IMPLEMENTATION COMPLETION AND RESULTS REPORT
(IDA-H8850)

ON A
CREDIT

IN THE AMOUNT OF SDR 3.3 MILLION
(US$5.0 MILLION EQUIVALENT)

TO THE
INDEPENDENT STATE OF SAMOA
FOR AN
AGRICULTURE AND FISHERIES CYCLONE RESPONSE PROJECT

27 September 2017

Agriculture Global Practice
Papua New Guinea and Pacific Islands
East Asia and Pacific Region
CURRENCY EQUIVALENTS

Currency Unit = Samoan Tala (SAT)

(Exchange Rate Effective August 31, 2013)
US$ 1 = SAT 2.35
SDR 1 = US$ 1.52

(Exchange Rate Effective August 31, 2016)
US$ 1 = SAT [ ]
SDR 1 = US$ [ ]

FISCAL YEAR
July 1 – June 30

ABBREVIATIONS AND ACRONYMS

ADRA Adventist Development and Relief Agency
AFCRP Samoa Agriculture and Fisheries Cyclone Response Project
APHD Animal Production and Health Division
CRW Crisis Response Window
DALA Damage and Loss Assessment
DRR Disaster Risk Reduction
GoS Government of the Independent State of Samoa
HHs Households
ISM Implementation Support Mission
ISR Implementation Support Report
MAF Ministry of Agriculture and Fisheries, Samoa
MNRE Ministry of Natural Resources and Environment
MOF Ministry of Finance, Samoa
MWCSD Ministry of Women, Community and Social Development
MTR Mid-Term Review
PDNA Post Disaster Needs Assessment
PDO Project Development Objective
PMU Project Management Unit
SACEP Samoan Agricultural Competitiveness Enhancement Project
SAT Samoan Tala
SDR Special Drawing Rights
USD United States Dollar
CONTENTS

Data Sheet
A. Basic Information
B. Key Dates
C. Ratings Summary
D. Sector and Theme Codes
E. Bank Staff
F. Results Framework Analysis
G. Ratings of Project Performance in ISRs
H. Restructuring
I. Disbursement Graph
1. Project Context, Development Objectives and Design................................................. 1
2. Key Factors Affecting Implementation and Outcomes.................................................4
3. Assessment of Outcomes.............................................................................................. 9
4. Assessment of Risk to Development Outcome...........................................................15
5. Assessment of Bank and Borrower Performance....................................................... 15
6. Lessons Learned......................................................................................................... 17
Annex 1. Project Costs and Financing............................................................................ 19
Annex 2. Outputs by Component................................................................................... 20
Annex 3. Economic and Financial Analysis................................................................... 24
Annex 4. Bank Lending and Implementation Support/Supervision Processes.............. 32
Annex 5. Beneficiary Survey Results............................................................................. 33
Annex 6. Stakeholder Workshop Report and Results..................................................... 35
Annex 7. List of Supporting Documents ....................................................................... 39
A. BASIC INFORMATION

Country: Samoa

Project Name: Samoa Agriculture & Fisheries Cyclone Response Project

Project ID: P145938

L/C/TF Number(s): IDA-H8850

ICR Date: 09/26/2017

ICR Type: Core ICR

Financing Instrument: IPF

Borrower: MINISTRY OF FINANCE

Original Total Commitment: XDR 3.30M

Disbursed Amount: XDR 3.30M

Revised Amount: XDR 3.30M

Environmental Category: B

Implementing Agencies:

Ministry of Agriculture and Fisheries

Cofinanciers and Other External Partners:

B. KEY DATES

<table>
<thead>
<tr>
<th>Process</th>
<th>Date</th>
<th>Process</th>
<th>Original Date</th>
<th>Revised / Actual Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept Review:</td>
<td>08/21/2013</td>
<td>Effectiveness:</td>
<td>01/30/2014</td>
<td>12/30/2013</td>
</tr>
<tr>
<td>Appraisal:</td>
<td>08/21/2013</td>
<td>Restructuring(s):</td>
<td></td>
<td>12/02/2015</td>
</tr>
<tr>
<td>Approval:</td>
<td>10/17/2013</td>
<td>Mid-term Review:</td>
<td>02/16/2015</td>
<td>03/02/2015</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Closing:</td>
<td>12/31/2015</td>
<td>03/31/2017</td>
</tr>
</tbody>
</table>

C. RATINGS SUMMARY

C.1 Performance Rating by ICR

Outcomes: Satisfactory

Risk to Development Outcome: Low or Negligible

Bank Performance: Moderately Satisfactory

Borrower Performance: Moderately Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)

<table>
<thead>
<tr>
<th>Bank</th>
<th>Ratings</th>
<th>Borrower</th>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality at Entry:</td>
<td>Moderately Satisfactory</td>
<td>Government:</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Quality of Supervision:</td>
<td>Moderately Satisfactory</td>
<td>Implementing Agency/Agencies:</td>
<td>Moderately Satisfactory</td>
</tr>
<tr>
<td>Overall Bank Performance:</td>
<td>Moderately Satisfactory</td>
<td>Overall Borrower Performance:</td>
<td>Moderately Satisfactory</td>
</tr>
</tbody>
</table>
### C.3 Quality at Entry and Implementation Performance Indicators

<table>
<thead>
<tr>
<th>Implementation Performance</th>
<th>Indicators</th>
<th>QAG Assessments (if any)</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Problem Project</td>
<td>No</td>
<td>Quality at Entry (QEA):</td>
<td>None</td>
</tr>
<tr>
<td>at any time (Yes/No):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem Project at any</td>
<td>No</td>
<td>Quality of Supervision</td>
<td>None</td>
</tr>
<tr>
<td>time (Yes/No):</td>
<td></td>
<td>(QSA):</td>
<td></td>
</tr>
<tr>
<td>DO rating before</td>
<td>Satisfactory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closing/Inactive status:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### D. SECTOR AND THEME CODES

<table>
<thead>
<tr>
<th>Major Sector/Sector</th>
<th>Original</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Fishing and Forestry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Agriculture, Fishing and Forestry</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td>Animal production</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Public Administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public administration - Agriculture, fishing and forestry</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Theme/Theme/Sub Theme</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment and Natural Resource Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Climate change</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Adaptation</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Renewable Natural Resources Asset Management</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Biodiversity</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Landscape Management</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Finance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance for Development</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Agriculture Finance</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Disaster Risk Finance</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Urban and Rural Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disaster Risk Management</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Disaster Preparedness</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Disaster Response and Recovery</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>
E. BANK STAFF

<table>
<thead>
<tr>
<th>Positions</th>
<th>At ICR</th>
<th>At Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Vice President:</td>
<td>Victoria Kwakwa</td>
<td>Axel van Trotsenburg</td>
</tr>
<tr>
<td>Country Director:</td>
<td>Michel Kerf</td>
<td>Franz R. Drees-Gross</td>
</tr>
<tr>
<td>Practice Manager:</td>
<td>Nathan M. Belete</td>
<td>John A. Roome</td>
</tr>
<tr>
<td>Task Team Leader(s):</td>
<td>Kofi Nouve</td>
<td>Mona Sur</td>
</tr>
<tr>
<td>ICR Team Leader:</td>
<td>Stephane Forman</td>
<td></td>
</tr>
<tr>
<td>ICR Primary Author:</td>
<td>Chase Palmeri</td>
<td></td>
</tr>
</tbody>
</table>

F. RESULTS FRAMEWORK ANALYSIS

Project Development Objectives (from Project Appraisal Document)

The development objective of the project is to provide recovery assistance to cyclone-affected farmers and fishers through vouchers and grants with the aim of restoring their lost production capacity, and to enhance preparedness of the agricultural sector to better respond to future disasters.

Revised Project Development Objectives (as approved by original approving authority)

(a) PDO Indicator(s)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline Value</th>
<th>Original Target Values (from approval documents)</th>
<th>Formally Revised Target Values</th>
<th>Actual Value Achieved at Completion or Target Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator 1:</td>
<td>Beneficiary subsistence farming and fishing households acquire farm assets and inputs to recover from cyclone losses (value of redeemed vouchers - million SAT)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Value quantitative or Qualitative | 0.00 | 7.30 | 7.30 |
| Date achieved | 10/22/2014 | 12/31/2015 | 03/31/2017 |
| Comments (incl. % achievement) | 100% achievement | | |
SAT 7.3m allowed AFCRP to reach 7,394 subsistence farmers or fishers with vouchers, who were able to restore their productive assets (small farm infrastructures rehabilitation and agr. equipment) to restart agriculture production.

<table>
<thead>
<tr>
<th>Indicator 2 :</th>
<th>Percentage of approved recovery plans of commercial enterprises implemented.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>Quantitative or Qualitative</td>
</tr>
<tr>
<td>Date achieved</td>
<td></td>
</tr>
<tr>
<td>Comments</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator 3 :</th>
<th>Methodology developed and adopted and MAF staff trained on compiling regular agricultural production data, assessing damages &amp; loss for the agricultural sector and capacities strengthened in DRR/DRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>Quantitative or Qualitative</td>
</tr>
<tr>
<td>Date achieved</td>
<td></td>
</tr>
<tr>
<td>Comments</td>
<td></td>
</tr>
</tbody>
</table>

(b) Intermediate Outcome Indicator(s)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline Value</th>
<th>Original Target Values (from approval documents)</th>
<th>Formally Revised Target Values</th>
<th>Actual Value Achieved at Completion or Target Years</th>
</tr>
</thead>
</table>

vii
<table>
<thead>
<tr>
<th>Indicator 1</th>
<th>Percentage of eligible subsistence farmers that have received vouchers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00 90% 99%</td>
</tr>
<tr>
<td>Date achieved</td>
<td>10/22/2014 12/31/2015 03/31/2017</td>
</tr>
<tr>
<td>Comments</td>
<td>110% achievement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator 2</th>
<th>Percentage of recovery plans of eligible commercial farmers and aquaculturists approved.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00 80 100 100</td>
</tr>
<tr>
<td>Date achieved</td>
<td>10/22/2014 12/31/2015 06/30/2016 03/31/2017</td>
</tr>
<tr>
<td>Comments</td>
<td>100% achievement All 100 plans were approved by PMU and PSC - 93 were fully implemented (cleared completion report).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator 3</th>
<th>Damaged MAF facilities repaired.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00 90% 100%</td>
</tr>
<tr>
<td>Date achieved</td>
<td>10/22/2014 12/31/2015 03/31/2017</td>
</tr>
<tr>
<td>Comments</td>
<td>110% achievement The project repaired and rehabilitated more infrastructure and equipment than anticipated from the PAD thanks to savings from C1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator 4</th>
<th>Client days of training provided to farmers on technologies and practices for more resilient agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00 300 400</td>
</tr>
<tr>
<td>Date achieved</td>
<td>10/22/2014 12/31/2015 03/31/2017</td>
</tr>
<tr>
<td>Comments</td>
<td>133% achievement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator 5</th>
<th>Client days of training provided to female farmers on technologies and practices for more resilient agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00 100 200</td>
</tr>
<tr>
<td>Date achieved</td>
<td>10/22/2014 12/31/2015 03/31/2017</td>
</tr>
</tbody>
</table>


### Comments (incl. % achievement) 200% achievement

<table>
<thead>
<tr>
<th>Indicator 6: Number of beneficiary subsistence farmers and fishers who have received e-vouchers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value</strong></td>
</tr>
<tr>
<td>Quantitative or Qualitative</td>
</tr>
<tr>
<td><strong>Date achieved</strong></td>
</tr>
<tr>
<td><strong>Comments</strong> (incl. % achievement)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicator 7: Percentage of beneficiary subsistence farmers and fisheries receiving e-vouchers that are female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value</strong></td>
</tr>
<tr>
<td>Quantitative or Qualitative</td>
</tr>
<tr>
<td><strong>Date achieved</strong></td>
</tr>
<tr>
<td><strong>Comments</strong> (incl. % achievement)</td>
</tr>
</tbody>
</table>

### G. RATINGS OF PROJECT PERFORMANCE IN ISRs

<table>
<thead>
<tr>
<th>No.</th>
<th>Date ISR Archived</th>
<th>DO</th>
<th>IP</th>
<th>Actual Disbursements (USD millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>03/03/2014</td>
<td>Satisfactory</td>
<td>Moderately Satisfactory</td>
<td>3.40</td>
</tr>
<tr>
<td>2</td>
<td>11/24/2014</td>
<td>Satisfactory</td>
<td>Moderately Satisfactory</td>
<td>3.40</td>
</tr>
<tr>
<td>3</td>
<td>06/17/2015</td>
<td>Moderately Satisfactory</td>
<td>Moderately Satisfactory</td>
<td>3.40</td>
</tr>
<tr>
<td>4</td>
<td>12/14/2015</td>
<td>Moderately Satisfactory</td>
<td>Moderately Satisfactory</td>
<td>3.40</td>
</tr>
<tr>
<td>5</td>
<td>06/15/2016</td>
<td>Moderately Satisfactory</td>
<td>Moderately Satisfactory</td>
<td>3.92</td>
</tr>
<tr>
<td>6</td>
<td>12/22/2016</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
<td>4.40</td>
</tr>
</tbody>
</table>

### H. RESTRUCTURING (IF ANY)

<table>
<thead>
<tr>
<th>Restructuring Date(s)</th>
<th>Board Approved PDO Change</th>
<th>ISR Ratings at Restructuring</th>
<th>Amount Disbursed at Restructuring in USD Millions</th>
<th>Reason for Restructuring &amp; Key Changes Made</th>
</tr>
</thead>
</table>

ix
<table>
<thead>
<tr>
<th>Date</th>
<th>Project Code</th>
<th>Stage</th>
<th>Result</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/02/2015</td>
<td>N</td>
<td>MS</td>
<td>MS</td>
<td>3.40</td>
</tr>
<tr>
<td>06/17/2016</td>
<td>MS</td>
<td>MS</td>
<td>3.92</td>
<td></td>
</tr>
</tbody>
</table>

I. DISBURSEMENT PROFILE

![Disbursement Profile Graph](image)
1. Project Context, Development Objectives and Design

1.1 Context at Appraisal

The Agriculture and Fisheries Cyclone Recovery Project (AFCRP) was financed under the World Bank Crisis Response Window (CRW) following Tropical Cyclone Evan (TCE) that hit Samoa in December 2012. At the time of project appraisal in early 2013, the context in Samoa was one of a lower middle-income, small island state, with slow economic growth rates. A tsunami that had struck the country with tragic loss of life, three years prior to TCE, was still much a part of the country’s memory of the impact of natural disasters. TCE impacted the struggling Samoan economy with an estimated US$ 210 million worth of damages and losses overall - roughly 30% of the value of annual GDP at the time. Of the damages and losses, an estimated US$ 33 million were in agriculture, livestock or fisheries. Losses and damages to crops accounted for some 84% of that amount.

