- 5. Protection from erosion on slopes
- 6. Establishment of traditional taboos and conservation areas.

Each group should now try and find a local "expert" from the village who is willing to give advice on the techniques that the group has chosen. The group works with this expert to learn how to demonstrate this technique to others.

Then each group should prepare to present and demonstrate this technique to the whole class. Use should be made of large wall charts, as well as actual materials. It may be necessary to go out into the field to do the demonstration.



#### Activity 4.1

The object of this activity is to help learners to master at least <u>one</u> traditional technique that will help others to make their community more resilient to the negative impacts of hazards and climate change.

You as facilitator will need to be flexible. If it is possible to enlist the help of knowledgeable people in a local village to help each group of learners, this would be ideal. You may need to negotiate with village leaders and TK owners in order to provide this help. You can tell them why the learners need to do this - so that they can help communities when future hazards, warmer temperatures and extreme weather events arrive.

On the other hand, you may have to try and do this with just one local expert and all the class learning together. That would be an acceptable way to work.

You might also find that one or two of the learners are already experts in certain techniques, and you could ask them to teach the others.

It is basically left to you as facilitator to proceed in the most appropriate way.

# My notes:

## Section 5 Promote the use of traditional knowledge in a local community

## Learner Guide: Page 43

After completing this section, the learner should be able to:

- 5.1 use a simple questionnaire to investigate some of the traditional knowledge about hazards and climate change that already exists in a local community;
- 5.2 consult with owners of this traditional knowledge to find ways in which the TK can be used to promote greater resilience in the whole community, and help the community to become more aware of at least one of these TK measures.

	Concepts 5.1	Time frame	Activities related to the concepts
5.1	Using a questionnaire to find out TK that already exists in a local community.	6 hours	5.1
5.2	Consultation with owners of TK and with the community regarding one or more traditional techniques that might be introduced into the community.	7 hours	5.2

#### Please allow learners to complete activity 5.1:



Type of activity	Resources		
5.1 Pair work - conducting a survey of TK in a Learner Guide. Own ideas local community			
Instructions to give to the learners			
Activity 5.1:			
Form pairs. With the help of your facilitator, each pair should arrange to interview at			
least five people in a local community who may have traditional knowledge regarding			
indicators of weather, climate, earthquakes and volcanic activity, and/or about traditional			
ways of adapting to natural hazards. The suggested questionnaire is given on page 19 of			

the Learner Workbook. You can also design your own questionnaire.



#### Activity 5.1

If you like the suggested questionnaire, you should arrange to print at least 5 copies for each pair. If you don't have facilities for making photocopies, you can ask each pair to make the copies by hand.

You may prefer to design your own questionnaire with the help of the learners, so as to better fit the community or communities with which you are working.

Once the copies of the questionnaire are completed, ask the learners to try and translate the words into their own language, for use in the community or communities.

You can ask all pairs to work in the same community, or you can ask each pair to go to a different community. You will have to go and prepare the community or communities beforehand, to make sure that there are people who are willing to be interviewed and who agree to be present when the learners go to their village.

It may be best for the learners to only interview those people who are known to have TK. On the other hand, they could also meet with the adults in five different families and find out just what knowledge they have.

When the learners meet with people who have TK, you will need to remind them to ask the TK owners if it is acceptable for their knowledge to be shared with others. This is because the following activity, 5.2, requires learners to work with TK owners to find ways in which one or more traditional techniques can be introduced more widely into the whole community.

Once the learners have done their interviews, they should return to the classroom and put all the information together. You should help them to do this. The results can be put up on the wall for all to see.

Using these results, you and the class can decide how you will go about completing activity 5.2.

#### Finally, you can ask the learners to complete activity 5.2:



Type of activity	Resources			
5.2 Pair or group work - consultation with owners of TK and a local community	Results of the survey done in activity 5.1. Own ideas			
Instructions to give to the learners				
Activity 5.2: Either in pairs or in small groups, and following the guidance of your facilitator, you will now return to the community in which you carried out your survey. Your aim is to meet with owners of TK and to consult with them regarding the traditional techniques that might be introduced more widely into the community in order to make it more resilient to hazards and climate change. You will then help to make the community more aware of one or more of these measures, and perhaps help them with implementation.				

Please follow the guidance given on page 20 of your Learner Workbook.



#### Activity 5.2

When carrying out this activity, keep in mind its main objective. You are working with the learners to help a community make greater use of traditional knowledge, so that it is better adapted to facing hazards and climate change.

The idea is that learners will work with the owners of TK to make traditional knowledge of such things as weather indicators, building design, food preservation, methods of cultivation and fishing, and the establishment of taboos and conservation areas to be more widely available in the community.

All this depends on building up good relations with TK owners and with the community. You and the learners must proceed with care, respect and sensitivity. You must also have confidence, because what you are doing is for the benefit of the community, and will surely help everyone.

As suggested on page 20 of the Learner Workbook, you hope that the TK owners will agree to share their knowledge. If so, then consultations can be held with the community or with individual families to see how this can be done, and how the learners can help with this. For example, the learners may be able to demonstrate one or two techniques to individual families.

However, if TK owners and/or the community do not wish to proceed along these lines, then you and the learners must respect their wishes.

Your own learning about how to proceed with this activity is going to be very valuable, and will help not only the learners at your training institution but others in other places in Vanuatu. Please be ready to learn from your experiences and to share your learning with others.

#### My notes:

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## Illustrations

Illustration and	Source	
page number		
Cover	Secretariat of the Pacific Community (SPC) and Deutsche Gesellschaft für	
	Internationale Zusammenarbait GmbH (GIZ) CCCPIR, 2013, A taboo leaf	
	indicator found on Emau island, North Efate, indicating that the reef is closed to all	
	fishing.	
Fig. 1 (p. 22)	Pierce, C., 1986, Yam garden near Lawital, North Tanna.	
Fig. 2 (p. 23)	Pierce, C., 2014, Irrigated taro garden near Forchenale, Santo Bush.	
Fig. 3 (p. 25)	Pierce, C., 1979, Nakamal at Lumbukuti village, Tongoa. (Example of a picture of	
	a traditional building)	

Reviewed date:

## What will I do differently next time?

Take some time to **reflect** on your own activities as facilitator of this Unit Standard.

Then write down five of the most important lessons you have learned:

What will I do differently next time?			
1.			
2.			
3.			
4.			
5.			

As a facilitator, you have gained hands-on experience in the application of the Unit standard. You may have experienced difficulties that the developers did not anticipate.

So it will be very helpful if you could give your comments below. They will contribute towards the future revision of this Unit, and should be brought to the attention of the Training Manager of your institution.

	Difficulties I had with this Unit	Recommended changes to address the difficulties
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		