



OVERVIEW ON THE WESTERN PACIFIC EU-ARD PROJECT

GENERATION AND ADAPTATION OF IMPROVED AGRICULTURAL
TECHNOLOGIES TO MITIGATE CLIMATE CHANGE-IMPOSED
RISKS TO FOOD PRODUCTION WITHIN VULNERABLE
SMALLHOLDER FARMING COMMUNITIES
IN WESTERN PACIFIC COUNTRIES

CLOSING WORKSHOP

04 February 2016

EU Funded Action in Support of
Smallholder Agriculture





Background of the project

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- Global open call for proposals from European Commission
- 2009-2010 Global Programme on Agricultural Research for Development (ARD)
- Food Security Thematic Programme (FSTP): Research and Technology
- One of the six priorities to be addressed:
 - ▣ **Risk management in family agriculture (risks associated to climate change)**
- Timeframe of five years from 15 February 2011

EU Funded Action in Support of Smallholder Agriculture for Climate Change Adaptation



Applicant and partners

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Applicant: NARI

Partners (3):

1. Ministry of Agriculture and Livestock (MAL), Solomon Islands
2. Department of Agriculture and Rural Development (DARD),
Vanuatu
3. University of Natural Resources and Applied Life Sciences,
(BOKU), Vienna, Austria



Project location

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Associate Institutions

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PNG:

- ▣ Department of Agriculture and Livestock (DAL), PNG
- ▣ National Weather Service (NWS), PNG
- ▣ World Vision Pacific Development Group

Solomon Islands

- ▣ Solomon Island Meteorological Service
- ▣ Kastom Gaden Association, Solomon Islands
- ▣ Ministry of Mines & Energy - Water Resources Management Division
- ▣ World Vision Pacific Development Group

Vanuatu

- ▣ Vanuatu Meteorological Service
- ▣ Department of Geology, Mines and Water Resources, Vanuatu
- ▣ Vanuatu Agricultural Research and Technical Centre (VARTC)

Project Goal:

To mitigate climate associated risks to food security and livelihoods for vulnerable smallholder communities in Western Pacific Countries - Papua New Guinea (PNG), Solomon Islands (SI), Vanuatu (Vu)

Project Specific Objective:

To improve **the food production capacity** of smallholder communities in PNG, SI and Vu in areas where precipitation deficits and/or excesses and soil salinity problems are becoming significant threats to agricultural productivity.

Result 1:

Action effectively delivering outputs in a timely, transparent and efficient manner

Result 4:

Diversification options for crop production and utilization available to smallholder communities in PNG, SI & Vu in areas affected by moisture stress, excess precipitation, or saline soil conditions

Result 2:

Suitable target smallholder communities in PNG, SI & Vu identified, needs-assessed, and participating in the research and development process.

Result 5:

Livestock and fish production diversification options resilient precipitation deficits and/or deficits or soil salinity,

Result 3:

Innovative water management & soil improvement strategies/systems to support agriculture under precipitation excess or deficit conditions available to smallholder communities in PNG, SI and Vu.

Result 6:

Linkages and information/knowledge sharing mechanisms established and/or strengthened between researchers, extension providers and smallholders



Project resources

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- Total direct cost: Euro 3.67 million
(about Kina 11-14 million over 5 years)
 - ▣ EU Research grant: 80% (Euro 2.93 million)
 - ▣ Applicant (NARI) contribution :20% (Euro 732 thousand)
- In-kind contributions from Partners and Associates
- Resources from participant smallholder farmers



Target beneficiaries

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- Project sites to represent areas affected by: soil moisture constraints – excess, deficit and salinity
- Direct participation (100 households per site in 11 sites across 3 countries):
 - PNG: 500 households in five sites
 - Tambul (Kiripia, Alkena), Kopafu (EHP), Murukanam (Madang), Derin (Madang), Hisiu (Hisiu/Yule Is)
 - Solomon Islands: 300 households in three sites
 - Aruligho (Guadacanal), Buma (Malaita), Hunda/Kena (Kolombangara Is)
 - Vanuatu: 300 households in three sites
 - Siviri and Malafau (Efate Is), Middlebush (Tanna Is)
- Broad benefits (long-term impact): about 2.4 million population across three countries:
 - 2 million people in PNG, 300 thousand in SI, 70 thousand in VU

Project Launch on 10 March 2011 – Port Moresby

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Project Inception Meetings (3 countries)