In 2013, the most recent agricultural census showed that as much as 85% of Samoa’s population of about 180,000 people were involved in some form of agricultural activities. However, just 4% of those were considered commercial agricultural producers. The value added of agriculture to GDP had been estimated at 10% in 2011, down from a 17% contribution a decade earlier in 2000.

The rationale for the Government of Samoa (GoS) request for Bank assistance was its immediate need to replace and rebuild the assets destroyed or damaged during the cyclone. This aligned with the Bank’s Country Partnership Strategy (CPF) for Samoa, approved earlier in March 2012, with its focus on encouraging broad-based growth and reducing vulnerability to economic shocks, natural disasters and climate change. Furthermore, a CRW had been set up by the International Development Association (IDA) specifically to provide additional resources to respond to major natural disasters and return countries to their long-term development path. According to CRW objectives, this financing was intended to complement UN efforts to provide emergency relief by supporting safety nets for affected populations and restoring basic physical assets that were destroyed by the disaster.

In the aftermath of TCE, GoS prepared the Post-Disaster Needs Assessment (PDNA)¹ that highlighted that agriculture, tourism and transport were the most affected sectors by the TCE. It also assessed that about 75% of the agriculture areas in Upolu island were severely or moderately affected by Cyclone Evan, notably in the southwest, central and southern parts of the island. For agriculture, the number one priority from the PDNA was “to replace the productive assets of subsistence and commercial farmers and fishers in order to restore production across the sector as soon as possible”. A Recovery Framework was then developed that sought to: (i) rebuild damaged public infrastructure; (ii) support households to recover; and, (iii) ensure a strong policy program to underpin increased resilience and a more effective response to any future disasters. AFCRP was then designed for the use of CRW funds in the context of the GoS Recovery Framework and the Bank’s CPF. AFCRP was prepared as an emergency operation and delivered in less than three months (from the Concept Note to the Approval stages), although it was not intended to be a humanitarian short-term assistance project, but was designed with a medium-term recovery objective of replacing the productive assets as recommended by the PDNA.

Just before TCE and the subsequent design of AFCRP, the Samoa Agriculture Competitiveness Enhancement Project (SACEP) was also launched, with total financing of US$ 13 million from IDA and the Food Price Crisis Response Multi-Donor Trust Fund. SACEP became effective in June 2012, and was in the early stages of implementation by the Ministry of Agriculture and Fisheries (MAF) when TCE hit.

¹The PDNA was led by the government of Samoa with support from the World Bank and other development partners, including the Asian Development Bank (ADB), Australia, New Zealand, Secretariat of the Pacific Environmental Program (SPREP), Secretariat of the Pacific Community (SPC), and the United Nations.
1.2 Original Project Development Objectives (PDO) and Key Indicators

The project development objective was ‘to provide recovery assistance to cyclone-affected farmers and fishers through vouchers and grants with the aim of restoring their lost production capacity, and to enhance preparedness of the agriculture sector to better respond to future disasters’.

The PDO can be unpacked into two objectives: (i) to provide recovery assistance to cyclone-affected farmers and fishers through vouchers and grants with the aim of restoring their lost production capacity – so simply providing farming and fishing households (HHs) with assistance being a goal in itself, so that it can accelerate the recovery of their production capacity (productive assets putting them in a position where they would be able to undertake back agriculture and fishery production activity – and not restoring the production itself which was considered as too ambitious for the project duration) as per the PDNA’s recommendation; and (ii) to enhance preparedness of the agriculture sector to better respond to future disasters – also responding to key challenges described by the PDNA, notably the lack of capacity in MAF to respond to the reconstruction and recovery needs in a timely manner, and the absence of any system for assessing farm damages and losses arising from disasters.

The key indicators for the PDO were stated in the PAD and Results Framework as:

(i) Beneficiary subsistence farming and fishing households acquire farm assets and inputs to recover from cyclone losses;

(ii) Approved recovery plans of commercial farmers implemented;

(iii) Methodology developed and adopted and Ministry of Agriculture and Fisheries staff trained on compiling regular agricultural production data and assessing damages and loss for the agricultural sector and capacities strengthened in disaster preparedness and response.

1.3 Revised PDO and Key Indicators, and reasons/justification

The original PDO and key indicators were not revised during the project. However, one new indicator was added to the Results Framework at the time of a restructuring in December 2015. The indicator added was: Number of beneficiary subsistence farming and fishing households who have received the e-voucher; with a target value of 7,000 HHs. This indicator was added to reflect additional information on the number of beneficiaries that became available during the course of implementation, thereby making the results framework more informative.

In addition, the performance target for the ‘percentage of recovery plans approved’ increased from 90% to 100%, to reflect the fact that the original target was on track to being exceeded.

1.4 Main Beneficiaries

The intended direct beneficiaries were individuals practicing subsistence and commercial agriculture, fisheries or aquaculture living on Upolu Island in the areas designated as severely or moderately affected by TCE in the Damage and Loss Assessment (DALA) undertaken as part of the GoS’ PDNA. The PAD made it clear that “in the absence of detailed records of individual household losses, all subsistence farming and fishing households in the cyclone affected districts would be targeted”. At the time of appraisal, and of the 17,511 HHs living in Upolu, about 60% (10,500) were engaged in agriculture. 96% of them were subsistence farmers (producing for their own consumption only or largely for home consumption and selling small surpluses to local markets) and 4% commercial farmers (producing primarily to sell in local markets or supermarkets).
These direct beneficiaries were estimated to be about 7,000 subsistence farmers and 100 commercial farmers, and ultimately the project supported 7,394 subsistence farmers and 100 commercial/semi-commercial farmers – representing over 70% of all farming and fishing HHs of Upolu and over 90% of those HHs that were in severely or moderately affected areas of the island.

Additional direct beneficiaries that were not mentioned in the appraisal report included the 569 farmers and fishers outside of TCE affected areas who participated in disaster risk reduction training to build their resilience to future such events, and the merchants who participated in the e-voucher scheme and benefit from increased sales volumes and the introduction of new customers.

In a larger sense, all farmers and fishers in Samoa were intended to indirectly benefit from a number of investments made in MAF. This included MAF’s restored capacity to provide services, from the enhanced resilience of MAF infrastructure in the event of future disasters, and from the new skills of MAF staff in assisting its clients to reduce disaster-related risk.

1.5 Original Components

The project was designed to have the following four components:

**Component 1. Cyclone Recovery for Subsistence Farmers and Fishers:** This component carried out a program of activities aimed at restoring the production capacity of cyclone affected subsistence farmers and fishers including: (i) issuing vouchers to subsistence farmers for purchase of eligible farm items; and (ii) issuing vouchers to subsistence fishers for purchase of eligible fishing equipment and/or farm items.

Electronic vouchers, using mobile phones, were issued to subsistence farmers and fishers. Beneficiaries were able to redeem the voucher value at designated suppliers (willing to install the electronic payment system and formalized through a signed Memorandum of Understanding (7 suppliers)), and purchase eligible farm or fishing equipment that was on a pre-defined list (based on the PDNA and consultation with MAF and WB safeguards team to black-list items promoting mis-use of pesticides or illegal fishing – see example in table page 10). HHs located in cyclone-affected villages with Community Based Fisheries Management Plans or Marine Protected Areas were able to use their vouchers to purchase eligible fishing equipment and/or farm items. Beneficiary HHs in villages without these management plans or protected areas were issued with vouchers for agricultural items only. HHs in districts severely affected by the cyclone received a higher value of vouchers than those in moderately affected areas. The voucher value was determined after the beneficiary identification was finalized: moderately affected HHs received SAT 700 (equivalent to around US$ 300 at appraisal) and severely affected HHs received SAT 1,200 (US$ 520 at appraisal).

**Component 2. Cyclone Recovery for Commercial Farmers and Fishers:** This component carried out a program of activities aimed at restoring the production capacity of cyclone affected commercial farmers and fishers, including: (i) providing Recovery Grants to commercial farmers to assist in restoration of farm equipment and infrastructure lost or damaged due to the cyclone; and (ii) providing Recovery Grants to commercial farmers involved in aquaculture to assist in restoration of the equipment or infrastructure damaged due to the cyclone.

Commercial farmers in the severely and moderately affected districts were eligible for Recovery Grants of up to SAT 7,000 (around US$ 3,000 at appraisal) for replacing cyclone damaged crop, livestock and aquaculture equipment and infrastructure. The value of the grant depended on the farmer’s approved recovery plan, which required some matching investment on their part. Grants were distributed using the same e-voucher system as for subsistence farmers.
Component 3. Restoration of MAF Facilities and Strengthening the Agricultural Sector's Capacity for Disaster Preparedness and Response: This component carried out a program of activities aimed at: (i) supporting the repair of essential MAF facilities, damaged during the cyclone as listed in the PDNA (e.g. damaged tunnel houses, see details in Annex 2. Outputs by Component); (ii) establishing systems for the regular collection and updating of agricultural production information; (iii) developing a standard methodology for collection and analysis of damage and loss data for the agricultural sector; and (iv) strengthening capacities of farmers and sector institutions in disaster preparedness and response.

Component 4. Project Coordination and Management: This component supported the implementation and management of the project including: (i) provision of technical assistance, necessary for coordination and implementation of the project; (ii) procurement of vehicles and provision of adequate work facilities for MAF; (iii) design and implementation of a Management Information System (MIS) for the Voucher Program and Recovery Grant Scheme and enhancing MAF's monitoring and evaluation systems to track implementation progress and results.

1.6 Revised Components - The original components were not revised during implementation.

1.7 Other significant changes

No major changes were made in the design, scope or scale of the project during implementation. However, the project was extended twice through two Level 2 restructurings, dated December 2, 2015 and June 17, 2016.

The original project closing date was December 31, 2015. With the first restructuring, this was extended to June 2016. In light of the delays experienced in setting up the e-voucher system, this extension was intended to ensure adequate completion of scheduled activities and better consolidation of project results. There was also a reallocation of funds between disbursement categories and between components. Due to a saving of some 7% (about US$ 200,000) in Component 1 for the distribution of electronic vouchers to subsistence farmers once all eligible beneficiaries had received their entitlements, funds were used to increase resources available to Component 3 (Restoration of MAF facilities), and Component 4 (Project Coordination and Management). The bulk of these funds (about US$ 160,000) went to C3 for works, materials and equipment to restore MAF facilities and operations for disaster preparedness and building resilience.

In June 2016, the project was restructured again to further extend the project closing date by nine months to March 2017. Although the e-voucher system had by then completed disbursement, additional time was needed to (i) prepare the completion reports for commercial farmer activities; (ii) finish all resilience-building works for MAF facilities, including new activities proposed by the MAF and discussed with the Bank Task Team (documented in the AM of March 2016) to be financed using cost savings from elsewhere in the project (for instance water storage in MAF demonstration farm and fishing vessel repair); (iii) complete the disaster preparedness and response training for farmers; and (iv) fully document lessons learned.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry

Soundness of background analysis: Project preparation, the resultant project design, and the quality of the project at entry all benefitted from the background analysis done during the PDNA. The analysis was quite thorough and rigorous, drawing on inputs from a range of stakeholders including those with in-depth knowledge of agriculture and fisheries in Samoa as well as those with wide-ranging experience in assessment of post-disaster situations. The design document cited experiences
from other emergency recovery operations that pointed to the need for simple project design and for a means of disbursement that would expedite delivery of funds to beneficiaries while minimising the administrative burden. In response to reservations expressed during internal reviews at the Bank as to the relative efficacy of e-vouchers, the design document did cover the issues and options relating to electronic disbursement versus cash or in-kind payments. However, having justified the choice to go with e-vouchers instead of cash or paper vouchers, the appraisal report did not refer to best practices in the design and administration of an e-voucher system. AFCRP did this later in a post-facto case study undertaken by the Bank as part of an effort to document the lessons learnt in the project.²

**Project design:** Aligned with the above analysis, the structure of the project (components and activities) was justifiably kept simple and the chosen geographical scope appropriate, guided by the PDNA. However, there were two key factors during the design stage that affected implementation and outcomes of the project. They remained key factors throughout the implementation stage. The first was the time factor. As a disaster recovery project, time was of the essence. The overall effectiveness of the project would depend to a significant degree on the rapidity with which its design and the implementation took place. In the event, time and information constraints at design were formidable.

The second key factor during preparation that affected the implementation and outcomes was the innovation factor. The decision to introduce e-vouchers, a new approach that had never before been tried in Samoa, raised the risk of delivering the core benefits to individuals affected by the cyclone. This innovation, in a context of limited knowledge and information, and where time was of the essence, could have appeared as risky. It compounded the difficulty of the project and it made the likelihood of falling short of expectations higher. However, recognizing that the project needed to reach as many households as possible when 75% of agriculture areas were affected and transport infrastructure damaged; there was a low response capacity from the Government; paper vouchers entailed a substantial administrative burden; and that Samoa had a high level of mobile phone penetration and expanding electronic banking services; the team rightly considered that there was the right foundation for adopting an electronic system to deliver benefits.

**Government commitment:** During the design process there was a high level of government commitment and clear feedback on what would be acceptable and most suitable in terms of a project approach in the Samoan context, particularly with respect to fiduciary matters and accountability. There was reluctance from government to distribute cash to households affected by the cyclone, as this was perceived as being prone to misuse by the recipients – vouchers were seen to be a more appropriate instrument, which a higher level of control over the expenditure.

**Risks and mitigation measures:** When added to worries about fraud corruption government capacity, these factors resulted in a ‘high’ risk rating for the project several areas including Project Design and Overall Implementation. This rating was fully relevant. With respect to project design, concerns over the potential for disputes over the beneficiary list were mitigated by a comprehensive community consultation process, and the public display of the beneficiary lists in each village to ensure full participation of eligible HHs. The introduction of the novel e-voucher system was supported by a dedicated in-country IT consultant to the project team, complemented by strong engagement from the service provider (Digicel) and an experienced international IT consultant from the Bank. With respect to implementation capacity, the fact that MAF had never implemented a World Bank or similar project before was mitigated by the establishment of a dedicated well-staffed project management unit (PMU), the capacity of which was built through appropriate trainings (notably fiduciary).

---
² Ravi Corea, *Case Study on Electronic Voucher System introduced with funding from Crisis Response Window after Cyclone Evan hit Samoa in December 2012* (Manuscript under preparation for publication by Bank, July 2017)
2.2 Implementation

Implementing agency capacity: The concerns expressed earlier in reviews of the project design, about lack of MAF experience in implementing projects and overall lack of experience in Samoa with electronic payments like the e-voucher, proved to be justified during implementation.

