



Government of Samoa

AGRICULTURE SECTOR PLAN

2011 - 2015

"...farming and fishing first..."



VOLUME I

MINISTRY OF AGRICULTURE AND FISHERIES

Contact details for the Agriculture Sector Plan coordinators:

CHIEF EXECUTIVE OFFICER, MINISTRY OF AGRICULTURE AND FISHERIES

Fonoiaava Sealiitu Sesega

Telephone: 22561/22564

Email: fono@maf.gov.ws

POLICY, PLANNING AND COMMUNICATION

Peseta Frank Fong

Telephone: 22561/22564

Email: frank.fong@maf.gov.ws

CROPS DIVISION

Misa Konelio Misa

Telephone: 20605

Email: misa.konelio@crops.gov.ws

LIVESTOCK (Animal Production and Health) DIVISION

Leota Laumata Pelesa

Telephone: 21052

Email: leota.laumata@aphd.gov.ws

FISHERIES DIVISION

Mulipola Atonio Mulipola

Telephone: 20369

Email: apmulipola@fisheries.gov.ws

QUARANTINE DIVISION

Pelenato Fonoti

Telephone: 20924

Email: ACEO@samoaquarantine.gov.ws

MINISTRY OF NATURAL RESOURCES & ENVIRONMENT, FORESTRY DIVISION

Taupau Maturu Paniani

Telephone: 23800

Email: maturu.paniani@mnre.gov.ws

MINISTRY OF FINANCE, ECONOMIC POLICY AND PLANNING DIVISION

Leiataua Henry Ah Ching

Telephone: 34324

Email: henry.ahching@mof.gov.ws

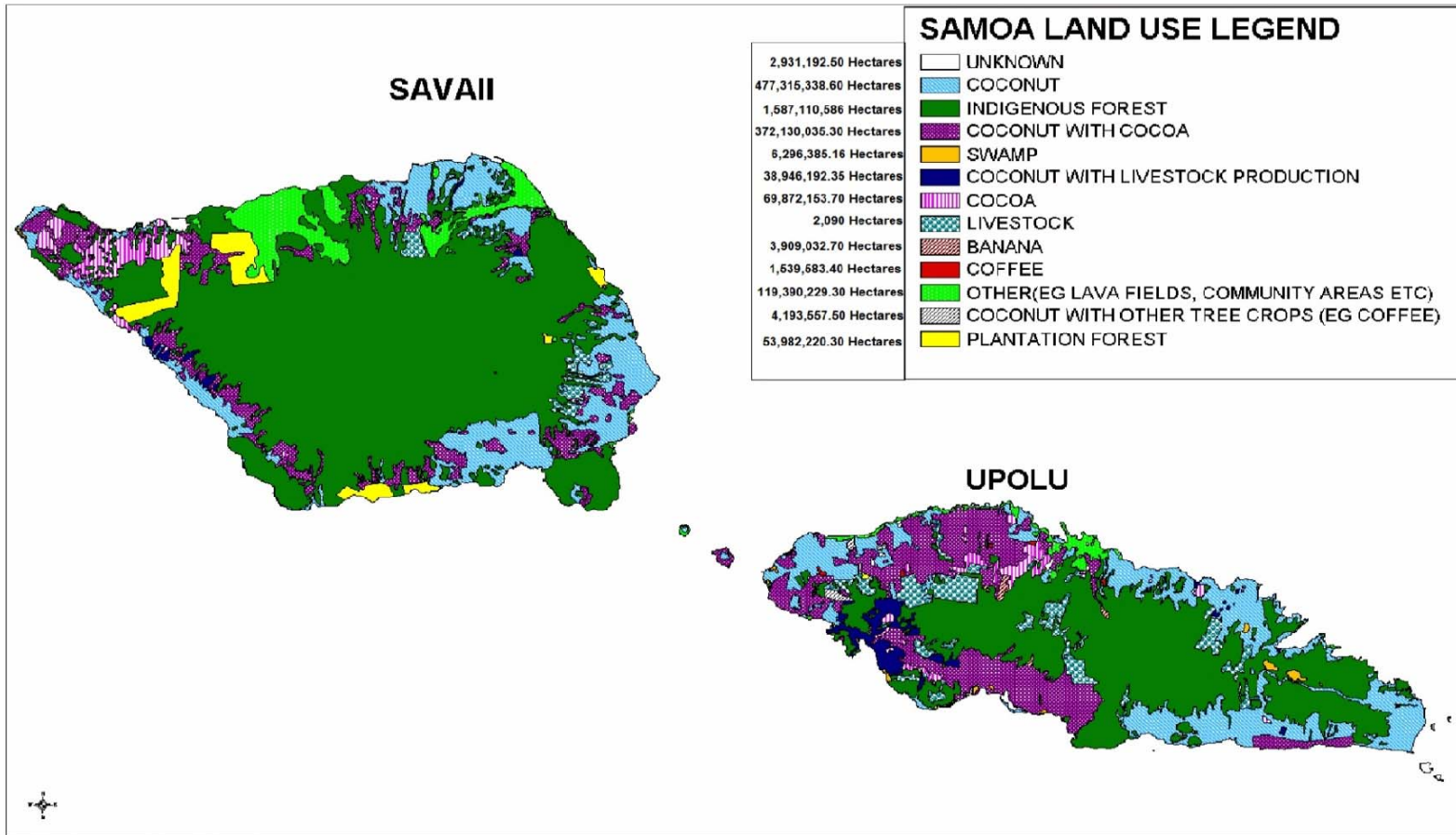
SAMOA BUREAU OF STATISTICS, ECONOMIC STATISTICS DIVISION

Tapua'i Laupu'a Fiti

Telephone: 62000

Email: laupua.fiti@sbs.gov.ws

Samoa Land Use Map



SOURCE: NATIONAL MAPPING SECTION(MNREM)

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List of Acronyms

ACIAR	Australian Centre for International Agricultural Research
ADB	Asian Development Bank
APHD	Animal Production and Health Division
ASP	Agriculture Sector Plan
AUA	Apia Urban Area
AUD	Australian Dollar
AusAID	Australian Agency for International Development
BNPL	Basic Needs Poverty Line
CD-MAC	Crops Development and Management Advisory Committee
CEO	Chief Executive Officer
CP	Corporate Plan
DBS	Development Bank of Samoa
EC	European Commission
EEZ	Exclusive Economic Zone
EMT	Executive Management Team
EU	European Union
F&V	Fruits and Vegetables
FAO	Food and Agriculture Organisation
FY	Financial Year
GDP	Gross Domestic Product
GoS	Government of Samoa
GPS	Global Positioning System
HACCP	Hazard Analysis at Critical Control Points
HIES	Household Income and Expenditure Survey
HSS	Health Sectors in Samoa
HTFA	High Temperature Forced Air
ICCRA	Integrating Climate Change Risks in the Agriculture sector
IPRs	Intellectual Property Rights
ISP	Institutional Strengthening Project
L-MAC	Livestock – Management Advisory Committee
LTA	Land and Transport Authority
MAF	Ministry of Agriculture and Fisheries
MCIL	Ministry of Commerce Industry and Labour
MFAT	Ministry of Foreign Affairs and Trade
MfR	Ministry for Revenue
MNRE	Ministry of National Resource and Environment
MoF	Ministry of Finance
MoH	Ministry of Health
MTEF	Medium Term Expenditure Framework
MWCSD	Ministry of Women, Community and Social Development
NCDs	Non Communicable Diseases
NES	National Export Strategy
NGO	Non Government Organisation
NWU	North West Upolu

NZ	New Zealand
NZAP	New Zealand Aid Programme
NZD	New Zealand Dollar
PACER	Pacific Islands Agreement on Closer Economic Relations
PDD	Project Design Document
PICTA	Pacific Island Countries Trade Agreement
PPP	Purchasing Power Parity
PS	Private Sector
R&D	Research and Development
ROU	Rest of Upolu
SAME	Samoa Association of Manufacturers and Exporters
SAT	Samoaan Tala
SBEC	Small Business Enterprises Centre
SBS	Samoa Bureau of Statistics
SDS	Strategy for the Development of Samoa
SLC	Samoa Land Corporation
SOE	State Owned Enterprises
SPA	Samoa Ports Authority
SPC	Secretariat of the Pacific Community
SPS	Sanitary and Phyto-Sanitary Measures
SROS	Scientific Research Organisation of Samoa
STA	Samoa Tourism Authority
STABEX	Stabilization of Export Earnings
STEC	Samoa Trust Estates Corporation
SUNGO	Samoa Umbrella of Non Governmental Organisations
SWAp	Sector Wide Approach
TOR	Terms of Reference
UNDP	United Nations Development Programme
USA	United States of America
USP	University of the South Pacific
WB	World Bank
WIBDI	Women in Business Development Inc
WTO	World Trade Organisation

Foreword

The Agriculture Sector Plan 2011 – 2015, is the first ever produced for the sector by the Ministry of Agriculture and Fisheries. This document, which I sincerely welcome, is the outcome of a comprehensive consultative process which involved both the public and private stakeholders.

Several factors make this first ASP particularly timely and relevant. Firstly, there is a renewed recognition of the critical importance of agriculture to the Samoan economy and of the central role it can play in achieving sustained economic growth, trade development and poverty reduction. Secondly, the Strategy for Development of Samoa with its vision of “Improved Quality of Life for All” recognises agriculture as one of the key productive sectors driving the economy. The real global concern for food security and bio-energy needs resulting from soaring prices and adverse impacts of climate change is also another key influence.

This ASP will commit the government:

1. To the principle of agriculture-led growth as a key national development strategy;
2. To the revitalisation of the agriculture sector to reverse its declining performance and to increase its overall contribution to GDP from 10% in 2010 to 20% by 2015;
3. To increase funding resources into the sector including the share of the national budget allocated to the sector to increase from 5% in 2010 to 10% by 2015;

This ASP is the foundation document for the sector and, if implemented well, will help position the sector to achieve the national development outcomes set out in the SDS.

The key role of the Ministry of Agriculture in implementing the ASP cannot be overstated. It will be the ministry’s responsibility to vigorously pursue the vision that is embedded in the document – “Agriculture for Food and Income Security”. The ASP provides the “road map” that will guide public and private actions and investments in the sector over the next five years.

It gives me great pleasure to commend MAF and all sector stakeholders who have all contributed to the preparation of this important document. I pledge Government’s commitment to its successful implementation.