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Lae



Honiara



Port Vila

EU Funded

Management and Coordination

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- NARI – Lead Agency
 - ▣ Action Coordinator, Project Office; Post doctoral Scientist (BOKU) stationed at Aiyura, project staff
- MAL – Action Sub-coordinator, Senior Scientist, Project Office, project staff
- DARD – Action Sub-coordinator, Senior Scientist, Project Office, project staff
- Action Coordination Committee: Chair (NARI DDG/Senior staff), Water expert (BOKU), Component Leaders (Crop, Livestock, Soil, Socioeconomics), M&E Resource Person, Sub-coordinators (VU/SI), Senior Scientists (VU/SI)

Management and Coordination

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Action Coordinator

Component
Leader –
Community
engagement

Component
Leader
Soil/Water

Comp Leader
Crop Imp

Comp Leader
Crop
Diversification

Component
Leader
Livestock

Component
Leader
Communication

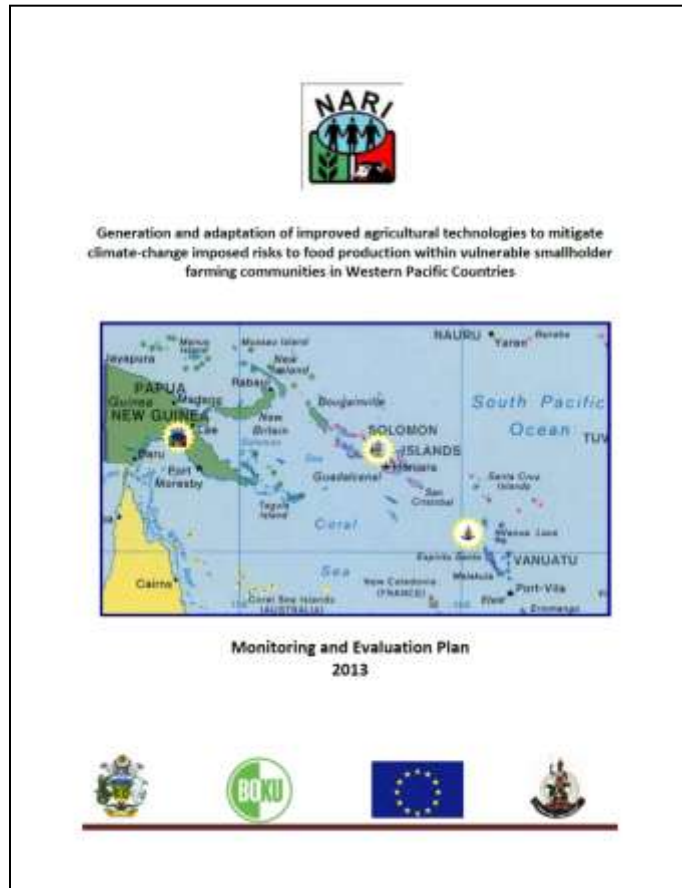
Site Coordinators (Kopafo,
Murukanam, Derin, Tambul,
Hisu/Yule Is)

Action Sub-
coordinator VU

Action Sub-
coordinator SI

M&E and Reporting

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- Development of a M&E Plan
- Elements of the Plan
 - Theory of Change
 - Overview of M&E Arrangements
 - Baseline data plan
 - Monitoring and Evaluating the progress of implementation
 - Data management (collecting, collating, analyzing and storing)
 - Reporting
 - Learning Dissemination

M&E and reporting

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- 2 level monitoring (Overall Project Implementation Plan, Site implementation plans)
- Definition of relevant indicators for project results and indicators for outputs at site level