Project start-up and early implementation were slow due to limited experience in project management and some lack of familiarity with the procedures to access and utilise the project financing. However, the presence of the SACEP PCU working alongside the AFCRP PMU in MAF served to mitigate these risks to a large extent, as it was foreseen that they would in the project design document. Shared experiences, human resources, and collaboration amongst staff proved invaluable as SACEP worked to help to backstop AFCRP, especially on procurement, monitoring and evaluation, and MIS issues.

On the other hand, even the technical assistance and strong implementation support in IT provided by the Bank was not sufficient to overcome lack of experience in setting up the electronic payments system. Learning-by-doing was the time-consuming path to resolving numerous issues that inevitably came up in the set-up and implementation of the novel, bespoke payment system. Not only did MAF have to build something new that would work, and put it into practice for the first time, they also had to do so with due diligence to ensure a secure payments system.

Yet, the time taken to set up a new, functional, robust system with adequate fiduciary controls was time lost for farmers. The delays in delivery of benefits prolonged the period with reduced production capacity and income caused by the cyclone.

Factors of success: To counterbalance these difficulties and implementation issues that were linked to the project design, several important factors specific to the context of the project’s implementation contributed to its overall success. The first was the flexibility and strong support from government. The Central Bank and the Ministry of Finance (MOF) were open to setting up the procedures needed to build on e-money arrangements that had already been created for use by the private sector.

The second factor was enthusiasm and competence of the private sector service provider contracted to work with MAF, Digicel, in adapting its mobile money system to providing farmers the vouchers in the form of credits accessible through cell phones. The firm provided technical support and allocated human resources required to render the e-voucher system operative that far exceeded estimated requirements at the time that the technical proposal for the contract was prepared. Project staff, beneficiaries and Bank implementation support providers all confirmed their appreciation for the quality of services rendered during stakeholder interviews and surveys.

The third key factor contributing to project success was the quality of technical backstopping and implementation support from the Bank. The Bank facilitated the dialogue and effective working relationships needed amongst diverse stakeholders with a role in e-voucher system - from Digicel, to the suppliers of agricultural tools and inputs, to the MAF project officers and MOF officials. The continuity of support from the same Bank-financed IT specialist starting with the design of the project in 2013 and continuing on through to project completion in 2017 was also invaluable to the project.

In general, review of implementation reveals that the PMU, project staff and Bank staff responsible for the project had an effective, problem-solving approach to the numerous day-to-day challenges in implementation. When some local elites proposed beneficiary lists that favoured inclusion of friends and family who did not meet the criteria for inclusion in project benefits, the project took steps to ensure that lists were made public, posted in community venues, and confirmed by consensus (in accordance with pre-agreed procedures). When the Samoan IT specialist who had developed the e-voucher system for AFRCP passed away unexpectedly the project managed to identify an IT consultant who - with implementation support from the Bank team – regained access to files that had
been inaccessible. When some beneficiaries were unable to spend their e-vouchers because they had lost or given away the mobile phone provided to them, the project made alternative arrangements to provide them a second chance to purchase goods at a value equal to the e-voucher that was provided to them. When commercial farmers made the case that it would be foolish to invest in ‘recovery’ of pre-cyclone capacity where pre-cyclone activities were unprofitable, the project agreed to allow farmers to adopt an approach that allowed for a shift to more economically sustainable activities, in line with the pre-approved recovery plans, without requiring that farmers could only use their funds to purchase items or undertake repairs for capital that had been destroyed by TCE.

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization

M&E Design. The design of the M&E system as described in the PAD was to include tracking project progress according to the Results Framework; capture of information to assess the effectiveness of environmental and social mitigation measures; visits to beneficiary HHs to ensure compliance with safeguards and to monitor use of inputs, and a management information system (MIS) for the Voucher Program and the Recovery Grant Scheme. The system was intended to work both as a day-to-day management tool for MAF, and as a mechanism for assessing project impact. The AFCRP Project Manager, supported by the MAF Policy Division and the three Project Officers, were to be responsible for M&E activities and related reporting requirements. Project data was to be summarized on a bi-annual basis and included in the Progress Reports to be circulated to government authorities, the Bank and other interested parties.

M&E Implementation and Utilization. While difficult to discern an M&E system as such, each of the basic activities called for in the project design were implemented to some degree. The MIS system that was a core element of the operation of the e-voucher scheme, was also the fundamental resource element of project M&E. In as much as it necessarily recorded all of the day-to-day transaction data for the e-voucher operations, it also effectively allowed project management to track project progress and outcomes overall. For example, transaction data revealed exactly how many beneficiaries had been reached, who they were, what assets they had acquired, where and when. Data from the MIS system could have also been used, for example, to verify compliance of commercial farmers in terms of the use of materials to realise their cyclone recovery plans. The enormous potential of the system in place could have been better utilized by the project and MAF.

2.4 Safeguard and Fiduciary Compliance

Safeguard compliance. At design Bank safeguard policies were triggered in four areas; OP 4.01, BP 4.01 Environmental assessment, OP 4.04 BP 4.04 Natural habitats, OP4.09 BP Pest management, and OP 4.10 Indigenous peoples. To address these issues the Government prepared an Environmental and Social Screening and Assessment Framework (ESSAF) which was disclosed in English and Samoan in accordance with the safeguard guidelines for Bank-financed operations.

The issues addressed were: (i) possible contribution to the use of pesticides and illegal fishing nets; (ii) possible support to environmentally unsustainable farms located in protected areas forests or sensitive natural habitats, or with bad agricultural practices or excessive use of pesticides (iii) possible relocation of cyclone-damaged fish ponds that would encroach on protected areas, mangroves or wetlands, or displace access of others to livelihood sources; and, (iv) possible unfairness in the selection of beneficiaries of the vouchers and grant programs that could potentially result in social conflicts in the villages.

AFCRP was fully compliant in taking the measures called for in the ESSAF with respect to steps needed to avoid contributing to the use of pesticides and illegal fishing nets by eliminating them entirely from the list of goods that could be procured by beneficiaries with e-vouchers. Commercial farmer recovery plans were screened before approval to prevent funding of practices or activities that
did not meet environmental safeguards requirements. The Environment and Safeguards Monitoring Officer (ESMO) from SACEP, who had received specialized training in the course of implementation support from the Bank, provided technical assistance to AFCRP officers responsible for screening commercial farmer proposals and their implementation for compliance. However, as noted above, the project did implement a process of posting the names of beneficiaries identified as eligible for project assistance publicly in each community, and community members were invited to verify that lists included individuals who had been affected and excluded those who had not been or who no longer farmed in that community. A grievance mechanism to appeal possible unfairness in the selection of beneficiaries was considered, based on a similar process for SACEP, but it was not made known to beneficiaries. Although community members and beneficiaries were able to make complaints to the AFCRP PMU and these were generally responded to, there was no systematic logging of grievances received or how they were addressed.

Fiduciary compliance. Fiduciary compliance was good overall. AFCRP benefitted from the support and experience of staff working with SACEP. Interim financial reports and audits were prepared and submitted on time. However, the project was temporarily unable to provide information requested to GoS auditors due to inadequate MIS back-up and back-stopping arrangements that became an issue when crucial knowledge and information for data retrieval was lost with the unexpected death of the responsible staff member. This was resolved in due time with the recruitment of the new IT adviser.

The only minor procurement delay occurred in finalizing the procurement arrangements for the e-voucher scheme and contracting an electronic payment system provider, but thanks to Bank support this was resolved quickly, as per the ISR of November 2014.

2.5 Post-completion Operation/Next Phase

The project effectively built in elements of sustainability of the project outcomes in terms of the ‘restored production capacity and enhanced preparedness’ sought after in the PDO. It did this by ensuring that the assets that could be acquired by the targeted beneficiaries were limited to production-related inputs, tools and equipment. The benefits of the new assets provided in Components 1 and Component 2 can be sustained after project completion as long as the beneficiaries retain ownership of the assets they acquired with e-vouchers and recovery grants. By allowing the beneficiaries themselves to identify and acquire those items of greatest utility for their specific production needs, the likelihood that the beneficiaries themselves would continue to enjoy the benefits post-completion increased, thereby reinforcing the long-term sustainability of the expected positive impacts of the project support.

For Component 3, the prospects for post-completion operations of restored MAF facilities are good given that the operating costs for the facilities restored were already part of government budgets, before the cyclone resulted in the need for their restoration.

The likely prospects for post-completion operations in the disaster preparedness and disaster management work under Component 3 are somewhat weaker. The fact that AFCRP collaborated closely with the Ministry of Natural Resources and Environment, Disaster Risk Management Office, (DRMO) led to some quite important project results. One was that the DRMO adopted the Disaster Risk Management Strategy for Agriculture and the Disaster Risk Management Strategy for Fisheries, both prepared with support from AFCRP, into the Samoan National Disaster Risk Management Plan. Another was that by conducting the Disaster Preparedness Training in collaboration with DRMO, AFCRP increased the likelihood that there will be future follow-up, reinforcement of messages and support to concerned communities. In fact, some communities developed their own Disaster Preparedness Plans thanks to the project. However, the work was constrained by the poor performance of one technical assistance provider and a late start for a second, much more effective advisor – both were recruited directly by the PMU. The poor performance of the first was mitigated
by closure of his contract and transfer of some tasks to the second advisor. If the disaster preparedness trainings had been done earlier, as scheduled, the sustainability of the benefits might have been better as stakeholders would have had more contact with the project and more time to internalize what they had learned. Furthermore, the extent to which MAF/DRMO will make budget provisions and institutional arrangements to continue and replicate what has begun under AFCRP is not known.

The most compelling, and possibly most valuable, benefit of AFCRP, the e-voucher system created by the project, could be considered the benefit most at risk in the post-completion period. The e-voucher system was included in the project merely as means to an end – delivering resources to farmers and fishers. The system was an unintended benefit of the project. It was considered part of the disaster response work, but not part of the future-oriented disaster preparedness work. Unfortunately no arrangements were made to provide for it to continue to generate benefits post-completion.

Nonetheless, the detailed case study of the e-voucher system, referred to above in section 2.1, was a valuable step that could help to sustain the system’s post-completion benefits. It served to share with others the benefits of the system and the knowledge acquired by AFCRP. In addition, AFCRP stakeholders have recognised the usefulness of the e-voucher mechanism and have worked as advocates to inform decision makers whose support will be needed after AFCRP completion to maintain and further develop the system. This has included advocacy with MOF in the form of face-to-face briefings and documentation of project outcomes. The project itself, as a working operation within MAF, was a testimonial to MAF officials and senior management of the usefulness of e-vouchers and the merit of sustaining an e-voucher system.

Some steps were taken by AFCRP with support from Bank staff to introduce e-voucher payments in SACEP implementation for its matching grants programme and the MAF stimulus programme. Were this to have succeeded it would likely have benefitted SACEP as a delivery mechanism, while allowing MAF and GoS to keep a functional e-voucher system active. However, it has not succeeded yet. Further recognition, a taste for innovation, and a strong desire to improve public sector service performance – combined with committed institutional support - would have been needed for Samoa to capitalise on the full potential that the e-voucher system created under this project has to offer.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

The project design was highly relevant to the country situation and its priorities when designed in the aftermath of TCE. It was informed by key recommendations of the GoS PDNA and the country’s recovery needs in the agricultural sector. It had a widespread reach to the thousands of small subsistence farmers who make up the vast majority of agricultural producers in the affected area, and also to the commercial farmers that projects like the Bank-funded SACEP are designed to reach.

3.2 Achievement of Project Development Objectives

The PDO was to provide recovery assistance to cyclone-affected farmers and fishers through vouchers and grants with the aim of restoring their lost production capacity, and to enhance preparedness of the agriculture sector to better respond to future disasters.

AFCRP met or surpassed all of the targets for the PDO indicators, as reflected in the Data Sheet, part F. AFCRP achievements also hold up to scrutiny of the PDO that goes beyond those basic indicators.

Taking the first part of the composite PDO, AFCRP did unequivocally ‘…provide recovery assistance to cyclone-affected farmers and fishers’. The assistance was provided for a total value of just over US$ 3 million (SAT 7.3 million), as intended. It reached 7,494 ‘cyclone-affected farmers
and fishers’ that reside in the areas severely and moderately affected by TCE. They received this assistance ‘through vouchers and grants’. Overall, as foreseen at design, the subsistence level producers received vouchers equivalent to about 91% of the total value of vouchers and grants distributed by the project. In terms of numbers of beneficiaries, about 99% of the total were subsistence-level, and only 1% were commercial producers. More than 99% of beneficiaries were farmers and less than 1% were fishermen or practicing aquaculture.

The distributions of vouchers by types of recipients are shown below.

<table>
<thead>
<tr>
<th>Number and relative share of beneficiaries, by beneficiary type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Subsistence, moderate</td>
</tr>
<tr>
<td>Subsistence, severe</td>
</tr>
<tr>
<td>Sub-total Subsistence</td>
</tr>
<tr>
<td>Commercial, moderate</td>
</tr>
<tr>
<td>Commercial, severe</td>
</tr>
<tr>
<td>Sub-total Commercial</td>
</tr>
<tr>
<td>Grand Total</td>
</tr>
</tbody>
</table>

Although not directly measured by one specific PDO level indicator, as it is included in the first part of the development objective, there is evidence that the ‘aim of restoring production capacity’ was achieved as a result of design choices made when setting up the e-voucher system, by confining the use of the resources provided by the e-voucher to the purchase of production-related goods on an approved list – thereby allowing farmers and fishermen to replace their productive assets as recommended by the PDNA. It was also achieved thanks to the conscientious implementation. Private sector suppliers and MAF project staff were both quite rigorous about administering the system during implementation by their monitoring that prevented the use of the benefit for other purposes, like to acquire consumption goods. As a result, about 7,500 households (or about 52,000 people considering current government estimates of rural household size) affected by the cyclone now have those assets that they identified as needing most.

The tracking data generated by the e-voucher MIS system in the table below shows the type of materials and inputs purchased by subsistence and commercial farmers with resources provided by the project. The items purchased by the most customers were among others wheelbarrows, bush knives and nails.

<table>
<thead>
<tr>
<th>Items most frequently purchased with AFCRP resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>Wheelbarrow</td>
</tr>
<tr>
<td>Grass-cutter</td>
</tr>
<tr>
<td>Chainsaw</td>
</tr>
<tr>
<td>Fencing</td>
</tr>
<tr>
<td>Bush knives</td>
</tr>
<tr>
<td>Nails</td>
</tr>
</tbody>
</table>

Therefore, and although a total value of vouchers might not appear as the best way to measure the provision of “recovery assistance to cyclone-affected farmers and fishers through vouchers and grants with the aim of restoring their lost production capacity”, other intermediate indicators (very high coverage among affected farmers and fishers) and evidence (many agriculture equipment purchased and farms rehabilitated) confirm the high efficacy of this section of the PDO.