Le Mamea Ropati Mualia
MINISTER OF AGRICULTURE & FISHERIES

Agriculture Sector Plan Profile 2011-2015

Sector Vision		Agriculture for Food and Income Security	
Sector Theme		“... farming and fishing first...”	
Overall Sector Goal:		‘To revitalize the agriculture sector to increase its relative contribution to the national GDP from its current level of 10 percent to 20 percent by 2015’	
Key High Level Development Outcomes		Increased food and income security by 2015	
Sector Policy Objectives			
Sector Policy Objective 1: To strengthen policy, legal, regulatory and strategic planning framework for sustainable agriculture development;	Sector Policy Objective 2: To improve self reliance in food production and nutritional security.	Sector Policy Objective 3: To enhance private sector capacity in improving productivity, value adding and marketing;	Sector Policy Objective 4: To ensure sustainable adaptation and management of agriculture resources;
Sector Policy Indicators			
ASP approved by Cabinet and implemented; Proportion of MAF budget allocation for agriculture increased;	Increased volume and value of domestic production of agriculture products; Contribution of locally grown foods to diet increased;	Increased agricultural production index; Increased value adding from agro-processing based industries; Increased export earnings and import substitution; Increased number of people engaged in agriculture activities;	Resilience and adaptation strategies developed and implemented; Area of arable, forested, reserved/protected land as proportion of total land area and % of arable land used; Rate of land degradation reduced (e.g. soil erosion)
Sector Strategic Outcomes			
Outcome 1.1: Agriculture Sector Plan effectively implemented by 2015;	Outcome 2.1: Increased food self reliance and nutrition;	Outcome 3.1: Increased private sector investments in the sector;	Outcome 4.1: Enhanced capacity for sustainable practices in the sector;
Outcome 1.2: Reliable and timely availability of key agricultural statistics for planning and monitoring of sector performance;	Outcome 2.2: Increased productivity from adoption of high yield crops, livestock and aquaculture species;	Outcome 3.2: Improved efficiency of economic infrastructure in the sector;	Outcome 4.2: Enhanced adaptation of environmentally friendly production systems;
Outcome 1.3: Coherent and well coordinated sector vis-à-vis adoption of the sector wide approach;	Outcome 2.3: Enhanced nutritional dietary intake from locally produced agriculture products;	Outcome 3.3: Increased access to tailor made financing arrangements for farmers and fishers;	
Outcome 1.4: Enhanced policy, planning and monitoring capacity of MAF including delivery of market oriented extension services;		Outcome 3.4: Increased diversification and access to commercially viable products in the sector;	
Outcome 1.5: Enhanced legal and administrative framework for leasing of customary land for agriculture formalized;		Outcome 3.5: : Increased compliance with food safety, phytosanitary and market access requirements in the sector;	
		Outcome 3.6: Increased exports of fisheries and niche type products;	

Projected Funding Requirements	
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Public Funding Source:	
Government Budget	133
External Funded Development Projects	15
Total Public Funding:	148
Private Funding Source:	
Equity	5
Total Lending to Agriculture Sector	16
Special Credit Line Facility (CBS)	5
Total Private Funding	26
Total Funding to Agriculture Sector	174
Medium Investment Scenario	5 Year Estimate
Public Funding Source:	
Government Budget	184
External Funded Development	64
Total Public Funding:	248
Private Funding Source:	
Equity	33
Total Lending to Agriculture Sector	104
Special Credit Line Facility (CBS)	10
Total Private Funding	146
Total Funding to Agriculture Sector	394
High Investment Scenario	5 Year Estimate
Public Funding Source:	
Government Budget	345
External Funded Development	140
Total Public Funding:	485
Private Source:	
Equity	103
Total Lending to Agriculture Sector	338
Special Credit Line Facility (CBS)	20
Total Private Funding	461
Total Funding to Agriculture Sector	946

Executive Summary

1. Agriculture has been, until the early 1980s, the most dominant sector in the economy of Samoa accounting for nearly 90% of total exports and around 60% of the country's total employment. The sector share of GDP was estimated at 50.8% in 1972, 51.7% in 1978, and 50.5% in 1983. Three plantation crops, namely, copra, cocoa and banana accounted on average for about 80% of all agricultural exports during the same period. These numbers alone demonstrate the potential of agriculture, if managed well, to make the greatest impact on food security, poverty alleviation, employment and export growth relative to other sectors of the Samoa economy.

2. The performance and relative contribution of the agriculture sector including fisheries to the national GDP has since steadily declined from 50.5% in the 1980's to 22% in 2000 and is now 10% in 2010. Employment levels in the sector have also declined over the last two decades from 60% in the early 1980's to 39% in 2006 according to the population census conducted that year.

3. The challenge now is to reverse this decline and to restore agriculture to its former prominent role as the main driver of Samoa's sustained economic growth, food security, trade development and employment creation. The primary focus therefore of the Agriculture Sector Plan 2011 – 2015 (ASP), is to revitalize the sector through the development of an appropriate enabling environment and framework of policy, institutional and legislative changes to foster a more commercial but pragmatic approach to agriculture based on lessons learned from the past and on encouraging private sector investment and leadership in the sector.

4. A situational analysis undertaken of the sector in 2009 identified a number of important issues that have impacted on its performance over the past several years. These will need to be taken into consideration in future medium to longer term development strategies if the current push to revitalise the agricultural sector and reverse its declining performance is to be successful. These issues are summarized below:

- Lack of an overarching national sector plan that provides a coherent policy, legal, regulatory and strategic planning framework to guide the sustainable development of agriculture.
- Lack of accurate and reliable agricultural statistical series on production, land holdings, productivity trends, employment, markets and prices and other series to develop accurate baseline data required for formulating evidence-based policies and strategies, for setting and measuring performance indicators and impacts and for effective monitoring and evaluation purposes.
- Low productivity and returns in village subsistence agriculture putting food security at risk and increasing reliance on imported low nutritional value food products. The recent initiatives taken by village traditional leaders to promote community type production schemes such as the Talomua have proven to be a successful model for revitalizing village agriculture.

- The devastating impacts of natural disasters, pests and diseases on subsistence and commercial commodities like taro (leaf blight) have severely impacted on the production and productivity of these crops that have been important contributors to the country's export earnings in the past years.
- The changing world market needs for agricultural products and the volatility in market prices for Samoa's main agricultural export commodities affected the returns to farmers of producing, maintaining and harvesting tree crops like coconuts and cocoa. The ban imposed by the European Union (EU) in the late 1990s on kava exports to the EU and subsequently extended to other markets has impacted adversely on farmers who depended mainly on this crop for livelihood.
- Relative decline of public and private funding for the sector.
- Limited involvement by the business community in the sector following the closure in the early 1980s of merchant outposts' networks in the rural sector and the establishment by government of commodities marketing boards to take over the purchasing and marketing of agricultural products.
- Incentivizing the business community and farmers to increase production and productivity of agriculture (through adoption of high yield and pest/disease resistant planting materials/seedlings, breeding stocks; diversification into new crops that are resistant to climate change impacts on soil and water conditions as well as diversification into aquaculture), to use own equity capital and/or borrowed funds to develop commercial type operations integrating production (including contracted sourcing from individual and village community producers) agro processing and value adding as well as marketing of agricultural products specifically targeting either export markets or import substitution or both. Incentives may also target private sector commercial investment in agriculture, located in rural areas including Savaii. Possible incentives may include the following:
 - Tax exemption or reduced tax on personal and corporate income derived directly from an approved investment in an agricultural commercial enterprise (investment must first be approved by either the current investment committee chaired by CEO of the Ministry of Finance (MOF) or some other committee to be appointed specifically to consider investment in agriculture);
 - Reduced interest rates on lending to approved agriculture development projects and businesses (i.e. agriculture venture approved by the Investment Committee) by 30 – 35% of weighted average interest rate on commercial loans by the commercial banks;
 - Price and input subsidies will need to be developed and linked to production and performance based indicators to ensure sustainable access to such benefits;
 - The current Small Business Enterprise Center (SBEC) and Village Group Guarantee Schemes are to be expanded and additional resources allocated to ensure the benefits are widespread and sustained;
 - Central Bank of Samoa (CBS) to examine the viability and options of appropriate insurance schemes to minimise risks to producers from natural disasters and other related commercial risks such as the export guarantee scheme;

- Government funding for cost of surveying customary land leased for agricultural purposes;
- A review of the Development Bank of Samoa's (DBS) role as the main conduit of commercial lending to the agriculture sector using customary land leaseholds as collateral and village group guarantees is critical in order to ensure timely and targeted delivery of resources to key beneficiaries in the community;
- Funding and Institutional capacity issues constraining the capability of the Ministry of Agriculture and Fisheries (MAF) and other sector agencies to provide informed and effective technical advice and support to guide farmers and fisheries operators in the production and marketing of their products.
- Recognizing agriculture is predominantly a private sector activity as government has now largely withdrawn from direct involvement in commercial plantation type operations through Samoa Trust Estates Corporation (STEC) and the Agricultural Store Corporation, there is now a need to better define the respective roles of Government, the private sector including the business community, and development partners in the development of the sector, with government focusing more on its policy and regulatory as well as facilitative role while the private sector becomes more involved in production, processing and value-adding as well as marketing.

5. The Agriculture Sector Plan 2011-2015, provides the key policy objectives and strategies to address the policy, legal and legislative as well as institutional capacity and coordination issues that affected the performance of the sector in the past years. The four subsectors of agriculture in the ASP are crops (inclusive of fruits and vegetables), fisheries, livestock and forestry.

6. The overall goal and focus of the ASP is *'to revitalize the agriculture sector to increase its relative contribution to the national GDP from its current level of 10% to 20% by 2015'*.

7. The development of the ASP, was led and coordinated by the MAF with the support of the Ministry of Natural Resources and Environment (MNRE) and in close consultation with the MOF and several public sector agencies as well as with private sector stakeholders including representatives of various farming and fisheries associations. The ASP will assist in making a timely transition toward the adoption of a sector-wide approach to developing agriculture and to facilitate a whole of Government perspective to setting policies, designing strategies, formulating costed investment plans for required economic infrastructure and in addressing the funding requirements of the sector.

8. The Government of Samoa through its *Strategy for the Development of Samoa 2008 – 2012 (SDS)*, identifies private sector led growth, including in agriculture, fisheries and forestry, as one of the priority areas it would be pursuing in the longer term. The ASP recognizes that the active involvement of the private sector will be critical in revitalizing growth in agriculture and therefore puts high priority on strengthening the capacity of private sector organizations to engage effectively with key government agencies to develop an innovative business enabling framework whereby the government, business

community and individual farmers and development partners will have confidence to be involved as partners in reversing the poor performance of the sector which has so much potential to contribute to sustaining economic growth, creating employment and increasing incomes in the rural sector as well as improving the economic and social wellbeing of the people of Samoa.

9. The key policy objectives for the ASP are:

- To strengthen the policy, legal, regulatory and strategic planning framework for sustainable agriculture development;
- To improve national self reliance in food production and nutritional security;
- To enhance private sector capacity in improving agricultural productivity, value adding and marketing;
- To ensure sustainable adaptation and management of agriculture resources;

10. The projected 5 year funding requirements for the implementation of the ASP will be in the range of SAT\$174 million – SAT\$946 million. Of these, public funded sources are projected to range from SAT\$148 million to SAT\$485 million while private funded sources for the five years will be in the range of SAT\$26 million to SAT\$461 million.

11. The agriculture sector is fraught with risks. Agriculture is highly vulnerable to natural disasters such as hurricanes, pests and diseases and has caused widespread devastation to the sector, especially in the period from the early 1990s. Furthermore, volatile fluctuations in market prices also affect returns to growers and are a major disincentive to the production, maintenance and harvesting of crops.

12. The following key actions must be undertaken within the next six months to ensure the timely implementation of the Agriculture Sector Plan:

- **March 2011:** (i) MAF to submit final ASP to the Cabinet Development Committee (CDC) and Cabinet for approval and (ii) MAF to formally activate the Agriculture Sector Steering Committee (ASSC); (iii) MOF and MAF to meet with AusAID and the World Bank to finalise their respective assistance to the agriculture sector;
- **March to April 2011 :** (i) Establish a Sector Coordination Unit to support the ASSC and (ii) Sector Coordination Unit to develop detailed implementation action plans and projects with key implementing agencies (expand on Medium Term Expenditure Framework (MTEF), Capacity Needs Assessment and Monitoring and Evaluation Framework);
- **April to June 2011:** (i) Secure financing and agree on financing mechanisms (donors roundtable and budget screening), (ii) Undertake a feasibility study for possible restructuring and resourcing of the DBS as a dedicated conduit for funding to accelerate the sustained development of agriculture and (iii) Develop and implement an Agriculture Sector Wide Programme.