	A	B	C	D	E	F	G	H	I
				Data			People		Time
Results Level	Indicator	Indicator definition or Information Need and M&E question	Baseline Value	Data source for Indicator information	Means of Verification/Data analysis method	Responsible for data collection/ analysis	Recipient of the Information	Timing of data capture/ Frequency	
Project Overall Objective (Goal): To mitigate climate change associated risks to food security and livelihoods for vulnerable smallholder communities in Western Pacific countries - Papua New Guinea (PNG), Solomon Islands (SI) and Vanuatu (Vu)	Meal frequencies and size of servings remain constant throughout the year in targeted communities in PNG, SI and Vu independent of climatic stress factors	This is a proxy indicator to assess food availability during lean seasons. Communities in PNG, Vu, SI respond to household food shortages due to climatic stress factors with reducing the no. of meals per day as well as size of the serves.	Communities have reported to reduce frequency of meals at least by 1 meal/day during times of food shortages; size of the meal is also reduced	Impact assessment survey reports	Survey analysis	Action Coordinator/ M&E Officer	NARI Senior Management	survey to be conducted 2-3 years after completion of the intervention	
Project Specific Objective: To improve the food production capacity of smallholder communities in PNG, SI and Vu in areas where precipitation deficits and/or excesses and soil salinity problems are becoming significant threats to agricultural productivity.	1. # of community members equipped with skills and knowledge relevant to using introduced technologies, strategies, practices Disaggregation by: gender; type of technology, practice, strategy; pilot site	Capacity improvement involves the following components: * necessary skills to use introduced technologies, practices, strategies * access to required information and opportunity to internalized information so it becomes their knowledge * have access to the technologies * have local support and	The baseline here would be '0' based on information from the needs assessment survey indicating that specific introduced technologies are not available in the communities	Project M&E reports	aggregated site monitoring and evaluation data;	Action coordinator, Component Leaders, Partner organisations	Donor, Senior management of NARI, MAL, DARD	at the end of the project	
	2. # of direct and indirect households in pilot communities supplied with # of appropriate technologies Disaggregation by: type of technology; pilot site	These are the number of households that either receive technologies as primary receivers, i.e. they are participating directly in the project or as secondary receivers, i.e. they are accessing the technologies through	The baseline here would be '0' based on information from the needs assessment survey indicating specific introduced technologies are not available in the communities	Project M&E reports; Final Project Evaluation	aggregated site monitoring and evaluation data; analysis of survey data	Action Coordinator; M&E Officer	Donor, Senior management of NARI, MAL, DARD	at the end of the project	

	A	B	C	D	E	F	G	H	I	J	K	L	M
	N°	Output/Milestone	Output Indicator relevant information to collect for milestones	Baseline needs	Date of achievement	Staff responsible	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3
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38	Output 3	Capacity for growing cassava using improved locally acceptable production practices and farmer-selected varieties increased in the Hisiu Communitiy	<ul style="list-style-type: none"> □ 3.1 # of farmers participating in learning activities on the use of cassava production practices □ 3.2 type of improved rice production practices and # and names of cassava varieties selected by >50% of participating farmers as appropriate and useful for adoption in their own system by three priority criteria □ 3.3 # of planting material units (cassava) distributed to # of primary and secondary users (within or in surrounding communities) 	* inventory of current cassava production practices (planting density, source and type of planting material, no. and name of cassava varieties, current yield of cassava per defined area, planting method)									
39	Milestone 1	Baseline data collected, interested farmers and suitable sites for cassava production demonstration identified			May-13	Paul, Peter, Simon							
40	Milestone 2	Sufficient cassava planting materials assembled at NARI-SRC for participatory research and demonstrations at the site	* Good planting material available established		Jul-13	Paul, Janet							
41	Milestone 3	Demonstration trial plot comparing different varieties and different densities or other practices (will depend on baseline information) successfully established	* trial established		Dec-14	Paul, Peter, Simon							
42		* Monitoring visits by NRI-SRC officer - monthly * Monitoring visits by Component leader- 3 months; 6 months after planting	* monitoring visits conducted		monthly	Paul, Peter, Simon							
		Participatory evaluation of cassava varieties and selection of best performing varieties and cultivation practices based on	* no of male and female farmers participating in the field day and		Aug-15	Paul, Peter, Simon							

M&E and reporting

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- Quarterly monitoring reports on site implementation plans and overall project implementation plan
- Quarterly project team review meetings
- Annual review and planning meetings
- Annual Action Coordination Committee meetings (5 meetings held)
- Annual report to donor, stakeholders, organisations



Theory of Change (Impact Pathway)

Farming households can better manage the risks from climatic variability and global Climate Change to household food security

Members
pilot
communities

changing of traditional farming practices, food use and preparation, adopting strategies to diversify access to food

ADRA

MAL

WV

KGA

DARD

ETC.

(P, N, D)
DAL

NARI

BOKU

To improve **the food production capacity** of smallholder communities

What materials and technical capacities will communities

What are the activities that would support and enhance farmer participation

What resources, capacities & activities will the project need

What would the project have achieved?

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- Adaptive, participatory research
 - Performance of technologies, practices, strategies when used by farming households
 - Study of the beneficiary responses, behaviour, innovation process
 - Pilot level (not about large numbers)
- Improvement of skills, knowledge, access to new/improved/different technologies, challenging the 'normal', introduction of new ideas to change attitudes and aspirations

Contin.

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- New research outputs (crop protection, water/soil management, rice production, crop variety evaluation)
- Improved organisational capacity (systems, processes, planning, M&E, staff development, facilities, equipment.....)
- New partnerships and networks (NARI, MAL, DARD, BOKU)





Thank you