---

3 Samoa Bureau of Statistics, Demographic and Health Survey, 2014
The ‘enhanced preparedness of the agriculture sector to better respond to future disasters’, set out as the second element of the PDO, was achieved in part as a result of Components 1 and 2. Through those components, the beneficiaries who received vouchers or grants now have increased resilience to future shocks than they would have had in a ‘without project’ scenario. Their asset base is at least partially restored, giving them the capacity to achieve pre-cyclone production levels. In addition, through Component 3 investments in infrastructure and equipment for MAF, its preparedness to respond to future disasters is enhanced. For example, with improvements in the access road to the Nu’u Research Centre and the provision of a generator to the government tissue culture facility, those MAF services to the agricultural sector are less likely to be compromised or interrupted by extreme weather events in future. Furthermore, under Component 3, going beyond the number of client days delivered to staff and beneficiaries, AFCRP produced important training materials for MAF staff and communities on planning and implementing ways of working to reduce disaster risk reduction.

However, the measurement of this part of the PDO through the PDO-level indicator 3 (Methodology developed and adopted and Ministry of Agriculture and Fisheries staff trained on compiling regular agricultural production data and assessing damages and loss for the agricultural sector and capacities strengthened in disaster preparedness and response) could give rise to confusion, as it appears to measure three things (i) methodology developed and adopted, (ii) MAF staff trained, and (iii) capacity strengthened in DRR. A yes/no achievement may appear vague and lacking evidence although evidence of outputs are there: PDNA and DALA preparation’s methodology transferred, 66 MAF staff trained on DRM, over 800 farmers and fishers sensitized, etc..

From the above discussion, the project efficacy in achieving its development objective could be summarized by the table below:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>PDO sections rating</th>
<th>Rationale</th>
<th>Overall rating</th>
</tr>
</thead>
</table>
| Efficacy       | 1. Recovery assistance to restore production capacity – **High** | • High coverage  
• Evidence that farmers and fishermen have received e-vouchers or grants and replaced productive assets. | **Substantial** |
|                | 2. Disaster preparedness – **Moderate** | • Existing PDO indicator is too vague, although additional evidence is provided by intermediate indicators and beneficiary feedback. |               |

### 3.3 Efficiency

Actual pre-cyclone production capacity and returns to production for subsistence farmers were not estimated at the time of the project appraisal, or for the baseline due to the emergency nature of the operation and its less than three months preparation timeline. However, for this ICR, an estimate of this has been made through an economic and financial analysis that compared likely ‘with’ and ‘without’ project scenarios. It used data from secondary sources outside the project, to assess the immediate impacts of the natural disaster on farmers’ incomes in year zero, and recovery/non-recovery pathways to the present, focusing on what will have been tangible direct benefits to HHs.

A wider range of qualitative and quantitative benefits generated by the project that have not been measured will also have enhanced overall project efficiency. These include: (i) spillover effects of farm capacity recovery on secondary beneficiaries, such as hardware and input dealers, farm laborers, and other actors involved in forward and backward linkages of the value chains in which direct beneficiaries are engaged, (ii) increased availability of food for beneficiaries and for local consumers, (iii) increased preparedness for prospective disasters that may significantly reduce damage and losses, (iv) likely increased efficiency and effectiveness of GoS in providing assistance following future
natural disasters, as a result of having updated registries and an e-voucher system in place; (v) reduced transaction costs for MOF, MAF, and beneficiaries; (vi) better targeting and reduced leakage or misuse of funds; and (vii) avoided damage to MAF facilities in future extreme weather events.

Results of the production analysis indicated that, with project assistance, subsistence farmers in moderately affected areas of Samoa experienced recovery from one to two years earlier than they would have in a ‘without project’ situation where farmers would have only been able to gradually re-introduce inputs and replace farming equipment. Estimated incremental incomes are derived from this earlier recovery and higher productivity as a result of project support. Cost-benefit (CB) ratios for different crops range from 0.9 to 2.45. The analysis also shows that severely affected areas would experience no recovery for vegetable production and only partial recovery of plantation trees ‘without project’ and achieve similar outcomes to moderately affected areas with project support. Incremental incomes are therefore higher than for moderately affected areas with CB ratios between 1.53 and 3.04.

With regards to commercial units, restoration of production capacities were assessed for a commercial pig breeder and a mixed-vegetable farm. In the first instance, a moderately affected farm would need 9 years to fully replace its breeding stock, while a severely affected farm would not have the capacity to recover by its own means. In the ‘with project’ situation, the grant scheme extended to commercial farmers would enable full replacement of stock and equipment in years 2 and 3, leading to restored income levels six years earlier. In the second model, a moderately affected farmer would have needed 4 years to restore pre-cyclone income and production levels, whereas a severely affected farm would have been unable to continue operations. With AFCRP support both moderately and severely affected farmers would have replaced lost equipment in year 2 and achieved full production and income levels in year 4. Costs-benefit ratios for them are 4.86 and 9.19, respectively.

Incremental net benefits for subsistence and commercial farmers in severely and moderately affected areas have been aggregated into a single benefit stream according to their relative weight and converted into economic benefits by applying a Standard Conversion Factor of 0.9. An adoption rate of 70% has been assumed to account for the fact not all farmers who have received assistance have made productive use of it. The analysis used a 10-year timeframe and a social discount rate of 5% - assuming a higher marginal utility of consumption and social time preference skewed towards earlier years, and low growth rates in a post-disaster context. Overall, the Net Present Value of the discounted cash flow is estimated at USD 2.3 million, and the EIRR at 41%.

Based on the above discussion, and despite the absence of economic and financial analysis at the time of appraisal, the project’s efficiency is rated as substantial.

3.4 Justification of Overall Outcome Rating

This project had substantial impact on restoring agriculture and fishery productive assets, therefore putting farmers and fishers in a position of resuming and increasing their production faster than without project, as well as in having MAF better prepared for potential future disasters (PDNA methodology, staff trained, MAF infrastructure rebuilt in a more resilient way). Nonetheless the project had shortcomings, the main one being the delay of about 10-12 months in the delivery of benefits with respect to its original schedule. This was understandable due to the innovative nature of the delivery mechanism. It was partly a consequence of unrealistic planning and partly a consequence of delays linked to administration and coordination. AFCRP has also fallen somewhat short of expectations with respect to the full implementation of activities related to disaster preparedness and data collection systems set up in MAF quite late, that leads to an uncertain likelihood that they will be fully institutionalised. While important, these Component 3 activities represented a minor part of all project initiatives, accounting for an amount of less than 2% of total project financing. For the remainder, the project had several strengths and was successful.
The project had a high degree of relevance to the needs of rural people affected by TCE, to the country’s socio-economic priorities and to the Bank Country Partnership Strategy 2012-2016. Project efficacy was substantial as it met the targets set in the Results Framework and produced all the planned project outputs. Project efficiency was also substantial, in that it produced good value for money for the people and the government of Samoa – resulting in increased production and increased income for cyclone-affected farmers while at the same time developing, testing and operating a new system for making payments to citizens in an easy, low cost way that is easy to monitor and control.

Rating: Satisfactory

3.5 Overarching Themes, Other Outcomes and Impacts

(a) Poverty Impacts, Gender Aspects, and Social Development

Feedback from beneficiaries, local authorities and government staff that was recorded in project progress reports, joint implementation reviews and stakeholder consultations illustrated some very positive results of AFCRP in terms of social development. These included, better governance in local communities as a result of the work done with local authorities in beneficiary targeting. The project also made social development impacts as participating HHs and enterprises took advantage of the freedom of choice offered by the project and the opportunity to autonomously plan and implement their own disaster recovery investments. In this sense the project resulted in greater dignity and self-respect in HHs that were enabled to plan and organise for recovery, compared previous recovery efforts that focused on hand-outs and in-kind assistance.

The returns estimated in the ‘with project’ crop and farm models in section 3.3 above suggest the very likely poverty reduction impact on the more than 52,000 people living in the 7,494 beneficiary HHs hit by TCE who were able to bounce back as a result of AFCRP assistance. This was due, at least in part, to the approach designed by the project to shape decision making in a way that would favour production and income generation. Yet, it must be acknowledged as a lesson learnt that some of the poorest farmers struggled to use the vouchers because they lacked transportation to reach the merchants involved in the scheme, or to bring back heavy/bulky equipment that was purchased.

However, there is no evidence of the project having had a positive impact on gender-related outcomes as a result of design or implementation, notwithstanding the fact that MAF achieved a fair gender balance in project staff and that there were strong women stakeholders in key government positions affecting the project at MOF, MWCSD, and MNRE.

(b) Institutional Change and Strengthening

As discussed above, AFCRP strengthened public sector institutions in Samoa in several ways. MAF, as implementing agency was made stronger as a result of the project in terms of its physical infrastructure made more resilient to future natural disasters. It has acquired a closer and better relationship with a large percentage of its clients who reside in Upolu. It has earned the appreciation of those clients and it has a more in-depth understanding of their current farming practices and skills. With the creation of the e-voucher system MAF now has, effectively, a database, an electronic network through which to contact, by telephone or SMS, almost 8,000 farming HHs. MAF is a stronger institution in terms of the skills of its staff that have been trained and applied knowledge acquired through training in disaster risk management and how to work with communities at the grassroots level for disaster preparedness. MAF has changed and been made stronger as a result of the experience it has acquired under AFCRP in new ways of working with private sector suppliers of agricultural and fishing equipment and materials.
The MNRE has been strengthened through its closer working ties with MAF and the contribution of AFCRP to the National Risk Management Plan and the contribution from MAF of Disaster Risk Management Strategies for Agriculture and for Fisheries. In preparing these AFCRP strengthened MNRE work in rural areas and community level knowledge and engagement.

Experiences with the development of the e-voucher system has also broadened the horizon of the MOF as an institution, giving it a now-tested practical alternative to its existing systems for making payments to individuals. Working with AFCRP has also strengthened the relationships between the Ministry of Women, Community and Social Development and its local government counterparts empowering them with the responsibility for community level administration for targeting post-disaster assistance.

3.6 Summary of Findings of Beneficiary Surveys and ICR Stakeholder Workshop

A short five yes/no question E-Voucher Satisfaction Survey was conducted via SMS with assistance from Digicel, to ascertain customer satisfaction and test with MAF this possible way of communicating with its clients. The response rate was low, with only 5-10% of the 7,000-odd beneficiaries responding (around 350-780 responses depending on the question). However, around 70% of respondents indicated that they were satisfied with the amount of assistance in terms of the value of the e-voucher that they received. Whereas, 84% said they were able to use the funds for recovery, 85% were satisfied with the e-voucher system, 86% would suggest that the e-voucher system be used again in the future, and 85% were satisfied with the service from the suppliers where they used the e-voucher.

AFCRP also contracted the Samoan office of the Adventist Development and Relief Agency (ADRA), a non-governmental organization, to implement a Beneficiary Survey. The survey was administered to a random sample (stratified by location and gender) of moderately and severely affected farmers and fishers that were roughly 10% of the total number of beneficiaries. About 95% of respondents indicated that they had increased production as a result of the assistance received from AFCRP. About 83% of recipients indicated that they were happy using the e-voucher system because they found it easy to use. A total of 94% of beneficiaries surveyed indicated that they recommend using the e-voucher system to distribute assistance in the future. The survey recorded that the same percentage, or more, of recipients were very satisfied with: the lists of project beneficiaries; the use of mobile phones; the amount of funds distributed; and the goods that they had purchased with the funds.

At the ICR Stakeholder Workshop (involving subsistence beneficiaries, commercial beneficiaries, participating merchants and MAF staff), when discussing what were the most useful outcomes of AFCRP, participants indicated that more and better tools and inputs made their work easier and more efficient; increasing their production capacity. The sales of participating merchants had increased, and sales were distributed across several suppliers rather than with one supplier, as had been the case with previous government procurement for such support. Participants observed that other forms of assistance, such as the seeds distributed immediately after the cyclone by FAO and various NGOs, were more useful in terms of immediate relief and re-starting production. But, for medium-term recovery efforts, tools and equipment were very welcome.

There was a consensus that the approach to beneficiary selection was good as the people who were hit by the cyclone were actually the ones who received assistance. Stakeholders agreed that having a publicly available list helped ensure this. It was agreed that working with village mayors to compose the lists worked well due to their knowledge of family circumstances and actual agricultural and fishing activities. They saw that the process allowed constituents to witness the performance of their mayors and to hold them accountable for fair treatment in targeting.

Workshop participants generally felt that having a project-defined list of goods with a range of goods
from which people were free to choose when using their voucher was far preferable to receiving goods procured and distributed by the government. The list was considered useful because it obliged people to buy items useful for production, rather than consumption.

Workshop participants underlined appreciation for several features of the e-voucher. The fact that no cash had to be handled made the process more transparent and reduced the risk of diverted funds or human error. The ‘real time’ information on individual accounts, expenditure and balances was seen as another positive attribute. And, once the system was in place, it was fast and efficient compared to other forms of distributions - like cheques, cash or goods - especially for outreach to large numbers of HHs.

Looking forward, stakeholders made a number of practical suggestions for improving such projects and the use of e-vouchers, notably replicating the project model in future, reviewing the definition of the household and definitions of subsistence and commercial farmers (and keep and updated list of the latter as for fishermen) and taking into account transport costs for subsistence farmers in such programs (See page 4 of the Annex 6 – Workshop report). Given the novelty of the approach, stakeholders felt that such projects should make a greater investment to engage with beneficiaries and to explain the technology before its dissemination (training and resource person in store). Another suggestion was to have a phone number for a help desk that the beneficiaries could call - given that they all had phones - for questions and problems.

Overall the feedback from the ICR Stakeholder Workshop, like that received through the SMS and Beneficiary Survey, was overwhelmingly positive.

4. Assessment of Risk to Development Outcome

The risk that the development outcomes of AFCRP will not be maintained or realised is negligible to low. The outcomes achieved by the project in restored production capacity cannot be undone in the post-project period. Although some beneficiaries may choose not to restore their production, that capacity to do so that was provided by the project - in the form of wheelbarrows or fencing for their plantation - will persist as long as the material continues to exist. The likelihood is also low that the enhanced preparedness to respond to future disasters - created by AFCRP in the form of restored Government infrastructure - is not maintained. All restoration of facilities that has been financed has been done to meet government building standards to prevent cyclone damage. To the extent that the Component 3 activities were undertaken and the intended outcomes were achieved, they are not at risk. For example, the MAF staff who have acquired an understanding and skills in conducting a PDNA will continue to be better prepared to respond to future disasters than before the project.