1 Chapter 1: Introduction

1. The consultations undertaken by the Ministry of Agriculture and Fisheries (MAF) for the development of its Corporate Plan 2008 – 2012, raised concerns about possible overlaps and duplication of roles of the MAF and other stakeholders in the absence of an overarching plan for the agriculture sector to guide its future developments. The MAF and its stakeholders agreed that such a plan was needed to articulate a vision for the agriculture sector, set clear goals and objectives to be pursued within a specified timeframe and would also clearly define stakeholder roles and functions for coordination. The sector plan would also assist to define the relative roles of the government and other stakeholders such as the private sector and the donor community providing a basis for enhanced sector partnerships.

2. The Agriculture Sector Plan 2011 – 2015, consists of two volumes.

- **Volume I** is the main ASP which provides the analysis of the sector and its contribution to the Samoan economy; a review of the sector's current institutional and financing frameworks; the key issues in the sector drawn from stakeholder consultations and literature reviews, that have influenced the performance of agriculture in the past and considered to be important in designing policy and strategies to improve performance in the future; the key sector policy objectives and strategies to guide the development of agriculture during the five year period from 2011 to 2015 and an implementation framework.

Volume I also provides projections of funding requirements to enable the effective implementation of the ASP's key policy objectives and strategies and a monitoring and evaluation framework to enable a continuing and robust assessment of sector performance during the ASP period.

- **Volume II** provides the working papers including performance measures and indicators on a subsector basis provided by MAF as an outcome of a Executive Management Team (EMT) retreat for the purpose of validating ASP related policies, sector and sub sector strategies and the setting of performance measures and related quantitative targets to be achieved by 2015. It also includes the questionnaire survey used to obtain the views of sector stakeholders on issues for the sector plan and analysis of responses received.

Methodological Considerations

3. The broad scope of services for the development of the sector plan include:

- Planning and coordinating with the Economic Policy and Planning Division (EPPD) staff of the Ministry of Finance (MOF) to identify and notify stakeholders as necessary;
- Reviewing the framework of the sector plan (from the current draft) based on the SDS 2008-2012 and ensure that it meets MOF guidelines;
- Preparing a detailed work plan for work, from developing the ASP to its proposed implementation, describing tasks and who is responsible including realistic deadlines;

- Conducting consultations as necessary between MAF and stakeholders; Interview and/or meet with relevant stakeholders and Ministries to gather information and data to assist in drafting the ASP;
- Organizing 2 workshops to obtain feedback on the first draft and later to present findings to stakeholders;
- Drafting a Terms of Reference (TOR) for the Agriculture Sector Steering Committee;
- Drafting the ASP including a submission to Cabinet for consideration and approval if required;

4. In line with the scope of services, the MAF worked closely with the Consultant, MOF and other key ministries such as the Samoa Bureau of Statistics and MNRE, with consultations conducted with representatives of the private sector and agricultural based interest groups. A questionnaire survey was also developed to seek the views of sector stakeholders in both the public and private sectors on key sector issues including inputs on key policy directions and priority strategies for the revitalization of production and productivity for each of the agriculture sub sectors. Furthermore, a public meeting was held to discuss and validate the findings of the survey following its completion. In order to review and validate key sector issues, policies and strategies drawn from literature reviews and stakeholder feedback, weekly meetings were held between the MAF executive team and the Consultant including a two day MAF EMT retreat held in December 2010 to finalize said issues, policies and strategies for incorporation into the draft ASP. The MAF also received weekly progress reports on the consultancy.

Data Collection and Analysis

5. As the drafting of the ASP progressed it became apparent following the MAF EMT retreat held in December 2011 that the necessary database to construct accurate baseline data and to quantify performance indicators was not available. It was then decided to restructure the ASP to focus on the setting of the key sector policy objectives and strategies but to defer the setting of quantitative performance targets until the statistical data required for determining reliable baseline data is collected. The plan recommends the collection of this data as a key priority in the first year of the ASP.

2 Chapter 2: Situational Analysis of the Agriculture Sector

2.1 Overview

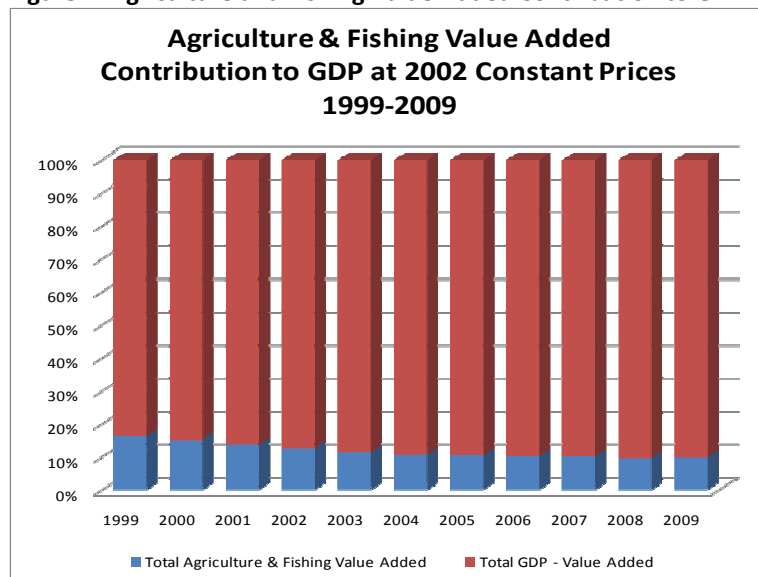
1. Samoa's geographic location and characteristics provide the perfect backdrop for a robust and growing agricultural sector as the country is mainly comprised of rich and fertile volcanic soil and is also blessed with tropical climate conditions. Despite achieving very favourable economic progress over the past decades, Samoa remains highly reliant on subsistence production practices, safeguarding its citizens from any serious detrimental effects of imported food shortages. However, it is this same geography that threatens the development of the agriculture sector as Samoa is prone to adverse climate change effects and natural disasters. Moreover, pests and diseases as well as man made mistakes have also adversely affected the sector's performance in the past years.

2.2 Contribution to the Economy

2.2.1 Economic Growth

2. In aggregate terms, the contribution of the agriculture sector to the economy has shrunk significantly over the decades from one half of GDP in the 1980s and one third of GDP in the 1990s to only 11% in 2009. The latest statistics show that there has been further decline in the sector with the contribution to GDP now estimated at 10% as of end 2010. Despite a marked increase in the performance of the fisheries sub-sector, the sector has still not reached the high value added levels it accomplished in the late 1990s as shown by *Figure 1* below.

Figure 1: Agriculture and Fishing Value Added Contribution to GDP 1999 - 2009



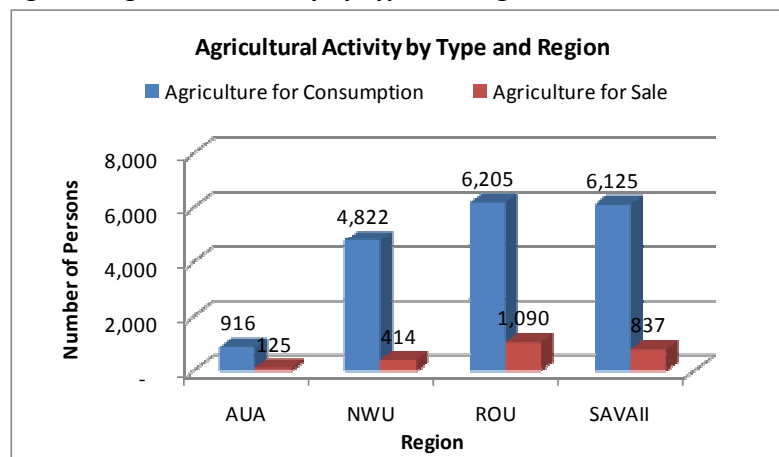
Source: Finance Statistics Division, Samoa Bureau of Statistics

2.2.2 Agricultural Activity, Holdings and Employment

3. The agriculture sector is widely regarded as a high risk sector mainly because of its vulnerability to natural disasters, and market uncertainties. This risk factor has contributed to a fall in the percent of households deriving income from the sector by 6%¹. The 1999 Agricultural Census surveyed a total of 20,521 households and of these, approximately 14,734 (71.8%) were agriculturally active. The other 1,597 (7.7%) households were engaged in minor agricultural activity and 4,199 (20.5%) households were classified as non-agricultural. Preliminary estimates in the 2009 Agriculture Census² indicates 23,164 households were surveyed, an increase of 12% compared to 1999, of which, only 15,775 (68%) were agriculturally active with approximately 3,572 (15%) households engaged in minor agricultural activity and the remaining 3,806 (17) classified as non-agricultural. The 1999 Agriculture Census also identified that a large majority of agricultural holdings were less than 10 acres and only a few exceeded 50 acres.

4. The findings of the 2008 Household Income and Expenditure Survey (HIES) further highlights that more households are engaged in subsistence agriculture as opposed to commercial agriculture activity, with a higher proportion of commercial activity occurring in Upolu than in Savaii.

Figure 2: Agriculture Activity by Type and Region



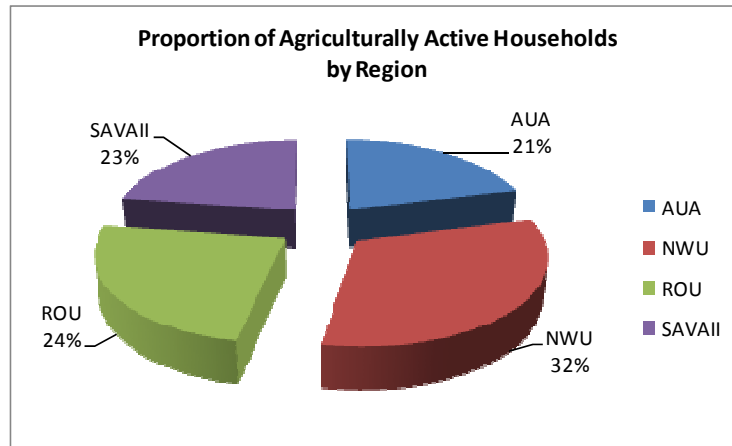
Source: Household Income and Expenditure Survey (HIES) 2008, Samoa Bureau of Statistics

5. The 2008 HIES also indicated that more households were agriculturally active on Upolu than in Savaii (Figure 3) which might be due to the availability of key market facilities and transport infrastructure on Upolu relative to those in Savaii. It would also seem to indicate that the provisions of these infrastructures are vital to the development of agriculture.

¹ 2009 Agriculture Census figures, Economic Statistics Division, Samoa Bureau of Statistics

² Preliminary estimates released by SBS in December 2010

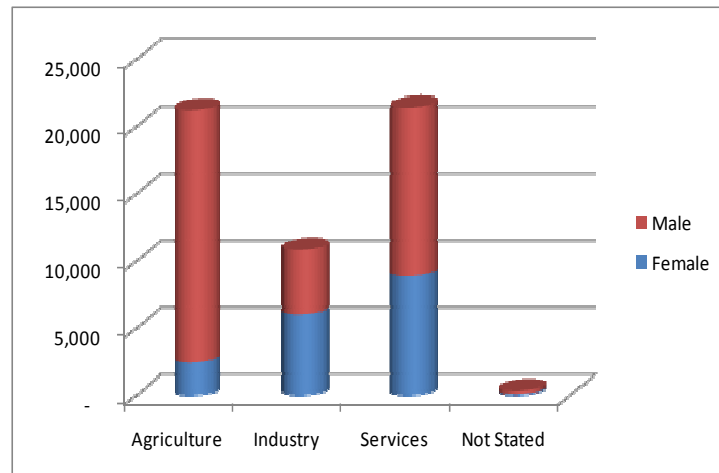
Figure 3: Agriculturally Active Households by Region



Source: Household Income and Expenditure Survey (HIES) 2008, Samoa Bureau of Statistics

6. According to the 2006 population census the sector employed approximately 20,843 or 39% of the total 53,928 working population (See Figure 4 below). This represents a major shift away from employment in the agriculture sector when compared to 60% share of the labour force in the 1980s. It is estimated that there has been further reduction in the levels of employment in the agriculture sector since 2006. The latest statistics³ on formal employment shows that there has been a 3% reduction and 1% improvement in formal employment for agriculture and fisheries respectively during 2006 to 2010.

