



VANUATU CLIMATE CHANGE AND DISASTER RISK REDUCTION



LESSONS LEARNED AND BEST ADAPTATION PRACTICE PROFILE

ALLEY CROPPING :: KHOLE VILLAGE SANMA PROVINCE

Protecting Food Security through Climate Change Adaptation



LIVE & LEARN
Environmental Education

Vanuatu

Erakor House, Erakor Bridge/Korman Stadium



Source: Live & Learn poster

Protecting our food sources
in a changing climate



(Source: Farm Tech Manual, Live & Learn)

Grow more
legume
trees

Common name
Gliricidia
Pacific names
Shade tree
(Solomon Islands)
Scientific name
Gliricidia sepium



PROJECT BRIEF |

The protection of food security through adaptation to climate change project is working in vulnerable communities across the Pacific including Vanuatu to increase the uptake of climate resilient farm technologies and climate change leadership in agriculture.

The project aims to help people in vulnerable communities to overcome poverty through building climate resilient communities and food systems. The project has two interlinked objectives that have been developed on the basis of community studies and research that point towards a greater need for community-based food security planning and support for the ecosystems based adaptation (EbA) principles at the community and national level.

PROJECT DURATION |

Phase I of the project started in September 2010 and extended to Phase II in July 2012, which will be completed by 1 December 2014.

LOCATION(S) COVERED |

- Tafea Province: West and South West Tanna comprising 10 communities.
- Sanma Province: Lorevilko, Khole, Tutuba, Nambauk and Fanafo.
- Shefa Province: Lelepa Island and 2 offshore communities, Mangaliliu and Tanoliu.

FUNDING |

Australian AID Community-based Climate Change Action Grants program.

PARTNERS/COOPERATING ORGANIZATIONS |

Agriculture Department (Field Assistants) and Farm Support Association (FSA) together with Live & Learn Vanuatu.

OBJECTIVES & GOALS |

(Goal) Strengthen the resilience of communities and ecosystems towards climate change.

(Objective 1) Protect local food supplies, assets and livelihoods against the effects of increasing weather variability and increased frequency and intensity of extreme weather events including natural disasters and sea level rise.

(Objective 2) Protect ecosystems and strengthen the provision of environmental services (food).

STRATEGIES & PROCESSES/METHODS |

Phase I, the following activities were carried out:

- The project methodology is through a Rapid Assessment of Perceptions (RAP) conducted to identify communities on Santo and Efate.
- Development of educational resources for use with farmers at the community level.
- Delivery of climate change education and leadership training at the village level.
- Organised demonstration and training activities in each of the project sites.
- External impact evaluation complete.

For Phase II activities:

- Establish climate change knowledge hubs in each of the project sites.
- Build capacity of the knowledge hubs through training and technical capacity building.
- Extend farm technologies across target communities through the knowledge hubs.
- Build civil society capacity in community-based adaptation and engage them with the knowledge hubs.
- Strengthen community-based adaptation and ecosystems-based adaptation in the village level in cooperation with government officers, to build adaptation dialogue between knowledge hubs leaders and key government staff.
- Undertake project impact evaluation.

RESULTS |

Rapid Assessment of Perceptions (RAP)

The RAP activity was conducted on Sanma Province with the communities of Khole 1, 2 and Manioc on the Eastern part of Santo. The result of the RAP identified impacts on livelihood and food security that the communities are facing. Male and female participants from the RAP state that the locally produced food severely stressed from climate change are: bananas, kumala





Food security workshop, Khole 2, East Santo. (source: Live & Learn)
<http://www.livelearn.org/programs/climate-change> (accessed: 30/07/13)

(sweet potato), coconut, Fiji taro, papaw and cucumber. These stresses were attributed to a combination of changes in weather patterns and pests/diseases. Participants stressed the importance and the need for effective fisheries management, integrated pest management, crop rotation, seed banks and soil improvement methods.

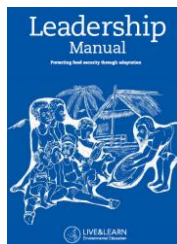
Educational Resource

Live & Learn Regional staffs in cooperation with Solomon Islands' stakeholders met in Honiara, Solomon Islands, to compile the Farm Technology Manual, which is now used across the Pacific region. 100 copies have been distributed to local farmers and schools in Vanuatu.



Climate Education & Leadership Training

- Introduction to climate change and food security workshops conducted with 60 farmers on Sanma province and 30 farmers in Shefa province.
- Farmers' workshop on Farm Technology Farming Manual at the 2 project sites on Espiritu Santo and Efate.