The only risk to the outcomes of the project is of losing the unintended benefits from the creation of the e-voucher system. Although it was not a project objective to create a new tool for government to reach rural people and deliver benefits to them in a time of disaster, this was a project result. But no arrangements have been made by government to maintain it yet. There is a risk that this unintended benefit will be lost.

Rating: Negligible to Low

5. Assessment of Bank and Borrower Performance

5.1 Bank Performance

(a) Bank Performance in Ensuring Quality at Entry

Overall the design of AFCRP was very relevant. The project’s successful implementation of its core activities, without any major revision in the design, provides evidence that the design did effectively
serve the purpose of the project with respect to the provision of recovery assistance and restoration of lost production capacity. The inclusion of the disaster preparedness dimension in the PDO and the related activities in the project design, based on lessons from other disaster recovery projects, was also quite relevant at design, even if the PDO-level indicators measuring it could have been more specific and attributable. The open-ended nature of the design of those activities provided AFCRP with welcome flexibility in the choice of infrastructure and equipment-related expenditures for disaster preparedness. However, more detail in design on the activities for strengthening farmer and institutional preparedness, and systems for data on production, damages and losses would likely have led to more substantial results during implementation of this component.

There could be some room for improvement in the Bank performance with respect to the formulation of the PDO statement and the indicators selected for the project Results Framework (RF). Although the PDO stated in the PAD states that the project’s objective is ‘to provide assistance’ to farmers and fishers, it also states that they have restored production capacity. But the RF indicators did not track restored production capacity which was done at the end, thanks to the MIS. They tracked the amount of resources transferred, monitoring only the value of electronic vouchers redeemed and the number of beneficiaries reached.

Rating: *Moderately Satisfactory*

(b) Quality of Supervision

Supervision of AFCRP met expectations and was enhanced by implementation support. It included support on fiduciary matters (financial management and procurement (see details in page 8)), safeguards, and technical support from an IT specialist. Bank supervision missions were fielded proactively in response to the numerous challenges in implementation. The continuity and quality of the IT support in particular was critical to the successful development and implementation of the e-voucher in AFCRP. However, better follow-up on the information of public about the grievance mechanisms could have been provided by the Bank, as well as supporting the implementation agency to ensure the optimum utilization of the MIS.

Rating: *Moderately Satisfactory*

(c) Justification of Rating for Overall Bank Performance

Rating: *Moderately Satisfactory*

5.2 Borrower Performance

(a) Government Performance

Government performance is rated as satisfactory. The government was in full compliance with the Financing Agreement and made all institutional arrangements necessary to facilitate the design and implementation of the project. It wisely supported collaboration with the private sector and the innovative use of information technology to test new forms of relationships and payments to citizens. Project-related duties were well performed by responsible institutions including, but not limited to, the Audit Office, the Attorney General’s Office, and the Ministry of Finance.

Rating: *Satisfactory*
(b) Implementing Agency or Agencies Performance

The performance of the Implementing Agency, MAF is rated as moderately satisfactory. The strong points of the ministry were its understanding of the importance of the planned project activities and the use of the available resources to build the skills and physical capacity to do more and perform better to meet the needs of farmers and fishers in the future. However, the project would have benefitted from greater efforts to (i) integrate AFRCP staff and its activities with MAF operations, and (ii) fully utilize the potential of the M&E system and MIS as mentioned above. The project could also have benefitted more from a more active engagement and guidance on the part of MAF senior management in representing the project to fellow government institutions and other stakeholders, such as the Ministry of Finance. Greater engagement by MAF senior management in the oversight of AFRCP implementation would also have been valuable to guide project staff holding implementation responsibilities. Similarly, greater initiative might have been taken to formulate MAF staff work plans and budgets to include collaboration with AFRCP.

Rating: Moderately Satisfactory

(c) Justification of Rating for Overall Borrower Performance

Rating: Moderately Satisfactory

6. Lessons Learned

Most of salient lessons learned from AFRCP were raised by stakeholders and shared amongst them at the project Stakeholders Workshop. The case study prepared by the Bank has also highlighted the lessons revolving around the development and use of e-vouchers in particular. Those key lessons are summarized again below. They are grouped according to: (i) the use of an e-voucher system, particularly in an emergency recovery context; (ii) the design and implementation of emergency recovery projects in general; and (iii) the design and implementation of a project in Samoa.

Use of e-vouchers. The main lessons learnt from the AFRCP experience that are useful to consider for future applications of e-voucher systems are:

- Importance of the enabling environment: legislative provisions and financial regulations for electronic money must already be in place; merchant payment operating systems need to be properly configured to the e-voucher interface; on-the-ground support from trained staff when beneficiaries are using the vouchers is important to ensure smooth implementation (and could be complemented by a helpline);
- Ability to monitor and control disbursement and use: e-vouchers allowed for more efficient (low transaction cost) monitoring and control of who receives benefits, the amount received, and how they use the funds compared to paper vouchers – which also allowed for automated reconciliation and audit processes with a low margin for error
- Impact on the merchants: when phasing the issuance of the e-vouchers, consideration should be given to the affect that large volumes of voucher redemption may have on the merchants, given their location, limited stocks and staffing situation
- Costs incurred in realizing the benefits: the use of the e-vouchers can have financial costs for the beneficiaries, in terms of transporting the goods to their homes from the relatively few merchant locations
- Suitability for emergency response: immediate distribution of inputs like food and seedlings will still be required while the e-voucher system is set up, but once in place the system is readily scalable and can be extended to reach large numbers of people very quickly

---

4 Corea, Case Study
Future applications: the e-voucher system has the potential to be used for continued distribution of benefits by MAF or other ministries, but needs to be kept functional.

Design and implementation of emergency recovery projects. Important lessons learnt include:

- **Balancing speed of preparation and implementation readiness**: as an emergency operation, the project was prepared and delivered in less than three months from Concept Note stage to approval which is commendable. However, the time to set up and roll-out the e-voucher system from scratch was about 12 months, judging by AFCRP experience – giving the impression of a shortcoming in the delivery of benefits to farmers and fishermen. Taking a bit more time during preparation to build the capacity in the implementing agency and fine-tune the design of the e-voucher system may have saved some time in the early implementation.

- **Adoption of grievance redress mechanisms**: although the AFCRP PMU was able to receive complaints and did make attempts to redress them, there was no formalized redress mechanism or logging of complaints. It was considered as a lower priority given the urgency and high coverage with which vouchers needed to be distributed. Future similar projects should include the design of an appropriate mechanism during the preparation phase.

- **Economic and financial analysis**: due to the post-disaster emergency context, and the general lack of sufficient data, an economic and financial analysis was not done during project design. The AFCRP experience shows how a useful estimate can still be derived even in the absence of the baseline analysis.

Design and implementing in Samoa. The implementation of AFCRP taught a number of useful lessons about development assistance in Samoa including the following:

- **Data definitions**: current government definition for a household - that is, the group of people who share one kitchen - may not be suitable for determining how support should be given to a household as a unit of production; it would have been helpful if MAF had an agreed definition and list of who in Samoa should be considered a commercial farmer.

- **Role of village mayors to support implementation**: although mayors are elected officials and the majority are sensitive to the needs of their constituents, some monitoring of the way that they carry out their duties would be helpful to ensure the rights of all including, for example, even those who may not have voted for the office-holder.

- **Role of the private sector**: there are private sector firms in the country that are assets that government can draw upon more in the context of investments for growth – they may well be willing to go beyond what would be purely commercial interest in building partnerships with the public sector, as was Digicel, due to commitments to technology leadership and corporate social responsibility.

- **Facilitating collaboration**: the project allowed for government to build strong collaboration and partnerships amongst MOF, MAF, MNRE, MWCSD, local government, ADRA, Digicel and the private merchant suppliers that engaged in the project – demonstrating government vision, commitment and ability to be flexible in decision-making.
Annex 1. Project Costs and Financing

(a) Project Cost by Component (in USD Million equivalent)

<table>
<thead>
<tr>
<th>Components</th>
<th>Appraisal Estimate (USD millions)</th>
<th>Actual (USD millions)</th>
<th>Percentage of Appraisal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclone Recovery for Subsistence Farmers and Fishers</td>
<td>3.08</td>
<td>2.96</td>
<td>96%</td>
</tr>
<tr>
<td>Cyclone Recovery for Commercial Farmers and Fishers</td>
<td>0.41</td>
<td>0.3</td>
<td>73%</td>
</tr>
<tr>
<td>Restoration of MAF Facilities and Strengthening the Agricultural Sector’s Capacity for Disaster Preparedness and Response</td>
<td>0.70</td>
<td>0.86</td>
<td>123%</td>
</tr>
<tr>
<td>Project Coordination and Management</td>
<td>0.93</td>
<td>0.97</td>
<td>104%</td>
</tr>
<tr>
<td><strong>Total Baseline Cost</strong></td>
<td><strong>5.12</strong></td>
<td><strong>5.09</strong></td>
<td><strong>99%</strong></td>
</tr>
</tbody>
</table>

| Physical Contingencies                                                    | 0.00                              |                       |                         |
| **Total Project Costs**                                                    | **5.12**                          |                       |                         |

<table>
<thead>
<tr>
<th>Source of Funds</th>
<th>Type of Cofinancing</th>
<th>Appraisal Estimate (USD millions)</th>
<th>Actual (USD millions)</th>
<th>Percentage of Appraisal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrower</td>
<td></td>
<td>0.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IDA/Crisis Response Window</td>
<td>Grant</td>
<td>5.00</td>
<td>5.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

(b) Financing
Annex 2. Outputs by Component

Under Component 1 the project final output was 7,394 electronic vouchers issued to subsistence farmers for a value of SAT 6.6 million or US$ 3.1 million. Several intermediate outputs were delivered by the project in order to produce that output. The project identified qualified suppliers where voucher recipients would use their vouchers and then produced seven Memorandum of Understanding with seven suppliers. The project identified all eligible farmers and registered 7,394 farmers. As a result the project produced a contact list for MAF with profiles and contact details through which it can reach 7,394 households (or about 40%) practicing agriculture in Upolu. The project prepared and issued a detailed contract with Digicel, the selected payments system operator. The project created a mobile money payments system, (MMPS) for e-vouchers custom tailored to the Samoan context in terms of available infrastructure, customer types, commercial needs and financial regulations. As a result of the distribution of handsets, the project produced farmers who were equipped with the infrastructure they needed to access the e-vouchers. And, the project issued, or produced, the e-vouchers. These outputs correspond to all of the outputs planned at appraisal.

The cumulative result of these intermediate outputs and culminating in the delivery of the vouchers, intended beneficiaries were able to successfully redeem their vouchers for farming or fishing equipment and production inputs. In line with the PDO, the outcome of the component was that the subsistence beneficiaries used the equipment and inputs - as documented in the beneficiary impact survey and in the stakeholders workshop.

Under Component 2 the project the final output was 100 recovery grants provided to commercial farmers and fishermen for a total value of US$ 0.3 million. The intermediate outputs produced by the project to result in the 100 grants began with identified eligible recipients, then registered recipients, then recipients with handsets through which they would receive the grants. The project also produced arrangements with MAF for the procurement of livestock and for seedlings for farmers and who planned to use their grant to invest in livestock, that could not be procured from the commercial suppliers with whom MOU’s were established for other inputs. In connection with this component the project and the proposed recipients produced Recovery Plans for how each of the grants would be used. Environmental and Social Safeguard Plans were prepared for each of the commercial farmers. As Recovery Plans were implemented the project and beneficiaries produced completion reports recording the extent to which the beneficiaries had actually implemented their Recovery Plans. And, the project and implemented a process by which completion plans were reviewed and certified by the Grants Steering Committee with MAF. A total of 93 recipients received Completion Certificates.

As under Component 1, the activities and outputs produced under Component 2 led to the successful delivery of the Grants as outputs that were, in turn, used by recipients to the restore capacity outcome that was central to the PDO. In most cases the outcome of the component was that it went beyond restoring capacity to enhanced capacity for greater resilience to future natural disaster. It did this through the use of better materials, better siting of activities, improved construction techniques, etc.

Under Component 3 the project produced all of the outputs planned at appraisal to repair MAF facilities damaged during the cyclone and, due to cost savings it was able to include several additional such outputs, expanding beyond expectations at appraisal. The outputs produced that were foreseen at appraisal included two structures with boundary fences to protect MAF facility sites; the expanded and upgraded Atele Pack House; the MAF greenhouse and tunnel house for propagation of vegetables at Nuu station; a new roof for the Aquaculture Workshop; and, a fisheries research vessel. Outputs in the form of materials replaced, as planned at appraisal, included materials for the delineation of fish
sanctuaries under a community-based fisheries management programme; a boat trailer and winch for evacuation in the event of future cyclones; equipment for fisheries ecosystem assessment; fish aggregating devices; re-stocked veterinary supplies for disaster preparedness; chain saws to assist in disaster preparedness for livestock producers; and, bags and planting materials for plant multiplication.

Additional facilities and materials that were outputs of project procurement and support to MAF included upgraded water storage facilities, chainsaws and a stock truck for the Animal Production and Health Division of MAF. The additional project outputs for the Crops Division of MAF included improved drainage at Atele Pack House and repaired structure at Savai’i pack house procured by the project; an improved access road and a generator for the tissue culture laboratory at Nuu agricultural station. For the Fisheries Division, further research vessel rehabilitation and a rehabilitated and expanded hatchery were additional outputs. And, lastly, in connection with the sustainability of the e-voucher system, the additional project outputs were enhanced IT facilities at MAF for MIS system back-up.

Outputs produced under Component 3 to produce an outcome of stronger capacity of farmers and institutions in disaster preparedness included trainers, materials for six courses and two community-level workshops, and 1535 (According to Borrowers completion report there were at least 154 staff + 1381 farmer/fisher beneficiaries of training, assuming all training activities lasted just one day, however I know that some lasted longer ) client days delivered in training on disaster risk management. In the course of the community-level trainings participants jointly prepared village-level Disaster Mitigation Plans for 10 villages in 5 participating districts. The project produced these outputs in collaboration with the Samoan National Disaster Management Office. It customised materials originally developed and used in Samoa under a UNESCO-financed Community Disaster and Climate Risk Management (CDCRM) initiative for the benefit of AFCRP stakeholders, mostly regular MAF staff, who have the understanding skills and materials to apply the principles in their work and transmit them through training to producers.

Project outputs under Component 3 included a Disaster Risk Management Strategy for Agriculture, covering crops and livestock, and a Disaster Risk Management Strategy for Fisheries. As a result, the Disaster Risk Management Office of the Ministry of Natural Resources and the Environment incorporated these two strategies into the Samoan national Disaster Management Plan. In connection with this work the project established a methodology for compiling regular agricultural data and assessing damage and loss. An outcome has been the adoption of the methodology by MAF.