Figure 4: Employed population aged 15+ by Sector and Gender, 2006



Source: 2006 Census, Samoa Bureau of Statistics

2.2.3 Poverty Alleviation

7. While Samoa has performed well in terms of human development, there have been concerns expressed over inequality of income distribution, hardship amongst vulnerable groups, and the lack of formal employment and income generating opportunities (especially for school leavers). Given that a

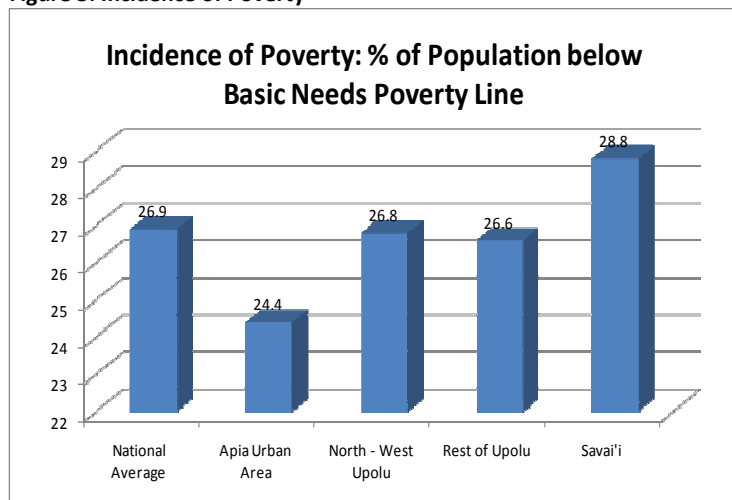
³ Sourced from NPF formal employment statistics

significant percent of land in Samoa belongs to customary land owners in the villages and that about two thirds of the population depend on agriculture for food security and livelihood, there is a strong correlation between the level of poverty and the performance of the agriculture sector.

8. According to a Poverty Report⁴ developed by the Samoa Bureau of Statistics with UNDP assistance in 2010, the measurement of absolute poverty⁵, which is used in Goal 1 of the MDGs, currently cannot be estimated in Samoa and other Pacific countries as the Purchasing Power Parity (PPP) indices are not yet available. Subsequently, for the analysis of hardship and poverty in Samoa the household income and expenditure data from the 2008 HIES was used to estimate food and basic needs poverty lines (BNPL). In terms of food and basic needs poverty lines the per capita costs of the BNPL have been estimated as a national average household expenditure of SAT53.59 per capita per week with the Apia Urban Area (AUA) having the highest at SAT 59.95 and the lowest in Rest of Upolu (ROU) at SAT49.46⁶.

9. The level of serious poverty, as measured by the proportion of households and population falling below the food poverty line is very low; only about 3% of households and 5% of the population. The average incidence of basic needs poverty over all households nationally is estimated at 20.1%, accounting for 26.9% of the population. Within this national average, Savaii had the highest proportion of the population (28.8%), followed by North-West Upolu (NWU-26.8%), Rest of Upolu (RoU-26.6%) and Apia Urban Area (AUA-24.4%) as noted in *Figure 5* below. Notably, for AUA and NWU the incidence of basic needs poverty amongst the population is little changed from that observed in the 2002 HIES.

Figure 5: Incidence of Poverty



Source: Poverty Report 2010 - SBS

4 A report on the estimation of basic needs poverty lines, and the incidence and characteristics of hardship and poverty, August 2010;

5 Measurement of absolute poverty enables cross country comparisons of the extent of poverty and is usually done through the estimation of the US\$1 per day PPP value.

6 These are the amounts of expenditure/consumption (cash and/or the value of own production consumed) required each week, to meet the estimated costs of a minimum standard of living in Samoa

10. The increase in basic needs poverty that is seen is concentrated in the rural areas, in ROU the proportion of population falling below the BNPL is estimated to have risen from 15.1% to 26.6% and on Savaii from 16.1% to 28.8%. As noted in the report, these significant increases are largely due to the fall in employment at Yazaki which has affected many rural households particularly in the ROU, and also to the increasing demands for cash to meet non-food needs that are being felt by all households as society becomes more monetized. The report makes suggestions on ways to address the growing signs of hardship and poverty. These include:

- Broadening and deepening the country's economic base , especially in strengthening the development and contribution of the agriculture sector to GDP and to providing food security;
- Greater emphasis on promoting private sector investment, improving community access to financial services and the creation of new employment and income opportunities;
- At the micro level, it is necessary to address the specific needs of individual communities and villages. This means promoting rural enterprise activities, especially in the agriculture and eco-tourism sectors, to create income generating opportunities as well as meeting particular local social development and infrastructure priorities.
- The current high prices of imported food and fuel give many opportunities for domestic agriculture to provide import substitutes for the rice and cereal products that feature in the diets of those in the urban centres.

2.2.4 Food and Nutrition Security

11. Samoa has become increasingly dependent on food imports. One measure of this high dependency is the percentage of food imports to total imports, which for the period 2005-2009 has increased from 24% to 30%. Food security has been identified through consultations, and revalidated through the ASP as the key desirable outcome of revitalizing the agriculture sector. Traditionally, food security has always been achieved through sustainable agriculture and fishing practices relying mostly on traditional food crops and then later, as demands continued to grow for more variety and quality, imports were brought in to supplement these excess demands. However, the ever increasing reliance on imports, effects of climate change, decrease in efforts, migration and the attraction of other high yield sectors have resulted in the threatening of local food supply and questions about its ability to sustain local livelihoods and nutrition have become an issue.

12. Subsistence farming in traditional crops (taro, bananas, cocoa and cassava) and livestock (cattle, piggery and poultry) is primarily encouraged to enhance production for national food security and target poverty alleviation. Government has continued to promote a targeted community based program "Talomua" to encourage people to go back to the land and ensure adequate access to traditional crops and livestock.

13. Samoa is challenged by rapidly increasing levels of food and nutrition related diseases (including diabetes, hypertension, obesity, coronary heart disease etc.) which impact negatively on the health

system, families and the national economy. These diseases are now the leading cause of death in Samoa as obesity rates have grown from 25.5% in 1978 to 67.5% in 2001⁷, among the highest rates in the world. Consequently, the government is prioritizing the production and consumption of local food products with high nutritional value as reflected in the Fruits and Vegetables Strategy.

2.2.5 Agricultural Trade Developments

Overview

14. Samoa runs a significant balance of trade deficit, the value of imports being some sixteen times greater than exports. The real contribution of the export sector to Samoa's economy has generally deteriorated over the last decade which is cause for great concern. Facilitating trade and improving exports remains a key priority for Samoa.

15. Samoa's trade deficit in 2009 was approximately SAT 151 million, with merchandise exports estimated at SAT 8 million and imports totalling SAT 159 million. Agricultural based commodities currently make up 92% or SAT 7 million of total merchandise exports and other than fish exports, there are no other major commodities that can stem the decline on the export side. Imports of food based products including fish, meat, fruit and vegetables have grown from SAT 120 million in 2006 to SAT 165 million in 2009. However, potential exists for substituting these with similar locally made products and will thus have a significant impact on reducing Samoa's current trade imbalance.

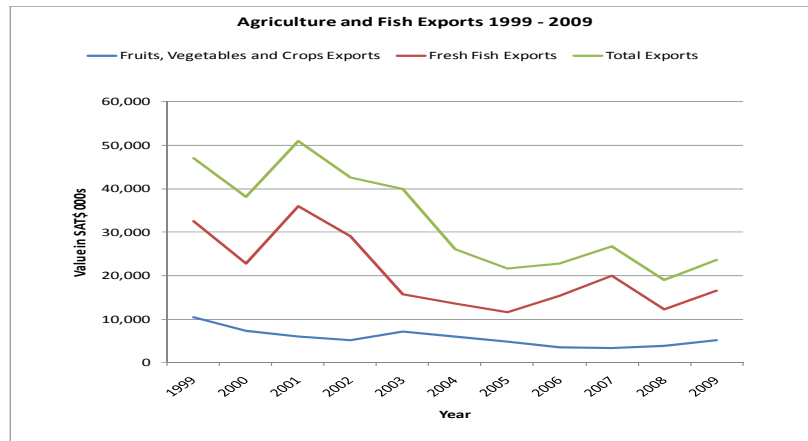
16. The National Export Strategy (NES) 2008-2012 identifies eleven objectives to achieve its vision and five sectors (including agriculture) that are key to the improved export performance of the country. Important strategies include legislation and enforcement of food safety standards, developing a Samoan brand, developing organic products and certification, establishing fair trade products registration and regulation, training on HACCP and ISO certification of business processes and carrying out value chain analysis of potential products. Building an abattoir to service the meat industry is also identified as important. Improving standards for export products in line with the demands of trading partners is recognized as critical. This will mean negotiating market recognition/access agreements with guidelines for products established and adopting tropical Codex standards for products of interest.

Exports

17. The performance of agricultural exports over the years has also been declining due to falls in the exports of coconut products (copra, oil and cream) despite recovering fish exports (*Figure 6*). The boom in exports of the agricultural sector in the early 2000s was driven mainly by the thriving exports of fresh fish despite the stagnating agricultural commodity exports. However, the downward trend of fish exports and further deterioration in agricultural commodity exports in the latter part of the 2000s (*as shown in Figure 6*) has dragged down the trend in exports. Some of the main factors identified as contributing to the decline in agricultural exports, were the dramatic decline in world prices for these products as well as supply constraints.

⁷ Source: Health Sector Plan

Figure 6: Total Value of Agricultural Exports ('000 tala) 2005/06 – 2009/10⁸



Source: Central Bank of Samoa, Bulletins 1999-2009

18. An assessment of the current market opportunities⁹ over the last decade shows that the key product that stands out with the greatest export potential in the short to medium term is fish and coconut based products. Export earnings of nonu based products have decreased over recent years and it is believed that key markets such as Japan and China are now fully saturated as such minimal growth is expected for such products. Taro exports on the other hand are still recovering and are expected to have significant export potential in the medium to long term *Table 1*:

Table 1: Export by Commodity (SAT 000) 2000-2009

Export by Commodity (SAT'000)										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coconut Based Exports										
Coconut Cream	7	7	8	7	7	8	7	7	6	5
Desiccated Coconut					0	0.9				1
Coconut Oil			5	2	3			0.2	0.3	6.7
Copra Meal	0	0	0.6	0.2	0.3					1.1
Coconuts						1	1.3	1.6	1.8	
Copra					0	0	0	0	0	0
Sub-Totals	7	7	13.6	9.2	10.3	9.9	8.3	8.8	8.1	13.8
Nonu Based Exports										
Nonu Fruit	1	1	1	2	5	3	3	2	1	1
Nonu Juice	1	2	2	9	17	24	10	11	10	8
Sub-totals	2	3	3	11	22	27	13	13	11	9
Taro Exports										
Taro	2	2	3	4	4	2	2	2	4	3
Sub-Total	2	2	3	4	4	2	2	2	4	3
Overall Total	11	12	19.6	24.2	36.3	38.9	23.3	23.8	23.1	25.8