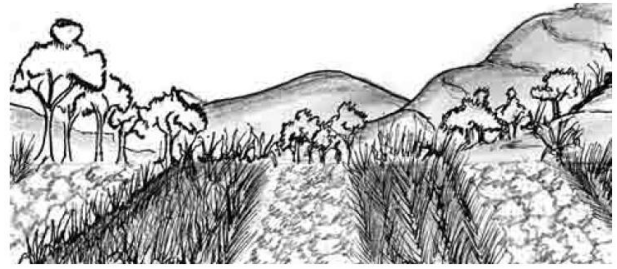
These workshops have been conducted with the help of the Agriculture field assistants and Farm Support Association (FSA) officers.

Demonstration Activity

Demonstration plots (alley cropping using glyricidia and vetiver grass) have been constructed in each community at the project sites (Khole 1 & 2, Lorevilko, Nambauk and Tutubah Island on Sanma Province and Lelepa Island on Shefa Province. These community projects were planted with climate resilience crops selected and supplied by the Vanuatu Government Agriculture Research Centre.

Rows of vetiver grass planted across the slope can be used to restore land, reduce soil erosion and increase soil fertility.

Planting vetiver can help protect food security against the impacts of climate change: land that would otherwise be useless because of soil erosion and other effects can be returned to production and use. Farmers can also sell the surplus crops they harvest from areas where vetiver grass is planted, to supplement their income.



(Source: Farm Tech Manual, Live & Learn)

Establishment of the Knowledge Hubs

Five new knowledge hubs were established in Vanuatu.

- Lorevilko 10 members (7 men and 3 women);
- Khole 11 members (8 men and 3 women);
- Fanafo 10 members (7 men and 3 women);
- Tutubah 10 members (9 men and 1 woman);
- Lelepa 15 members (7 men and 8 women).

PLAN & SUSTAINABILITY |

Working in line with the Agriculture Department's Priorities Action Plan and the Agricultural Department's Field Assistants so that they can take ownership and continue to maintain/monitor activities on the various project sites.

The establishment of a committee in each project site and linking them to the relevant government sector to build strong partnerships between them for future action plans.

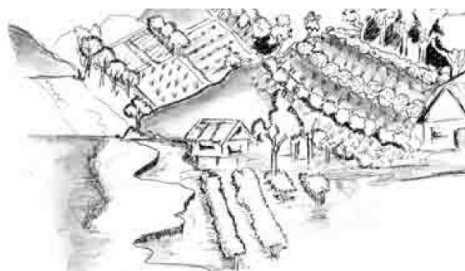
BEST ADAPTATION PRACTICES |

Strengthen farmers on existing ecosystems-based adaptation and encourage them to plant more resilient crop species that can withstand climate variability.

Adopting alley cropping techniques using:

- Glyricidia (to enrich soil and provide shade to the crops);
- Vetiver grass (protect soil on slopes to reduce top soil erosion); and
- Muccuna (ground cover to also enrich soil fertility).





Alley cropping, crop rotation, cover crops allow land to be used more intensively. The result is more permanent or long lasting gardens where trees are combined with food crops and soil fertility is maintained.

(Source: Farm Tech Manual, Live & Learn)

both domestic consumption and to sell to generate income.

WAY FORWARD |

- Capacity building will be conducted to strengthen the Knowledge Hubs Leaders in each community.
- Extend farm technologies across the communities through the Hubs.
- Get civil societies to engage with the Hubs to strengthen ecosystems-based adaptation and community-based adaptation in the community level.

Additional Information

Vanuatu Climate Change Food Security Project employs 3 project staff with a Project Coordinator based in Port Vila and 2 community facilitators, one based in Santo and another one to be assigned to Tanna.

LESSONS LEARNED |

- Coordination of project activities in communities from central locations with less regular project visits has impacted project implementation.
- Project inputs in the form of training provided to the communities or direct donations such as tools must be coordinated through the community's committee so proper records are kept.
- When disseminating information about climate change and food security in the communities, any technologies promoted must directly support people's livelihood therefore food production must complement

For more information

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This project is funded by the Australian AID Community-based Climate Change Action Grants program implemented by Live & Learn Vanuatu in collaboration with the department of Agriculture. The publishing and printing of this profile is possible through European Financial assistance through its GCCA funds via NAB's PMU, VMGD.



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