Under Component 4, the project outputs included a functioning Project Management Unit initially staffed with a Project Manager and three Project Officers. They also included a project office with equipment, as foreseen at appraisal. Project financed outputs in project management included technical advice from advisors in Information Technology, Monitoring and Evaluation, Procurement and Financial Management. The Management Information System for the management and monitoring of the e-voucher system was a project output, created as foreseen in the project design. Other Component 4 outputs included those required in the routine operation of project management tasks such as annual planning and budget documents, procurement documentation, financial reports, and three annual audits as well as regular project progress reports, and quarterly Steering Committee Meetings.

The following table lists the key intermediate and final outputs described above that were produced during AFCRD implementation with AFCRD financing in collaboration with partners and stakeholders.
The World Bank
(P145938)

Key intermediate and final outputs produced under AFCRP

 Outputs

Component 1. Cyclone Recovery for Subsistence Farmers and Fishers:
- Signed MOUs with qualified suppliers (7)
- Registered Subsistence Farmers (7,394)
- MAF contact list database, with 7,394 households practicing agriculture
- Contract with Payment Service Operator
- Mobile Money Payments System, (MMPS) for E-vouchers
- Functioning E-voucher system
- Subsistence farmers with functioning handsets
- Vouchers issued to subsistence farmers (7,394)

Component 2. Cyclone Recovery for Commercial Farmers and Fishers
- Approved Recovery Plans (100)
- ESM Safeguards
- Registered Commercial farmers
- Commercial farmers with handsets
- Recovery grants issued through e-vouchers (100)
- Completion Reports approved by Grant Steering Committee (93)

Component 3. Restoration of MAF Facilities and Strengthening the Agricultural Sector’s Capacity for Disaster Preparedness and Response
- Repaired MAF Facilities, as follows:
  - Nu-u and Atele Facilities of Crops Division Compound fences
  - Green houses at Nu’u
  - Pack house at Atele Restored
  - Aquaculture Building restored
- Better equipped MAF Crop, Livestock and Fisheries Divisions, as follows:
  - Fisheries Research Vessel
  - Replacement Marker Buoys
  - Boat trailer and winch
  - Equipment for fishery translocation & ecosystem assessment
  - Fish aggregating devices
  - Bags and growing materials for multiplication of planting materials
  - Veterinary drug supplies
- Toolkit for training in resilient fisheries and agriculture
- System for the regular collection and updating of production data
- Standard methodology for the collection and loss data for the agriculture sector
- Training days delivered on technologies and practices on disaster preparedness and response to farmers for more resilient agriculture (1,381)
- Training days delivered on technologies and practices on disaster preparedness and response to sector institutions (154)
- Village-level Disaster Mitigation Plans (10, in 5 districts)
Component 4. Project Coordination and Management

- Functioning, equipped project office
- Project staff in post
- Project management that has been advised on coordination
- Project management that has been advised on monitoring and evaluation
- Available vehicles and work facilities
- Communications and Awareness materials including brochures and banners for event
- MIS system for vouchers system designed
- Periodic progress reports (5)
- Annual audit reports (4)
Annex 3. Economic and Financial Analysis

Introduction

The Project Development Objective (PDO) was to provide recovery assistance to cyclone-affected farmers and fishers through vouchers and grants with the aim of restoring their lost production capacity, and to enhance preparedness of the agricultural sector to better respond to future disasters. The following key performance indicators were selected to monitor and evaluate achievements:

- Beneficiary subsistence farming and fishing households acquire assets and inputs to recover from cyclone losses. This outcome indicator was captured by the value of redeemed vouchers.
- Approved recovery plans of commercial farmers implemented.
- Methodology developed and adopted and MAF staff trained on compiling agricultural sector and capacities strengthened in disaster preparedness and response.

In order to assess the effectiveness of the project, progress against the achievement of these key performance indicators was measured. At project completion, targets were achieved for e-voucher distribution (Indicator 1) and procedures and training for disaster preparedness (Indicator 3) and exceeded for implementation of commercial farmer’s recovery plans (Indicator 2)\(^5\). However, while these performance indicators and their targets were effective in measuring project outreach (i.e.- number of farmers assisted), they did not fully capture the main outcome the project intended to accomplish, i.e.- restoring lost production capacity. This economic and financial analysis attempts to measure the extent to which the project contributed to the achievement of pre-cyclone production levels as compared to a “without project “scenario.

At the time of appraisal, no economic and financial analysis was conducted. Hence, this analysis takes a retrospective look into baseline levels (pre-cyclone production), immediate impacts of the natural disaster in farmers’ incomes (or year zero) and recovery/non-recovery pathways to the present date. Thus, the analysis focuses only on a set of tangible direct benefits of the wide range of qualitative and quantitative benefits generated by the project. These include: i) spillover effects of farm capacity recovery on secondary beneficiaries, such as hardware and input dealers, farm laborers, and other actors involved in forward and backward linkages of the value chain, ii) increased availability of food for beneficiaries and for local consumers, iii) increased preparedness for prospective disasters that may significantly reduce damage and losses, iv) increased efficiency and effectiveness of GoS in providing assistance following future natural disasters, as a result of having updated registries and an e-voucher system in place, reducing transaction costs for MAF and beneficiaries, and ensuring better targeting and reduced leakage or misuse of funds, v) avoided damage to MAF facilities in future extreme weather events.

Methodology and assumptions

For the purpose of the analysis, three scenarios have been prepared as the basis to calculate: (i) the economic losses caused by Cyclone Evans on commercial farms and at the subsistence household level, and (ii) the incremental effect of AFCRP on post-cyclone recovery activities, i.e. – the extent to which project assistance contributed to the restoration of pre-cyclone production levels. These scenarios include: i) pre-cyclone production models, illustrating returns from typical farming systems in the year immediately preceding the occurrence of the cyclone (2011), ii) a dynamic multi-annual ‘without project situation’ scenario, where year zero exemplifies the economic losses caused by the disaster, while recovery in subsequent years is assumed to take place without external assistance (in the cases where recovery is possible at all with farmer’s own funds), iii) a ‘with project’ situation showing the

---

\(^5\) Borrower’s Project Completion Report
effects of project assistance, accounting for the fact that such assistance arrived only in 2014 when some farmers had already started to re-build their assets and production capacity by their own means. Such scenarios have been used to analyze the incremental impact of AFCRP on its two main target beneficiaries, individual households and semi-commercial and commercial farmers, in both moderately affected and severely affected areas, with up to 50% and 80% losses, respectively.

In view of the lack of baseline and end-line data on AFCRP beneficiaries, the above mentioned financial models have been built using data from secondary sources. In particular, the economic and financial analysis for the World Bank-funded Samoa Agriculture Competitiveness Enhancement Project has been used to calculate pre-cyclone production levels for subsistence and commercial farm activities and complemented/validated using an FAO study on production of selected fruits, vegetables and other crops conducted for the Climate Change Adaptation for Samoa (ICCAS) Project. Without and with project situations build on these baselines and are estimated at 2012 constant prices. Key quantitative and qualitative information has also been extracted from: i) business plans presented by commercial farms as a pre-requisite to receive AFCRP financial assistance, ii) an impact survey for electronic Voucher Payment Systems conducted by ADRA, iii) an internal report on implementation of the grant scheme for semi-commercial and commercial farmers.

The capacity to recover for each scenario in both moderately and severely affected areas have been assessed taking into account the financial means available to restore key productive equipment and infrastructure as well as the availability of working capital to purchase planting materials and inputs, either with own funds (based on the net income after losses in 2012) or with project assistance starting in 2014 after some levels of self-recovery had been achieved. For severely affected areas, recovery would not be possible without AFCRP for some activities at the subsistence level, in particular with regards to vegetable production. More details are presented in the section below and in the enclosed excel files.

Other key assumptions: in the financial models, family labor has been assigned a value equivalent to 60% of hired labor wages, in line with SACEP’s assumptions. Such value is used for both family and hired labor in the economic analysis to reflect the shadow price or labor, i.e.- its opportunity costs. The remaining financial prices have been converted into economic using a Standard Conversion Factor (SCF) of 0.9. Benefits have been aggregated into a single stream by weighting incremental incomes for moderately and severely affected areas. Actual disbursements have been used for the costs streams. There are no O&M costs or other recurrent costs anticipated beyond the life of the project.

One acre production models.

According to the Project Appraisal Document, crops losses were high for fruits and vegetables because the cyclone occurred during the peak production season for fruit trees and the off-season vegetable harvest, while root crops destruction was less prevalent. Hence, for subsistence farm activities, six one-acre models have been prepared for the crops most affected by the cyclone: vegetable production (bell pepper, carrots and tomato) and tree crop production (breadfruit, banana and coconut). Tables 1 to 5 in the Appendix present pre-cyclone production levels, the effects of 50% losses in moderately affected areas and two different pathways for recovery, with and without project assistance.

Pre-cyclone levels show cash returns per acre cultivated under vegetables ranging from USD 700 and USD 1,400 which are reduced to USD 160 to USD 619 following a 50% loss in production after all expenditures in farm inputs and had been made and family labour utilized. Such profits were just enough to invest in land clearing and purchase of planting materials the following year. However, basic farm implements and other key inputs (fertilizers and pesticides) were unaffordable, which reduced productivity by + 50%, both in the WoP and WP scenarios in year one (2013). Thereafter, the models

---

6 Budgets for Production of selected Fruits, Vegetable, Root Crops and other Crops. FAO, 2010.
present a WoP where inputs are gradually re-introduced and farm implements acquired according to the working capital generated on previous years, achieving pre-cyclone productivity and income levels only in year 4 (2016). In the WP scenario, the e-voucher system put in place in 2014 enabled farmers to fully access all necessary inputs and implements for 2 production cycles (e-voucher duration is 18 months), bringing about recovery to pre-cyclone levels two years earlier. The net incremental income of AFCRP for each crop is calculated as the difference between the WoP and WP which reflects the 2-year advanced recovery. Incremental incomes are then compared with the e-voucher amount, averaging USD 700 for moderately affected farmers, to provide a cost-benefit ratio for each crop. Results show a C/B between 0.9 and 2.08.

With regards to tree crops, the analysis assumed moderate damage of trees and nuts/bunches as follows: 30%/80% for breadfruit, 20%/40% for banana and 35%/40% for coconuts plantations. In financial terms, these translated into a decrease in gross income from USD 1,250 to about USD 500 for breadfruit, USD 1,700 to USD 470 for banana and USD 1,500 to 365 for coconut. The recovery pathway in the WoP scenario is again based on the financial capacity to invest in planting material and new implements and the slow re-introduction of other inputs. Given the longer maturity period of plantation crops, full recovery without external assistance would only be achieved in year 5 (2017). On the other hand, restoration of pre-cyclone production levels in the WP situation occured one year earlier, as all damaged trees were replanted immediately after AFCRP assistance. Nevertheless, incremental benefits relative to the WoP are observed from year 2014, on account of higher productivity realized for the surviving plants. Cost-benefits ratios are higher for tree crops than for vegetables, with values between 1.97 and 2.95.

About 51% percent of project beneficiaries reported to have been severely impacted by TCE, with many losing the entire plantation and about 34% reporting a +/- 75% loss. Thus, the scenarios explained above were replicated to reflect severe damage to vegetables and tree crops, producing the following results:

- Vegetable crop recovery would not have been possible without AFCRP assistance, as farmers would incur in losses with no profit to be carried over to the following year for purchase of planting materials. For the same reason, in the WP scenario, production was interrupted in the subsequent year and resumed only when the e-voucher system is made available to farmers. Restoration of productive capacity occurred in year 4 as in the moderately affected areas with project assistance. With a zero WoP scenario, incremental incomes attributable to AFCRP are much larger for severely affected than for moderately affected areas, resulting in higher cost/benefit ratios (1.53 to 3.04) despite a higher cost per beneficiary (USD 1,150).

- According to the PAD, almost the entire banana and breadfruit trees were lost in the most affected areas, and coconut plantation sustained significant nut losses. The severe damage scenario assumes a 80%/80% tree and nut loss. In the WoP scenario, farmers would not have the capacity to invest in re-planting and equipment, and the surviving trees would have been neglected with low yields and dedicated mostly to sporadic family consumption. On the contrary, AFCRP enabled full replanting and restoration of income and productivity levels in year 5 (2017). Cost-benefits ratios of project interventions in severed damaged tree crops range from 2.03 to 2.74.

Tables 1 and 2 provide a summary of incremental benefits, e-voucher costs and cost-benefit ratios for the crop models described above.
Table 1: Key results for farmers in moderately affected areas

<table>
<thead>
<tr>
<th></th>
<th>Bell-pepper</th>
<th>Carrot</th>
<th>Tomato</th>
<th>Breadfruit</th>
<th>Banana</th>
<th>Coconut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incremental Income</td>
<td>616</td>
<td>1,145</td>
<td>1,552</td>
<td>1,281</td>
<td>1,468</td>
<td>1,609</td>
</tr>
<tr>
<td>Project Support</td>
<td>684</td>
<td>590</td>
<td>747</td>
<td>607</td>
<td>745</td>
<td>656</td>
</tr>
<tr>
<td>C/B</td>
<td>0.90</td>
<td>1.94</td>
<td>2.08</td>
<td>2.11</td>
<td>1.97</td>
<td>2.45</td>
</tr>
<tr>
<td>Net Income pre-cyclone</td>
<td>734</td>
<td>710</td>
<td>1,386</td>
<td>1,253</td>
<td>1,704</td>
<td>1,555</td>
</tr>
<tr>
<td>Net Income post-cyclone</td>
<td>160</td>
<td>218</td>
<td>619</td>
<td>498</td>
<td>471</td>
<td>365</td>
</tr>
<tr>
<td>Recovery WoP</td>
<td>yr 4</td>
<td>yr 4</td>
<td>yr 4</td>
<td>yr 5</td>
<td>yr 5</td>
<td>yr 5</td>
</tr>
<tr>
<td>Recovery WP</td>
<td>yr 3</td>
<td>yr 3</td>
<td>yr 3</td>
<td>yr 4</td>
<td>yr 4</td>
<td>yr 4</td>
</tr>
</tbody>
</table>

Table 2: Key results for farmers in severely affected areas

<table>
<thead>
<tr>
<th></th>
<th>Bell-pepper</th>
<th>Carrot</th>
<th>Tomato</th>
<th>Breadfruit</th>
<th>Banana</th>
<th>Coconut</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incremental Income</td>
<td>1,801</td>
<td>1,361</td>
<td>3,189</td>
<td>2,123</td>
<td>3,208</td>
<td>2,548</td>
</tr>
<tr>
<td>Project Support</td>
<td>1,138</td>
<td>890</td>
<td>1,047</td>
<td>1,045</td>
<td>1,183</td>
<td>930</td>
</tr>
<tr>
<td>C/B</td>
<td>1.58</td>
<td>1.53</td>
<td>3.04</td>
<td>2.03</td>
<td>2.71</td>
<td>2.74</td>
</tr>
<tr>
<td>Net Income pre-cyclone</td>
<td>734</td>
<td>710</td>
<td>1,386</td>
<td>1,253</td>
<td>1,704</td>
<td>1,555</td>
</tr>
<tr>
<td>Net Income post-cyclone</td>
<td>-115</td>
<td>-18</td>
<td>95</td>
<td>-36</td>
<td>-384</td>
<td>-202</td>
</tr>
<tr>
<td>Recovery WoP</td>
<td>none</td>
<td>none</td>
<td>none</td>
<td>partial</td>
<td>partial</td>
<td>partial</td>
</tr>
<tr>
<td>Recovery WP</td>
<td>yr 4</td>
<td>yr 4</td>
<td>yr 4</td>
<td>yr 4</td>
<td>yr 4</td>
<td>yr 4</td>
</tr>
</tbody>
</table>

Subsistence farm models.