Source: Central Bank of Samoa, Bulletins 2000-2009

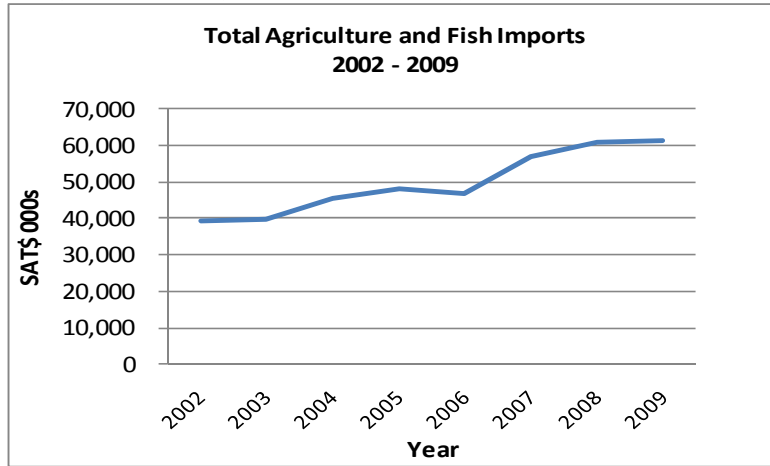
⁸ Includes Banana, Coconut Cream, Coconut Oil, Coconuts, Copra, Kava, Nonu fruit, Nonu juice, Taamu, Taro

⁹ Samoa Diagnostic Trade Study – Final Draft, December 2010

Imports

19. Over the past seven (7) years, Samoa’s imports of agricultural and fish products have increased by around 50% despite efforts to promote the use of local fish (see *Figure 7 below*):

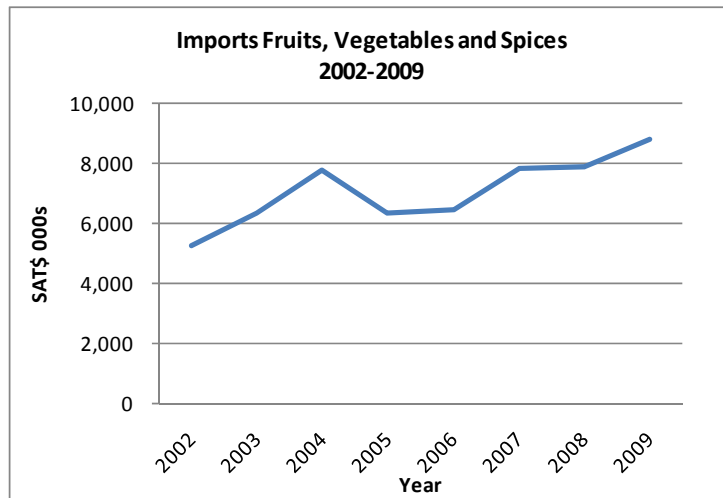
Figure 7: Total Agriculture and Fish Imports 2002 - 2009



Source: Finance Statistics Division, Samoa Bureau of Statistics

20. Furthermore, despite collaborative efforts between the agriculture and tourism sectors in promoting the use of local produce by the local hotels and restaurants industry, data shows the imports of fruits, vegetables and spices have almost doubled in the past 7 years (see *Figure 8 below*).

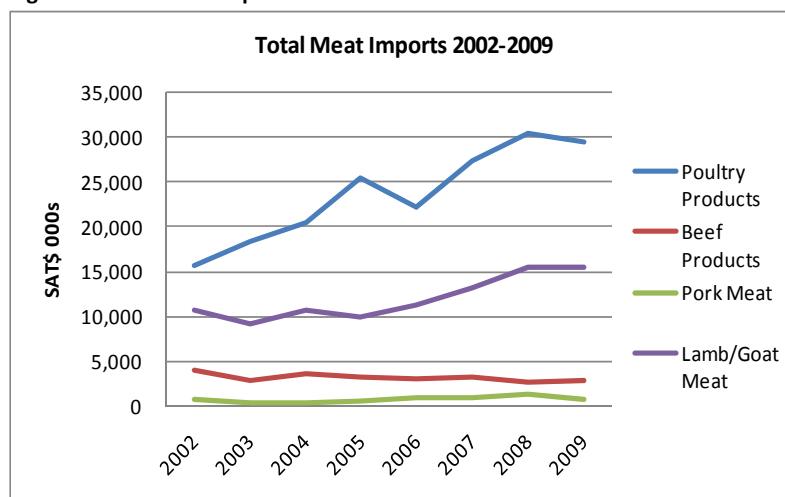
Figure 8: Imports of Fruits, Vegetables and Spices 2002 - 2009



Source: Finance Statistics Division, Samoa Bureau of Statistics

21. Imports of meat products have been increasing consistently over the years due to the inadequacy of local supply. Despite efforts by local poultry farmers, poultry is by far the highest meat product import in the last seven years (refer to *Figure 9 below*).

Figure 9: Total Meat Imports 2002 - 2009



Source: Finance Statistics Division, Samoa Bureau of Statistics

22. Key sub-sectors that have been identified for greatest import substitution potential include livestock and fruits and vegetables. As noted in Table 2 below, total imports of such products now constitute 30% of Samoa's total imports.

Table 2: Imports Classified by Broad CCCN (1) Classification

IMPORTS CLASSIFIED BY BROAD CCCN(1) CLASSIFICATION					
Amounts in Tala thousands, fob					
Description	2005	2006	2007	2008	2009
Live animals and animal products	48,749	46,276	56,897	62,684	60,360
Vegetable products	20,789	22,762	26,695	32,864	33,616
Animal and vegetable fats and oils	3,983	3,633	3,598	6,688	4,590
Prepared food stuffs; beverages and tobacco	46,501	55,201	61,809	67,232	66,821
Sub-Total	120,023	127,873	148,999	169,469	165,387
Total	507,712	607,812	593,640	659,187	558,779
% of Total Imports	24%	21%	25%	26%	30%

Source: Central Bank, 2005 – 2009 Bulletins

23. For livestock, potential per annum earnings for domestic farmers based on the current value of imported livestock related products is approximately SAT 32 million¹⁰ and for the Fruits and Vegetables based products around SAT 16.5 million¹¹. Notably the Fruits and Vegetables stakeholders have recently completed a comprehensive strategy to address these potential earnings and contribution to the overall growth of this particular segment of the agriculture sector.

¹⁰ Based on assumption that domestic farmers can supply 50% of the domestic demand for live animals, animal products, animal and vegetable fats and oil.

¹¹ Based on assumption that domestic farmers can supply 50% of the domestic demand for vegetable products.

2.3 Sub-sector Performance

2.3.1 Overview

24. The declining performance of the agricultural sector largely reflects the lack of investment and financing in the sector over the last decade with the profitability of many traditional crops becoming marginal due to high costs of production coupled with declining world market prices for agricultural products. The situation has been compounded by the lack of investment in commercial production in the absence of a clear framework covering legal, policy and administrative processes to access and secure customary land property rights resulting in investors shying away from the sector.

2.3.2 Crops

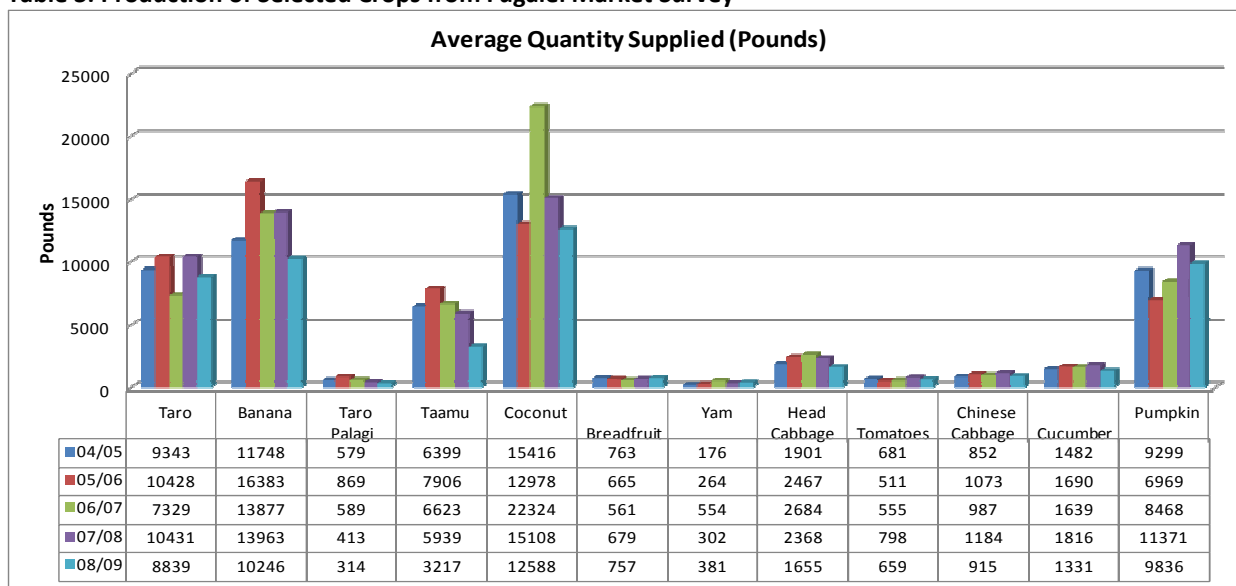
25. Traditionally the production of tree and food crops has dominated Samoa's agriculture. Of the total arable land utilised of 80,500 ha, it is estimated that 65 % is for cultivation of plantation crops (53,000) and 15% under mixed crops (10,000 ha). However, the impact of natural disasters, namely hurricanes and infestation by pests and diseases such as the taro blight in the late 1990's have contributed to the decline in crop production in the past two decades. The destabilising effects of external shocks have also affected the performance of Samoa's crop exports due to exchange rate movements as well as changes in the economic policies of major trading partners. The lack of institutional capacity to competently implement, monitor and evaluate the impact of previous investments as well as the failure of farmers and producers to respond to incentives provided have also contributed to the decline in crop production.

26. Traditionally Samoans have relied on coconuts, bananas, root crops, breadfruit and fish for much of their diet. These commodities together with a wide range of fruit and vegetables are traded in local markets especially at Fugalei Market and Salelologa Market. The other principal fruits include pineapples, papaws (papaya), mango, breadfruit and avocados. Vegetables principally include peas and beans, tomatoes, capsicum, laupele, egg plants, pumpkins and Chinese cabbage.

27. In the absence of a reliable database on agricultural production, the following production estimates for some key crops have been gauged through the Fugalei market surveys¹² and anecdotal evidence from previous studies.

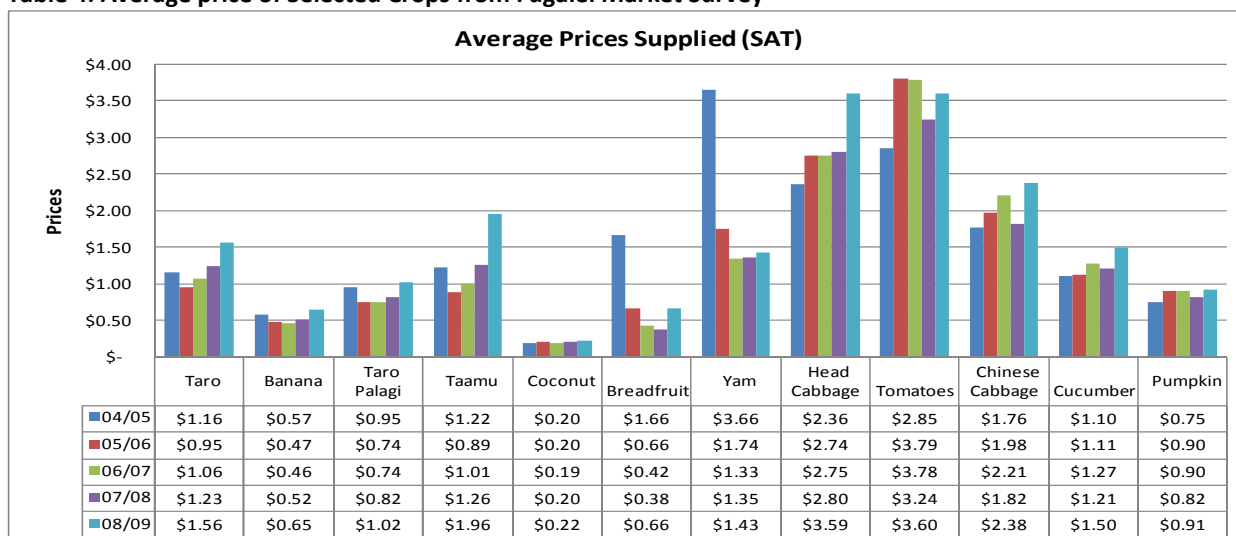
¹² The Fugalei Market Surveys conducted by the Samoa Bureau of Statistics assess the average quantity supplied and weighted average prices of only twelve key crops.