The 7,394 targeted subsistence farmers and fishermen received the assistance and resultantly acquired farm assets and inputs to recover from cyclone losses. By building on the above budgets, and assuming typical mix of crops\(^7\), an estimation of pre-cyclone production and incomes at the household level was conducted for subsistence farmers with different land sizes. An Impact Survey for Electronic Voucher Payment Systems showed that the majority of beneficiaries held between 3-5 acres of land on average.

\(^7\) Cropping intensities are assumed as follows: 15% for all three vegetables, 15% for coconut and 20 for banana and breadfruit trees.
with 75% having less than 6 acres. Relative distributions are shown in Figure 1. Pre-cyclone gross income levels start at 1,200 USD per annum for 1 representative acre to over 8,700 for a 7 acre holdings. Households in moderate impacted areas having lost about 50% of their harvest experienced a reduction in their annual profits of 68-75%, while all farmers in severely impacted areas with over 80% crop and plantation damage withheld losses directly proportional to their land size assuming a 100% cropping intensity. WoP and WP recovery pathways for both categories and resulting incremental benefits are provided in tables 6 to 7 and the Appendix. Time frames for recovery according to damage levels and landholding sized are in line with the results presented for the crop models. Moderately affected households benefiting from AFCRP would recover pre-cyclone levels of production about one year before non-beneficiaries and mature other benefits in terms of productivity. Severely affected areas would experience no recovery for vegetable production and only partial recovery of plantation trees without project and achieve similar outcomes to moderately affected areas with project support.

Figure 1: Landholding sizes of e-voucher beneficiaries

Source: Impact Survey for Electronic Voucher Payment Systems

Table: Pre-cyclone and post-cyclone gross income levels (USD)

<table>
<thead>
<tr>
<th></th>
<th>Pre-cyclone</th>
<th>Post-cyclone - Moderately affected</th>
<th>Post-cyclone - Moderately affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer Profits - Farmer 1 acres (USD)</td>
<td>1,249</td>
<td>398</td>
<td>(63)</td>
</tr>
<tr>
<td>Farmer Profits - Farmer 3 acres (USD)</td>
<td>3,748</td>
<td>942</td>
<td>(189)</td>
</tr>
<tr>
<td>Farmer Profits - Farmer 5 acres (USD)</td>
<td>6,246</td>
<td>1,570</td>
<td>(315)</td>
</tr>
<tr>
<td>Farmer Profits - Farmer 7 acres (USD)</td>
<td>8,745</td>
<td>2,198</td>
<td>(441)</td>
</tr>
</tbody>
</table>

Commercial farm models.

Component 2 dealt with a program of activities aimed at restoring production capacity of cyclone affected semi-commercial and commercial farmers and fishermen, specifically: (i) providing recovery grants to commercial and semi-commercial farmers to assist in restoration of farm equipment and infrastructure lost or damaged due to the cyclone; (ii) providing Recovery Grants to commercial farmers involved in aquaculture to assist in restoration of the equipment or infrastructure damaged due to the
The majority of beneficiaries were farmers (98), 94 of whom represented severely affected areas. By sub-sector, the Scheme assisted the recovery of two Fisheries Tilapia Farms, 42 Livestock Farms, 42 Crop Farms, 13 Farms of Mixed Livestock and Crops, and one garden of Ornamental Plants. For the purpose of this analysis, two models of commercial farms were prepared: (i) a commercial pig breeder, and (ii) a commercial producer of mixed vegetables.

The first model assumes a pig breeder with a stock of 20 sows and 2 boars producing 104 new heads per year after mortality, and a gross margin of USD 3,400. The cyclone hit the farm causing the death of 5 sows, destruction of the pen and loss of other equipment. The narrow profits in the following years (on account of a reduction in production to 59 new heads) would make the purchase of new sows possible only from year 4, and full replacement only in year 8, with production and gross margins levels recovered in year 9. In the “with project” situation, the grant scheme extended to commercial farmers (USD 1,900 in moderately affected and USD 3,000 in severely affected areas) would enable full replacement of breeding stock and other equipment in years 2 and 3, resulting in advanced recovery production and income levels by six years. Net incremental incomes accrued up to year 9 add up to USD 7,257, which compared with the grant for severely affected commercial farms (USD 3,000) yield a cost-benefit of 2.

The illustrative model for a commercial producer of mixed vegetables assumes farm equipment consisting of drip irrigation and water storage to ensure continuity of supply, intensive use of high quality seeds and inputs as well as poly-tunnels, and employment generation of about 180 man/days per year. Pre-cyclone levels show gross yield per acre of over 10 tons and about USD 3,600 gross returns per acre. When moderately affected, it is assumed that 50% of the production is lost as well as all the equipment mentioned above. This would translate into a drop in gross income to USD 800 per acre and loss of productivity of 50% in the subsequent year on account of the reduced working capital to invest in seeds and inputs and the lack of irrigation equipment. In the WoP scenario, it would take about 4 years to restore the lost equipment and gradually re-introduce seeds and inputs to original levels. In turn, a severely affected commercial farm would have incurred in losses of over USD 1,000 and unable to continue operations by its own means. Conversely, an AFCRP beneficiary would have been able to replace the lost equipment in year 2 for both scenarios and full production and income levels would have been achieved in year 4. Costs-benefit ratios are 4.86 and 9.19, respectively.

**Economic analysis.**

Project benefits: incremental net benefits for subsistence and commercial farmers in severely and moderately affected areas have been aggregated into a single benefit stream according to their relative weight and converted into economic by applying a SFC of 0.9. Subsequently, and adjustment rate of 70% has been adopted to reflect the actual realization of benefits, accounting for the fact not all farmers who have received assistance have made productive use of it.

Project costs: final disbursement figures is USD have not been provided by MAF, except for disbursement of subsistence and commercial grant schemes. The closest available estimate of total disbursement can be found in the Borrower’s Project Completion Report at USD 6,090,589. An annual disbursement pattern has been assumed to calculate the project’s incremental net benefits.

Results of the analysis: a 10 year timeframe has been taken into account for the cash flow calculations, as incremental benefits are expected to span until 2021 (for commercial farmers). The social discount rate used for the analysis is 5%, assuming a higher marginal utility of consumption and social time preference skewed towards the earlier years, and low growth rates in a post-disaster context. The NPV of the discounted cash flow is USD 2.4 million, and the EIRR is 41%.

---

8 Borrower’s Project Completion Report
9 Ibid
### Table: Economic and Financial Analysis

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>E-voucher distribution</strong> number</td>
<td>1,400</td>
<td>6,994</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Severely affected</strong> 51%</td>
<td>714</td>
<td>3,567</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Moderately affected</strong> 49%</td>
<td>686</td>
<td>3,427</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Phasing of benefits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total incremental benefits severely affected farmers USD</strong></td>
<td>329</td>
<td>386</td>
<td>620</td>
<td>643</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total incremental benefits moderately affected farmers USD</strong></td>
<td>703</td>
<td>447</td>
<td>102</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>2014 Grants USD</strong></td>
<td>727,657</td>
<td>584,168</td>
<td>497,845</td>
<td>441,238</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>2015 Grants USD</strong></td>
<td>-</td>
<td>3,582,800</td>
<td>2,909,893</td>
<td>2,559,584</td>
<td>2,294,269</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Incremental net benefits for subsistence farmers USD</strong></td>
<td>727,657</td>
<td>4,166,968</td>
<td>3,407,738</td>
<td>3,000,822</td>
<td>2,294,269</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Commercial grant schemes number</strong></td>
<td>-</td>
<td>100</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Severely affected</strong> 94%</td>
<td>-</td>
<td>94</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Moderately affected</strong> 6%</td>
<td>-</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Incremental benefits severely affected subsistence farmers - crop mix USD</strong></td>
<td>-</td>
<td>2,854</td>
<td>3,622</td>
<td>2,680</td>
<td>2,680</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Incremental benefits severely affected subsistence farmers - pig breeder USD</strong></td>
<td>-</td>
<td>-</td>
<td>1,583</td>
<td>791</td>
<td>1,313</td>
<td>1,026</td>
<td>1,008</td>
<td>810</td>
<td>-</td>
</tr>
<tr>
<td><strong>Average incremental benefits severely affected commercial USD</strong></td>
<td>-</td>
<td>1,427</td>
<td>2,603</td>
<td>1,736</td>
<td>1,997</td>
<td>513</td>
<td>504</td>
<td>405</td>
<td>-</td>
</tr>
<tr>
<td><strong>Incremental benefits moderately affected subsistence farmers - crop mix USD</strong></td>
<td>-</td>
<td>1,509</td>
<td>1,252</td>
<td>62</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Phasing of benefits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Total incremental benefits severely affected farmers</td>
<td>USD</td>
<td>-</td>
<td>134,141</td>
<td>244,659</td>
<td>163,142</td>
<td>187,685</td>
<td>48,205</td>
<td>47,368</td>
<td>38,070</td>
</tr>
<tr>
<td>Total incremental benefits moderately affected farmers</td>
<td>USD</td>
<td>-</td>
<td>9,054</td>
<td>7,514</td>
<td>373</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Incremental net benefits for commercial farmers</td>
<td>USD</td>
<td>-</td>
<td>143,196</td>
<td>252,173</td>
<td>163,516</td>
<td>187,685</td>
<td>48,205</td>
<td>47,368</td>
<td>38,070</td>
</tr>
<tr>
<td>Total AFCRP incremental net benefits</td>
<td>USD</td>
<td>727,657</td>
<td>4,310,163</td>
<td>3,659,911</td>
<td>3,164,338</td>
<td>2,481,953</td>
<td>48,205</td>
<td>47,368</td>
<td>38,070</td>
</tr>
<tr>
<td>Success rate (actual realization of benefits)</td>
<td></td>
<td>0.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted incremental net benefits</td>
<td>USD</td>
<td>472,977</td>
<td>2,801,606</td>
<td>2,378,942</td>
<td>2,056,820</td>
<td>1,613,270</td>
<td>31,333</td>
<td>30,789</td>
<td>24,746</td>
</tr>
<tr>
<td>Project Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subsistence grants*</td>
<td>USD</td>
<td>632,580</td>
<td>2,065,056</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial grants *</td>
<td>USD</td>
<td>275,872</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Project Costs **</td>
<td>USD</td>
<td>1,831,957</td>
<td>523,416</td>
<td>261,708</td>
<td>500,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Project Costs</td>
<td>USD</td>
<td>2,464,537</td>
<td>2,864,344</td>
<td>2,378,942</td>
<td>2,056,820</td>
<td>1,613,270</td>
<td>31,333</td>
<td>30,789</td>
<td>24,746</td>
</tr>
<tr>
<td>AFCRP Incremental Net Benefits</td>
<td>USD</td>
<td>(1,991,560)</td>
<td>(62,738)</td>
<td>2,117,234</td>
<td>1,556,820</td>
<td>1,613,270</td>
<td>31,333</td>
<td>30,789</td>
<td>24,746</td>
</tr>
<tr>
<td>NPV</td>
<td></td>
<td>2,482,167</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRR</td>
<td></td>
<td>41%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

<table>
<thead>
<tr>
<th>Names</th>
<th>Title</th>
<th>Unit</th>
<th>Responsibility/ Specialty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lending</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mona Sur</td>
<td>Manager, Portfolio and Operations</td>
<td>EACNF</td>
<td>Task Team leader</td>
</tr>
<tr>
<td>Mark David Ansell</td>
<td>Procurement Specialist</td>
<td>GGODR</td>
<td>Procurement</td>
</tr>
<tr>
<td>Stephen Paul Hartung</td>
<td>FM Specialist</td>
<td>GGODR</td>
<td>Financial Management</td>
</tr>
<tr>
<td><strong>Supervision/ICR</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kofi Nouve</td>
<td>Program Leader</td>
<td>AFCW2</td>
<td>Task Team Leader</td>
</tr>
<tr>
<td>Brenna Moore</td>
<td>Agriculture Specialist</td>
<td>GFA02</td>
<td>Team member</td>
</tr>
<tr>
<td>Gitanjali Ponnambalam</td>
<td>Country Program Assistant</td>
<td>EACNF</td>
<td>Team Assistant</td>
</tr>
<tr>
<td>David Whitehead</td>
<td>FM Specialist</td>
<td>GGODR</td>
<td>FM</td>
</tr>
<tr>
<td>Eric Blackburn</td>
<td>Procurement Specialist</td>
<td>GGODR</td>
<td>Procurement</td>
</tr>
<tr>
<td>Stephane Forman</td>
<td>Senior Agriculture Specialist</td>
<td>GFA02</td>
<td>ICR TTL</td>
</tr>
</tbody>
</table>

(b) Staff Time and Cost

<table>
<thead>
<tr>
<th>Stage of Project Cycle</th>
<th>No. of staff weeks</th>
<th>USD Thousands (including travel and consultant costs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lending</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervision/ICR</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td>346,028</td>
</tr>
</tbody>
</table>
Annex 5. Beneficiary Survey Results

The Beneficiary Survey was carried by the Adventist Development and Relief Agency, (ADRA) under the auspices of the AFCRP Project Management Unit. The ADRA Samoa survey team adopted and used the standard survey questionnaire developed by the AFCRP Project team, consisting of nine questions. The survey focussed on what recipients had used the e-vouchers for and how they viewed the use of e-vouchers. The survey was administered to a randomly selected sample of 737 beneficiaries that was just under 10% of the 7 494 project beneficiaries. Interviews took place face-to-face, and in some cases by telephone. It took place over the period April-August 2016. The questions and the summary of responses recorded in the survey report are shown below.