Table 3: Production of Selected Crops from Fugalei Market Survey



Source: Central Bank Bulletins, 2004-2009

Table 4: Average price of Selected Crops from Fugalei Market Survey



Source: Central Bank Bulletins, 2004-2009

28. Taro is grown primarily for local consumption but became a major export earner in the 1980s and early 1990s with taro exports estimated at SAT 16million in 1989. However, the outbreak of taro leaf blight (TLB) in 1993 destroyed the crop. Nevertheless taro production has increased as TLB resistant varieties have become available based on a market appraisal study undertaken by FAO in 2004 which indicated that there were around 4000ha of *taro Samoa* planted illustrating a resurgence in efforts towards this variety. Prices at the Fulagei market for taro have increased over recent years to average around \$1.16 to \$1.56 per lb with supply averaging around 9,000lbs to 10,000 lbs. Exports for taro have now slowly recovered again and were estimated to be between SAT 2million – SAT 4million from 2000 to 2009 despite the export markets in New Zealand being dominated by Fiji, Tonga and Niue who

supplied the preferred original Samoa variety during the periods of TLB and have since continued this trend.

29. Coconuts remain an important cash crop for Samoans. Copra and coconut products used to be important export commodities with figures recorded in 1983 of 3,175 mt of copra and 12,207 mt of coconut oil exported. Exports of coconuts and coconut products since the late 1980s have been relatively nonexistent however in the past few years the production of coconut oil for export has slowly increased following private sector investment in coconut processing. Sales of coconuts through the Fugalei market have been fairly stable at 13000 to 19000 lbs per month over the past five years. But this is a limited market when compared to the processing plants combined demand for 400,000 nuts per week.

30. Cocoa is another long established crop for domestic consumption and was also a major source of export revenue however like coconuts, it also declined in the 1960s and early 1970s and very little replanting has taken place since then. Current cocoa production of up to 1000 tonnes comes mainly from smallholder producers however these trees are generally very poorly maintained with very low yields. Cocoa production was estimated to have peaked in the early 1960s and from then there has been a steady decline in production although a considerable quantity of cocoa is consumed by rural households.

31. A major industry review was undertaken to examine ways to revitalize the cocoa industry¹³ which indicated the need for substantial production expansion to ensure processing viability but recognizes that this relies on strong government support e.g. production on government estates and support to growers to substantially lift yields. Any strategy to expand exports will need to address plant health issues and quality issues for cocoa beans and for the cocoa paste now produced in the informal processing sector.

32. Banana is an important food source and in the 1950s was a major export product to New Zealand. Although Samoa exported considerable quantities of bananas to New Zealand this market is now largely supplied by Ecuador due to inconsistent supplies by Samoan exporters as a result of diseases affecting the crop which included black leaf streak and bunchy top virus. Recent efforts to export organically grown bananas have stalled as a result of quarantine access to the New Zealand market.

33. Kava was a major export crop for Samoa before the ban by Europe on imports. However, there is a strong domestic market for kava with most supplies to the Fugalei market originating from Fagaloa village on Upolu. Although the European market remains closed, there have been concerted efforts taken by Pacific Island kava producing countries to reopen the export market.

¹³ *“Feasibility of Reviving Cocoa as a Major Industry: Strategic Overview”*, Policy, Planning and Communications Division, Ministry of Agriculture, August 2010

34. MAF has taken a number of initiatives in developing existing as well as the introduction of new crops. The development of a detailed strategy for fruits and vegetables nationwide is aimed at linking the markets back to the production of fruit and vegetables by farmers. MAF has also developed a pilot vegetable farm for transferring skills and management practices to the small farmers. To assist in the export of fruit and vegetables, MAF has outsourced the use of its heat treatment plant to the private sector and is also providing technical support in ensuring compliance with the quarantine requirements of overseas markets. Currently export quarantine protocols (Bilateral Quarantine Agreement) are in place with New Zealand for taro, eggplants, breadfruit and pawpaws (papaya).

35. Based on a recent study¹⁴ on gross margins of selected crops, *Table 5* outlines a list of top twelve crops with high economic potential. Notably, vegetables seem to have a higher return per investment and for the root crops, key commodities include taro and coconuts for drinking.

Table 5: Economic Potential of Selected Crops

Crop	SAT	SAT
	Gross Margin per hectare	Return per Man-day
Cucumber	\$ 440,000	\$ 2,739
Taro (Samoa)	\$ 20,000	\$ 536
Tomatoes	\$ 64,000	\$ 179
Potato (Irish)	\$ 19,500	\$ 169
Lettuce	\$ 20,000	\$ 160
Papaya (Year 2)	\$ 33,000	\$ 158
Taro (Palagi)	\$ 12,500	\$ 126
Banana (Year 1)	\$ 22,000	\$ 106
Coconut/drinking nut	\$ 5,000	\$ 84
Capsicums	\$ 16,650	\$ 78
Pineapples (Year 2)	\$ 11,250	\$ 69
Chinese Cabbage	\$ 67,500	\$ 59

Source: Ministry of Agriculture and Fisheries

2.3.3 Livestock

36. Livestock development is important in diversifying agriculture and in providing national food and nutritional security. The main livestock animals raised for domestic consumption in Samoa are cattle, poultry, pigs, goats and more recently sheep.

37. The national cattle herd in 1984/85 was estimated to be 20,052. Of these about 8,700 were owned by small producers in the villages, 7,824 belonged to WSTEC (now STEC), 1,028 were in cattle farms owned by Government primarily for the purpose of producing high quality sires for the national herd and also for demonstration and training programmes. Commercial producers operating on freehold plantations owned 2,500 head of cattle. As of 2009 it is estimated by the Agriculture Survey that the national herd has reached 42,219 compared to 28,000 in 1999.

¹⁴ Final Draft - Budgets for Production of Selected Fruit, Vegetable, Root Crops and Other Crops, Agriculture Component of the ICCRA HSS Project, July 2010

38. Poultry has traditionally been raised for domestic consumption. Van Wissen¹⁵ estimated there were between 250,000 and 270,000 chickens in the village sector in 1978. Various attempts in the past years to establish commercial egg production have not been entirely successful due mainly to poor management, high feed price and low producer margins. Recent establishment of a feedmill using local ingredients has improved the choice of farmers in accessing a reliable and cost effective feed whilst broiler production has remained undeveloped. As of 2009 it is estimated by the Agriculture survey that the total number of chicken was 307,028 which is a drop from 1999 which was 431,000.

39. Pigs have traditionally been important in village life for ceremonial occasions and for domestic consumption. Van Wissen's survey data indicated a pig population of between 110,000 and 120,000. There have been attempts to introduce commercial pig farming in the villages with mixed success and productivity has been relatively low. The Agriculture Survey 2009 estimated that there were 152,140 pigs compared to 167,000 in 1999 reflecting a drop in number of pig farms. The recent establishment of an integrated commercial feedmill and pig farm has shown that there is a potential for commercial pig farming and related processing of pork if there is a reliable and cost effective source of feed and availability of markets. The MAF Avele facilities have been leased to the private sector for meat processing to nurture the industry in meat processing to support livestock development initiatives.

40. Renewed interest in goat farming followed the establishment by the USP School of Agriculture in Apia of a small flock of goats imported from Fiji. Moreover, goat production was subsequently promoted under an IFAD livestock project whilst sheep farming was introduced in 2004 as part of the livestock diversification efforts. According to the 2009 Agriculture Survey there were 168 goats compared to 2000 goats in 1999 reflecting the sharp drop in goat farming attributed to the lack of markets for goat meat.

41. A recent livestock initiative has been launched for the development of sheep farming using a tropical bred sheep patented by Fiji. MAF is assisting the farmers through the breeding and provision of extension services to selected sheep farmers. Furthermore, the 2009 Agriculture Survey recorded 500 sheep compared to the initial stock of 44 in 2004 and is estimated to have grown to about 600 at end 2010.

42. Beekeeping is a diversification option for many village operators. There is some domestic beekeeping with most honey being a darker thinner type of honey based on coconut flowers and some of this product is exported. There are an estimated 400 hives in Samoa and a potential based on flora availability for 5000 hives however bee equipment at present is imported and expensive. There is a Bee Keepers Association and WIBDI has assisted in funding a project focused on promoting beekeeping in some areas for village level production with an estimated 30 families involved.

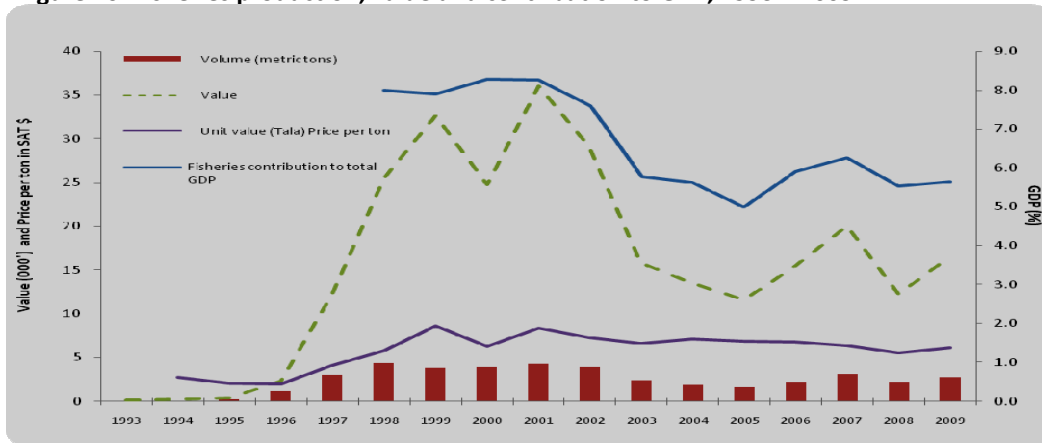
¹⁵ Van Wissen, H.L.M, Preliminary Estimates of Pigs, Cattle and Poultry Population/Distribution Within the Village Agricultural Sector, Working Paper No 9, DAFF, June 1978

43. Water use for irrigation and livestock use is limited at present. The Livestock Sector Review 2004 identifies the need to establish policies for rural water supply focused on agricultural use to assist the sector's development. Furthermore, the Water for Life 2008/09 – 2011/11 document highlights that this is not likely to compete with other water uses nor will it increase the stress on available water resources whilst ultimately recommending that strategies be considered for irrigation provision to rural areas to assist in enhancing farming outputs and productivity.