**Question 1: What was your main farm activity before Cyclone Evans?**
About 87% of respondents indicated that their main farm activity was Taro and Banana or Taamu. Other main activities included vegetables, piggery, and mixed crops.

**Question 2(a): How much land do you farm?**
About 9% of respondents farm less than 1ha, 65% farm 1-5 ha, 23% farm over 6ha.

**Question 2(b) What proportion was damaged by the cyclone?**
About 71% of respondents indicated that they lost more than 75% of their plantation.

**Question 3(a) How do you learn about the AFCRP Project?**
Some 89% of respondents heard about the project from their Village Representative, most of the remaining respondents heard from television.

**Question 3(b) What do you understand to be the purpose of the Project?**
Altogether 88% of respondents indicated that they understood that the purpose of the project was to restore farm productivity.

**Question 4: List materials you purchased and explain how they were used.**
The list of materials purchased by respondents of the survey resembled the materials purchased by all beneficiaries and ranged across the ‘white list’ of goods for which the government e-vouchers could be used. The most common farm implements they purchases were bush knives and wheelbarrows. Whereas other inputs centered on fencing wire, fence posts, mails, construction timber, saws, axes and carpentry tools.

**Question 5 What are the changes you now have in your farm as a result of the funding assistance you received?**
About 86% of respondents indicated that they increased production as a result of the assistance received from AFCRP.

**Question 6: Were you happy about using the E-Voucher System with mobile phones to receive your funds?**
Altogether 83% of respondents found the mobile phones easy to use, At least one third of respondents also indicated that they received funds quickly and about one quarter indicated that they were able to purchase needed items.
Question 7: Will you recommend using the E-Voucher system to distribute future funding assistances for Samoan farmers and fisheries?
Almost all, or 94%, of recipients recommend that the government use e-voucher systems in future.

Question 8: Overall, were you satisfied with Project and the processes it used?
Similarly, 94% or more were satisfied with the project processes to identify households that should receive assistance; 96% were satisfied with the use of mobile phones; 95% were satisfied with the funds distributed; and 95% were satisfied with the goods that they purchased.

Question 9: How would you like the Government to support Farmers in the event of similar disaster in the future?
Overall, 91% of respondents expressed the view that government should support farmers in future similar disasters by providing them with grants. In addition, some 34% felt that government should provide inputs to improve resilience, and roughly the same percentage felt that government should provide training to improve resilience.
Annex 6. Stakeholder Workshop Report and Results

AFCRP IMPLEMENTATION COMPLETION STAKEHOLDER WORKSHOP
SUMMARY REPORT
4 August 2016

Introduction: The implementation of the Project particularly the operation of the EVPS involved several other participating partners that all had different experiences and perspectives. The Project Completion workshop offered the last opportunity for all stakeholders to share and evaluate project implementation and outcomes with much focus on the EVPS.

Participants: The Stakeholder Workshop was a half-day event and was jointly facilitated by MAF AFCRP and the World Bank. Stakeholder participants included subsistence farmers and commercial farmers most of whom were village mayors, Digicel Samoa10, Blue Bird Lumber and Hardware, Ace Hardware and Samoa Builders, Seb & Rene Sports, Strickland Limited, Soil Pacific Health Ltd11, Ministry of Finance (MOF)12, Ministry of Women Community and Social Development (MWCD)13, ADRA Samoa14, MAF Crops Division, MAF Fisheries Division, MAF APH Division, PMU and the visiting World Bank implementation support team.

Approach: Workshop program included a presentation by the AFCRP Project Manager, Malama Jasmine Siamomua on the overview of the AFCRP from July 2013 to 30 June 2016 highlighting the achievements; and two panels of stakeholder representatives and plenary discussions with all participants led by the AFCRP Interim Coordinator, Afuamua Lafaele Enoka15 and the Bank’s IT Advisor, Ravi Corea. Official opening was delivered by the MAF CEO, Fonoiava Sealiitu Sesega and AFCRP Interim Manager conducted the closing.

Opening remarks by MAF CEO: Mr. Sesega underlined the AFCRP key achievements and the challenges encountered during project implementation. He emphasized to the participants to share their experiences and opinions on what was good about the project and what could be done to improve MAF performance for future recovery efforts for farmers and fishermen.

Plenary discussions: The discussion was thoroughly coordinated and stakeholders were asked key questions and subject matters based on their involvement. Views and experiences were shared and discussed accordingly as summarized in Table 1 below.

Conclusion: All stakeholders who were beneficiaries, suppliers and mayors were very appreciative of the government’s decision to undertake a cyclone recovery project for farmers and fishers with the funds made available by the World Bank, and they supported the

---

10 Operator of the EVPS
11 Registered Suppliers of agricultural and fishing goods (eligible only) for the approved and/or selected registered beneficiaries
12 Executing Agency
13 Mediator Agency between the MAF and the beneficiary villages
14 Contractor for the EVPS Impacts Evaluation
15 Project Coordinator of Samoa Agriculture Competitiveness Enhancement Project (SACEP)
replication of recovery projects like AFCRP in future. There was also a consensus amongst these groups that the use of the e-voucher should be replicated in future projects like AFCRP or other projects where government seeks to provide direct assistance. They felt that some of the benefits of the e-voucher, like time saving and traceability could make it good for re-use by MAF.

**Key recommendations:**

**Improving the project:**

- Need to reconsider the definition of the household used by the AFCRP for the selection of beneficiary households;
- Government needs to monitor the behaviour of the mayors in fulfilling their roles especially when it comes to listing of villagers for funding assistances;
- For selection of beneficiaries, greater attention needs to be given to identifying who is a subsistence farmer and who is a commercial farmer according to agreed government definitions. MAF has to have a list of commercial farmers (like the Fisheries list of commercial fishers and tilapia growers) that it can be updated and used for future programs;
- Recovery projects like AFCRP need to take into consideration the costs and difficulties that subsistence farmers incur to transport the materials they buy back to their villages.

**Improving the EVPS:**

- Representatives from the project and Digicel need to be at the merchants fulltime to assist beneficiaries with the usage of mobile phones and EVPS; or a help-line or a help-desk that to provide instant assistance to the beneficiaries when needed;
- When using the EVPS in future, it is important for the government of Samoa to consider using the bio metric (i.e. fingerprints) technology as the next step which is more secure for registration and identification of farmers.
Table 1. Outcomes/Feedbacks by the Project Stakeholders

<table>
<thead>
<tr>
<th>1. Most useful outcomes of the AFCRP project</th>
<th>Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder</td>
<td>Feedback</td>
</tr>
<tr>
<td>Beneficiaries (subsistence and commercial farmers and fishermen)</td>
<td>✓ The project was useful because with more and better tools their work was easier and they could speed up their work. ✓ Commercial farmers indicated that their production capacity increased and they could produce more now with the tools and investments they made with project.</td>
</tr>
<tr>
<td>Digicel Samoa Ltd.</td>
<td>✓ The project was useful because it provided the Samoan government with practical experience in successful innovation and the adoption of smart new technology for providing government services.</td>
</tr>
<tr>
<td>Input Suppliers (i.e. Bluebird Lumber and Hardware, Ace Hardware &amp; Samoa Builders, Strickland Limited, Pacific Soil Health Limited, Seb and Rene Sports)</td>
<td>✓ The project was useful for them because their sales increased. ✓ The project was useful to the economy because it stimulated growth of several suppliers and thereby increased competition and consumer choice.</td>
</tr>
<tr>
<td>All participating stakeholders</td>
<td>✓ The project was a useful project mostly because it directly helped many people who had been hit by Tropical Cyclone Evan (TCE).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Intended beneficiaries</th>
<th>Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder</td>
<td>Feedback</td>
</tr>
<tr>
<td>Beneficiaries (subsistence and commercial farmers and fishermen)</td>
<td>✓ Approach to beneficiary selection was quite good. The reasons cited included: (i) beneficiaries should have been from households in the geographical areas by the cyclone and it was confirmed that they were from those areas; (ii) having a list of beneficiaries made it possible to know exactly who was benefitting; and (iii) the village mayors were well suited for making the final selection of beneficiaries based on their knowledge of family circumstances and actual agricultural and fishing activities.</td>
</tr>
<tr>
<td>ADRA Samoa</td>
<td>✓ Expressed concern that young people from families were registered for the household, rather than head of household due to the fact that elders might not have felt comfortable with the e-voucher and handset technology.</td>
</tr>
<tr>
<td>Beneficiaries, ADRA Samoa and MWCD</td>
<td>✓ Generally agreed amongst themselves that village mayors were best suited to determine who should receive assistance in recovery of agricultural activities at the local level. ✓ Some were not clear on the ways in which beneficiaries were selected and the distinctions made between subsistence and commercial farmers. ✓ Some generally expressed concern about the trustworthiness of many mayors and underlined that having a mayor that was honest and acted in good faith for the well-being of all village members was critical for ensuring that the intended beneficiaries were actual beneficiaries.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. White list of eligible farming and fishing items – useful or not useful</th>
<th>Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholder</td>
<td>Feedback</td>
</tr>
<tr>
<td>Stakeholder</td>
<td>Feedback</td>
</tr>
<tr>
<td>-------------</td>
<td>----------</td>
</tr>
</tbody>
</table>
| Beneficiaries (subsistence and commercial farmers and fishermen) | ✓ Other forms of assistance, such as the seeds distributed immediately after the cyclone by ADRA were more useful in terms of immediate relief and re-starting production. But for the AFCRP, the recovery tools and equipment were very welcome.  
✓ The list was useful because it obliged people to buy items that were useful for production rather than for other home consumption or home repair.  
✓ Others felt that people for whom home food production was essential or for whom farming was the main or only source of income had already spent whatever they had on recovery of production as a first priority and for them it would have been helpful if the ‘white list’ included materials to restore damages to shelter and housing. MAF clarified that building materials were available on the list.  
✓ All expressed appreciation for having tools like wheelbarrows.  
✓ Some questioned the choices made by the government in deciding what to include on the list. The list should contain those items that were likely to have been damaged or that farmers or fishers are likely to have lost during the cyclone. Items that could be useful for an affected family to recommence or recover its farming or fishing activities should have been included on the list. |
| Beneficiaries, ADRA Samoa and MWCD | ✓ Generally agreed that having a list that provided a range of goods from which people were free to choose was preferable to receiving in-kind assistance that would have involved goods procured and distributed by the government. |
| 4. EVPS as a delivery mechanism - useful or not useful | |
| Stakeholder | Feedback |
| Beneficiaries (subsistence and commercial farmers and fishermen) | ✓ Beneficiaries appreciated getting an e-voucher over getting materials procured by government as they knew best what they needed and wanted. Also, they could buy from whichever participating supplier they considered best.  
✓ Once the system was in place it was fast and efficient compared to other forms of distributions - like checks, cash or goods - especially for outreach to large numbers of individuals.  
✓ Everyone indicated finding the e-voucher easy to use. |
| Digicel Samoa Ltd. | ✓ The EVPS provided ‘real time’ information on beneficiaries (e.g. accounts, expenditure and balances);  
✓ It was a good way for beneficiaries and government to learn that a handset can have other uses besides making phone calls; |
| Input Suppliers (i.e. Bluebird Lumber and Hardware, Ace Hardware & Samoa Builders, Strickland Limited, Pacific Soil Health Limited, Seb and Rene Sports) | ✓ The system allowed them to view ‘real time’ information on beneficiaries’ details such as accounts, expenditure and balances;  
✓ It was a brilliant system although a few hiccups were encountered in getting it up and running; |
| MOF | ✓ The EVPS mechanism was good because there was no handling of cash. This also made the process more transparent, reduced the room for possible diversion of funds or human error. |
Annex 7. List of Supporting Documents

Implementation Support Missions – Aide Memoire

The World Bank – Samoa, Agriculture and Fishery Cyclone Response Project (AFCRP) (IDA Grant No.: H885-WS) Sixth Implementation Support Mission: 14-24 March 2016 Aide-Memoire


The World Bank - Samoa Agriculture and Fishery Cyclone Response Project (AFCRP) (IDA Grant No.: H885-WS) Fourth Implementation Support Mission: 2-13 March 2015, MTR, Final Aide-Memoire


Implementation Status Reports


The World Bank – Samoa, Samoa Agriculture & Fisheries Cyclone Response Project : P145938 – Implementation Status Results Report : Sequence 01 (English) MAR 03, 2014

Official Documents and Records

The World Bank, Final Results Framework, June 2016 P145938

The World Bank – Samoa, Amendment to the Financing Agreement for Agriculture and Fisheries Cyclone Response Project, Grant DEC 2015

The World Bank - Samoa, Agriculture and Fisheries Cyclone Response Project: Restructuring (English) DEC 02, 2015, RES20914, Project Paper

Official Documents- Supplemental Letter Ref. Performance Monitoring Indicators for Grant H885-WS (Closing Package) (English) NOV 01, 2013 Side Letter

Official Documents- Supplemental Letter Ref. Financial Data for Grant H885-WS (Closing Package) (English) NOV 01, 2013 Side Letter

Official Documents- Disbursement Letter for Grant H885-WS (Closing Package) () NOV 01, 2013 Disbursement Letter

The World Bank – Samoa, Agriculture and Fisheries Cyclone Response Project : Disbursement Letter DEC 2013

The World Bank - Financing Agreement for Agriculture and Fisheries Cyclone Response Project, Grant NOV 01, 2013


The World Bank – Samoa, Agriculture and Fisheries Cyclone Response Project (English) Project Appraisal Document SEP 19, 2013

The World Bank – Samoa, Agriculture and Fisheries Cyclone Response Project: Environmental and Social Management Framework, AUG 22, 2013


The World Bank – Samoa, Agriculture and Fisheries Cyclone Response Project: Integrated Safeguards Datasheet; August 2013 Report No. 80789

The World Bank – Samoa, Samoa Post-Disaster Needs Assessment Cyclone Evan 2012, March 2013

The Government of Samoa


Agriculture and Fisheries Cyclone Recovery Project

The Government of Samoa, Ministry of Agriculture and Fisheries, Agriculture and Fisheries Cyclone Response Project; Project Implementation Manual, August 2013

MAF AFCRP Subsistence Beneficiaries (Component 1). xlsx (Mallama Siamomua)
MAF AFCRP Roll Out 2b Commercial FINAL. xlsx (Mallama Siamomua)
MAF AFCRP Roll Out 3b Commercial FINAL. xlsx (Mallama Siamomua)
MAF AFCRP Roll Out 4b Commercial FINAL. xlsx (Mallama Siamomua)

Other
Case Study of an E-voucher System for Distribution of Benefits to Cyclone Affected Communities in Samoa – Ravi Corea