2.3.4 Fisheries

44. The fisheries sector relies mainly on its offshore and inshore reef and lagoon fish resources. The total offshore fisheries output for 2001 was estimated at 6,180 mt valued at SAT 50.7 million with 80% exported valued at SAT 45 million (Faasili & Time, 2006). Official estimates from the Central Bank of Samoa (CBS) show that exports of fish grew from more than SAT 25 million in 1998 to SAT 36 million in 2001 however, export values post - 2002 declined to as low as SAT 11.5 million (2005) and despite a slight improvement in 2007 valued at SAT 20 million has continued to decline in the following years. The variability in the reported data as exhibited for 2001 is attributed to the periodic pricing of fish used by MAF to estimate values while CBS utilises an annual average to value production. Therefore, although both agencies utilise the same provisional forms to record data, estimates for the value of fisheries still differ thus emphasizing the need for quality control of the data (Gillet, 2009).

Figure 10: Fisheries production, value and contribution to GDP, 1993 – 2009



Source: Extracted from CBS export data tables (extracted values). "000"- Thousands of tala.

45. From late 2002, catch volumes have decreased significantly with the lowest volumes recorded for total offshore fisheries in 2005 (1,664 tonnes). This downturn of events was felt across the region with most countries experiencing low catch rates for albacore tuna and in some cases have not fully recovered (Langley, 2006).

46. The inshore coastal fishery of Samoa plays a vital role in the livelihood of village economies with an estimated subsistence catch of 7,169 tons valued at SAT 45 million in 2000 (Passfield, 2001). However, there has been a noticeable decline in inshore resources which has been linked to the use of destructive albeit efficient fishing methods, loss of habitat and increased commercial harvesting traded

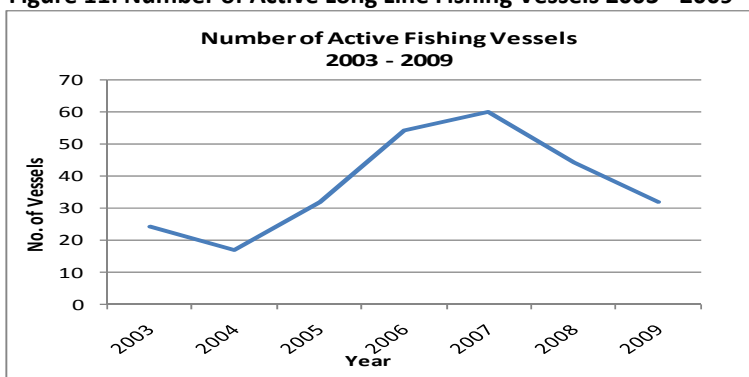
fresh or processed and for 'faaso'¹⁶ for family and relatives overseas. Land reclamation and road construction have also been known to destroy fish nursery areas and poor land management has led to erosion and consequent siltation of lagoons. The emphasis therefore for the subsector is conservation and sustainable management.

47. The 2009 agriculture census showed that 24.8% of households were engaged in fishing reflecting a 24% decline in the proportion of households engaged in fishing over the past decade (from 32.6% in 1999). The 2009 agriculture census also indicated that the vast majority fished mainly or entirely for home consumption, and only a small portion fished for commercial reasons.

48. Offshore long line fishing, predominantly tuna fishing, has been very consistent in leading the export earnings for the country since its humble beginnings in the early 1990's. At present, the industry is faced with the challenge of optimizing benefits and returns to the industry and the people of Samoa while at the same time ensuring that the fish stocks available within the EEZ are harvested in a sustainable manner.

49. The trend of the number of active fishing vessels licensed between 2003 and 2009 saw an average 14% decline in fishing vessels between 2007 and 2009 as shown in *Figure 11* below.

Figure 11: Number of Active Long Line Fishing Vessels 2003 - 2009

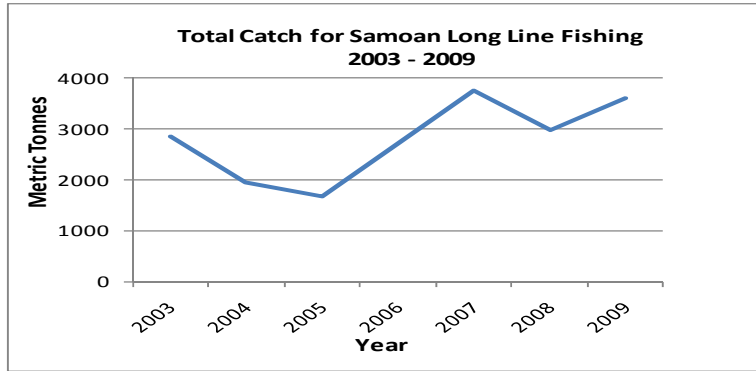


Source: Fisheries Division, Ministry of Agriculture and Fisheries

50. *Figure 12* below shows that despite the fall in the number of active fishing vessels shown above, the total landed catch for the period illustrated an increasing trend. However, export values for the period were low due to the fall in unit value of fish attributed to global market prices as well as the global economic crisis in 2008 to 2009.

¹⁶ Consignments of seafood sent as gifts to relatives overseas.

Figure 12: Total Catch (tonnes) for Samoan Long Line Fishing 2003 – 2009

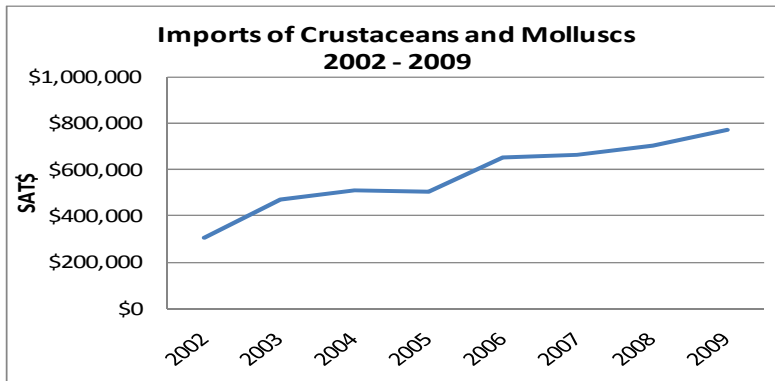


Source: Fisheries Division, Ministry of Agriculture and Fisheries

51. Loining and canning of fish has been explored by a Government task force which was set up in 2010 to examine a possible option for one of the fish canneries in American Samoa to relocate some of its labour intensive fish processing operations in Samoa. Asau has been identified as potential site but there are a number of uncertainties to be addressed before such a project could materialise.

52. One area of potential in the fisheries subsector is aquaculture. The development of nurseries and farms for harvesting crustaceans and molluscs for local sale and use could eventually lead to exports if well managed. Data shows that the imports of crustaceans and molluscs to Samoa between 2002 and 2009 has more than doubled and is likely to continue increasing (*Figure 13* below). This shows the high and growing demand for these products as the tourism sector continues to grow.

Figure 13: Imports Crustaceans and Molluscs 2002 - 2009



Source: Finance Statistics Division, Samoa Bureau of Statistics

2.3.5 Forestry

53. The forest sub-sector has developed a new logging code of practice, reviewed timber prices, undertaken resource inventory mapping, and has reviewed legislation, as part of its new forestry sub-sector plan. The aim is to develop new ways of protecting the remaining indigenous forest resources and accelerating reforestation so that a viable forest sector and stakeholder communities are sustained.

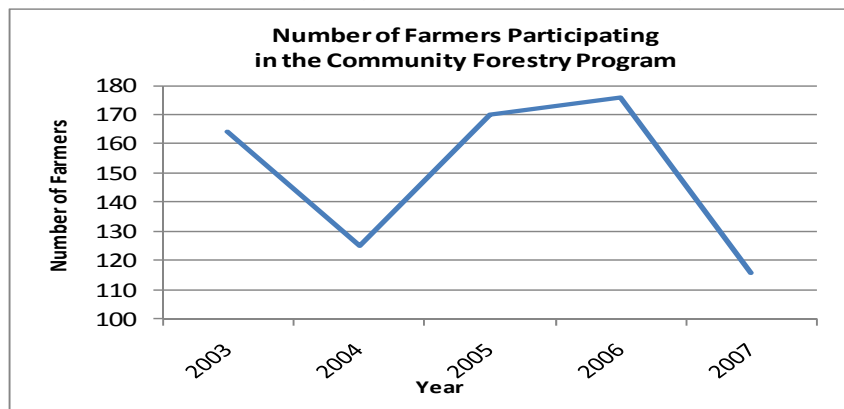
54. During the last three decades, Samoa’s forests have been depleted to the point of near exhaustion. In 1989 it was estimated that 192,000 ha was under forestry, secondary forestry or scrub

equivalent to 70% of total arable land. However, remapping of the forest resource in 2003 – 2004 provisionally concluded that there were very few areas of closed canopy forest remaining in Samoa with little re-forestation efforts. The depletion of large tracts of tropical hardwoods which formed the basis of the commercial sawmills in the 1980s has led to increased focus on sustainable environmental management of the forest resources with selected targeted commercial forest plantations in high value tropical hardwoods. The shift in policy focus led to the relocation of the Forestry Division of MAF to the MNRE. A further policy review is currently examining the relocation of forestry from MNRE to an independent forestry agency in Government.

55. In 2000, there was estimated to be about 2,500ha of state plantation forest, mostly young mahogany with a maturity period of 25 years, while community forestry programs have had limited success. The 2009 agriculture Census indicates that there has been a 26% reduction in the percentage of households participating in planting forest trees since 1999, indicating the limited number of people available to work in community forestry programs as the harvesting of forestry products is a timely process. However, the MNRE has indicated that at the moment 105 hectares of land is currently under the forestry program.

56. In 2004, a Project Identification Brief for a Community Forestry Program prepared by the then Ministry of Agriculture, Forests, Fisheries and Meteorology was submitted to AusAID for funding support¹⁷. The Brief noted that Samoa had less than one year of commercially viable available indigenous forest resource available, and proposed a five year program aiming to “increase widespread commitment to sustainable woodlot farming and therefore increase community income and revitalize the forestry industry”.

Figure 14: Farmers Participating in Community Forestry Program 2003 – 2007



Source: Fisheries Division, Ministry of Agriculture and Fisheries

¹⁷ The CDC brief prepared by MNRE in May 2010 indicated that the Forestry Division has implemented a Community Forestry Program (CFP) since 1999. To date, 892 farmers have participated in the CFP Program, in which an estimated 120,000 trees have been planted on agricultural land. The existing CFP provides a starting point for the design of the new SAP.

57. Farm agro-forestry is seen as a viable option. The decline in native forest resources means that integrating timber species within the farming system is of increasing interest to many farmers, both for subsistence and commercial purposes, and the interest is expected to increase when the full commercial value of timber is realized. Efforts to improve land conservation and management are being focused on managing forest areas whilst continued assessment of the state of forest protected areas in the country will be considered as well as efforts towards exploring carbon sink initiatives.

58. Samoa has globally significant biodiversity, but biodiversity conservation - whether in formally protected areas (PAs) or the wider production landscape – needs strengthening. The establishment of PAs and other conservation measures are complicated by customary land ownership arrangements, which require that local communities are consulted and agree to any such changes. Furthermore, because agriculture and natural resource extraction is a crucial part of local livelihoods, communities need incentives to agree to restrictions on their activities in PAs and to change their forest and land management practices to ones that enhance biodiversity protection and are generally more sustainable.

2.4 Cross Cutting Issues

2.4.1 Land Use

59. Agriculture in Samoa is a smallholder activity practiced using labour intensive technologies. Farm size is typically less than 10 acres. Soils are of volcanic origin and generally very fertile. Farmers use a variety of mixed cropping techniques for ground crops (e.g. taro with other crops), ground crops in association with bananas), or “stage” cropping of tree crops (typically cocoa under coconut); cattle-raising is often integrated with tree crops (typically cattle grazing under coconut trees). An FAO funded study in 2004, estimated that only 80,500ha or about 28% of the total land mass is under regular agriculture or livestock production. The same report provided the following details on land use and distribution of the total land mass across land use categories:

- 53,000 ha or 18.6% (sole) plantation crops;
- 10,000 ha or 3.6% is under mixed cropping;
- 17,500 ha or 6.2% is classified as grassland;
- 192,000 ha or 68% is classified as forestry, secondary forestry or scrub;
- 10,800 ha or only 3.2% has no agricultural potential being urban land, barren land (lava) lakes or wetlands.

60. A comprehensive manual¹⁸ developed under the ICCRAS project provides the mapping of soil types and identification of potential locations in optimising use of the arable land available for agriculture highlighted in **Annex 1: Soil Suitability Analysis**. The manual provides agricultural extensionists and researchers, planners, farmers and others working in the rural development sector

¹⁸ Soil resources interpretative reference manual for Samoa, April 2010

with a ready guide to the field of soils, soil attributes important for optimal crop growth, information about soil fertility, and an assessment of the suitability of the soils to grow a wide range of fruit and vegetable crops.

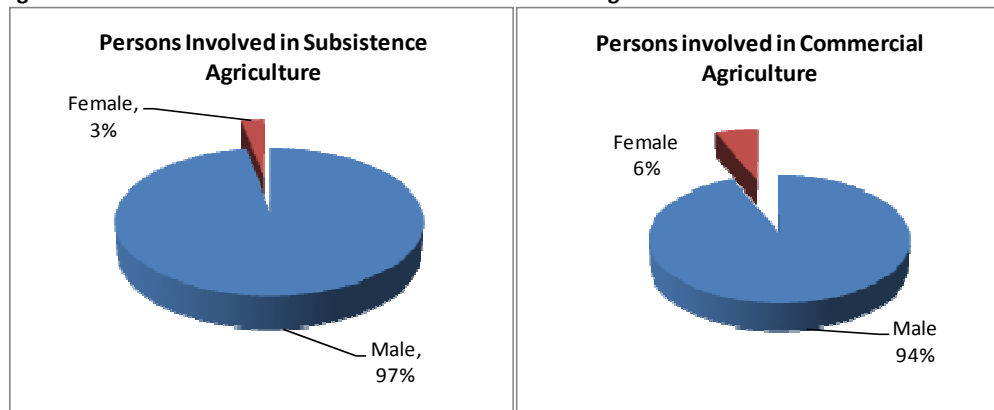
61. The Government is now taking the initiative of developing the strategic planning framework for the longer term development of the sector and has already taken steps to promote greater economic use of customary land focussing primarily on addressing the following outputs:

- Amendments to the Alienation of Customary Land Act 1965 to further promote appropriate economic use of customary land through leasing arrangements;
- Streamlined administration processes for entering into leases on customary land;
- Improved registration, mapping and availability of information on customary land titles and boundaries;
- Implementation of institutional arrangements for appropriate government involvement in matters related to economic use of customary land.

2.4.2 Gender

62. Data from the 2008 HIES shows the majority of labour intensive activities in both subsistence and commercial agriculture and fisheries are undertaken principally by males with less than 10% done by females (*Figure 15* below). This highlights the potential for increased involvement participation of women in the future development of the sector. Work undertaken by Women In Business Development Inc. in recent years to promote the participation of women in commercial type businesses based on organic farming have increased the proportion of females active in commercial agriculture activity.

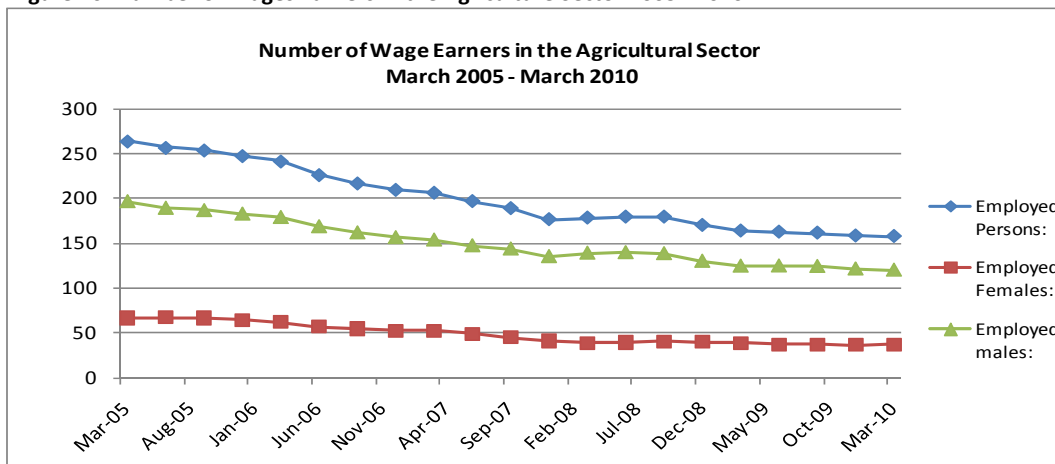
Figure 15: Persons Involved in Subsistence and Commercial Agricultural Activities



Source: Household Income and Expenditure Survey (HIES) 2008, Samoa Bureau of Statistics

63. Gender inequality is also exhibited in the formal employment statistics for the agriculture sector with more males being employed than females as shown in *Figure 16* below.

Figure 16: Number of Wages Earners in the Agriculture Sector 2005 - 2010



Source: Finance Statistics Division, Samoa Bureau of Statistics

64. Figure 16 above also shows that the number of employed persons in the formal agriculture sector has steadily fallen over the period shown for both females and for males.

2.4.3 Youth

65. One of the key issues noted in the sector is that the capacity for involvement of the youth¹⁹ in agriculture is quite limited. Based on the 2006 census findings, approximately 51% of the total working population are considered to be in the youth category and less than 10% are directly employed in the sector. This is partly attributed to issues to access to, and control over, productive resources (land and capital) as well as limited knowledge and skills in modern farming techniques. Another key factor is that the majority of the youth are now engaged in service based jobs and other small income generating projects and will be reluctant to persevere in agriculture.

66. In rural areas, young men and women contribute significantly to family labour and food security as such their role is identified as a crucial factor in supporting youth engagement in agriculture. For young people to see agriculture as a possible career option, they must be supported in developing appropriate business skills, accessing land and credit and having control over the financial returns from their activities. The immediate support groups including the church, family, community and school, also play an important role in encouraging youth engagement in the sector.

67. With the stagnating population growth rate and increasing urbanisation it will become increasingly urgent that ways are found to engage with this untapped labour force.

¹⁹ Youth – in the ASP is identified to be between the ages of 15-29 years of age

2.4.4 Environment

68. Agricultural activity has impacted on land use, soil, water, biodiversity and the landscape. Specifically, there are a number of key emerging environmental issues in agriculture with significant implications on the future productivity and sustainability of the sector. These include:

- Land degradation including erosion, compaction and overuse;
- Agro-chemical pollution of ground and surface water;
- Loss of strategic forests and wetlands leading to loss of biodiversity;
- Increasing livestock numbers imposing pressure on ecosystems and watershed systems;
- Loss of biodiversity in agricultural landscapes through the introduction of non-native varieties;

2.4.5 Climate Change Adaptation

69. Climate change will have significant implications on agricultural development. The implications of disruptions to the sector in lieu of lack of adaptation strategies will be immense in the sense that a large percentage of the population depend on the sector for their subsistence living. Building the resilience²⁰ of farmers and the rural poor to cope with climatic fluctuations is key to a sustainable trade in agriculture produce and products. Matching usable science-based climate change prediction information needs to farmer needs by taking into account traditional practices incorporating existing local knowledge and experience is crucial in this case. Strengthening the capacity of farmers and producers to manage their resources (e.g. savings, credit schemes, agriculture inputs, agricultural production, land use, etc) is equally important.

20 Building economic resilience means strengthening competitiveness to take advantage of international trade opportunities which in turn contributes to economic growth by creating jobs, enhancing the private sector, and raising the standard of living.

3 Chapter 3 Current Agricultural Institutional and Funding Framework

3.1 National Development Strategies

1. Samoa's overarching national planning document is the Strategy for the Development of Samoa 2008 – 2012 (SDS 2008 – 12). The SDS was formulated on the basis of an extensive consultative process involving government agencies, the private sector, civil society organisations, church leaders and community groups.

2. The national vision of the SDS 2008 – 2012 is:

Improved Quality of Life for All

3. To successfully realize the achievement of the national vision, the Government of Samoa realizes, through the SDS, the need to ensure improvement in the quality of life for all Samoan citizens through collaborative partnerships with its citizens and development partners. The vision calls for concerted action to ensure that the national development and reform agendas bring about sustainable improvements in living standards and wellbeing of all Samoan citizens while at the same time also ensuring sustainable management of Samoa's natural resources and environment for future generations.

4. Samoa currently does not have an overarching strategic plan for agriculture development however; several policy and strategic initiatives related to the medium to longer term development of the agriculture sector have been implemented or are currently being developed. These are briefly summarised below.

3.1.1 Other Key National Strategies and Projects

- Samoa-Australia Partnership for Development: Priority Outcome 1– Private Sector Growth and Employment which aims at increasing the contribution of agriculture to GDP by supporting private sector development, promoting regional economic development and trade liberalisation, improving infrastructure and lowering the cost of doing business.
- National Export Strategy of Samoa 2008 – 2012: highlights the deterioration of the export sector since the 1980s. Accordingly the strategy highlights increased productivity in agriculture as critical to the revitalisation of the export sector.
- Fruits and Vegetable Strategy 2009: The strategy's main objectives are, (i) enabling the agriculture sector to increase its contribution to the economy by better capitalising on existing and potential market opportunities and attracting direct investment, (ii) articulating and implementing value chain actors to address issues relating to market standards and requirements, and (iii) mobilising resources for implementation of the strategy.
- Diagnostic Trade Integrated Study 2010: the main objective of the study is to identify key constraints, both internal and external, to Samoa's trade development and make

recommendations on actions, in terms of legislation and policy framework changes, institutional reforms, capacity development and training, trade negotiations, to address these constraints and to mainstream trade development into Samoa's strategic planning frameworks.

- Integrating Climate Change Risks in the Agriculture and Health Sectors in Samoa (ICCRAS & HSS) 2008 – 2012, UNDP (part of NAPA 1 initiatives): The main objective of the project is to increase the resilience and adaptive capacity of coastal communities to the adverse impacts of climate change on agricultural production and public health.
- Proposed Samoa Agriculture Competitive Enhancement Project, World Bank: The project aims to strengthen the livestock and fruits and vegetables sub sectors through market development support.

5. More details of these strategies and projects are provided in ***Annex 2: Detailed Key Initiatives in the Sector.***

3.2 Sector Institutional Framework

3.2.1 Overview

6. Improving the performance of the agriculture sector will not only require dealing with policy, legal and regulatory, and institutional issues which affected the sector in the past years but equally important will be some redefinition of roles and changes in the way government, the private sector, development partners and the communities interact and coordinate their respective contributions to achieve the ASP's key policy objectives as well as the effective implementation of sector strategies .

3.2.2 Current role of the public sector agencies

7. Under the SDS 2008 – 2012, government is committed to providing a more facilitative role for the business community and the private sector to invest more of their own resources in increasing agricultural production and productivity. This facilitative role will include providing a stable macro-economic environment, investing in economic infrastructure, improving the enabling environment for development of private enterprise including an appropriate package of non-permanent tax and non tax measures to incentivize private investment in agriculture, facilitating the development of financial schemes targeting the needs of the sector and supporting research of sector development potential through MAF and SROS. Government is also committed to maintain ongoing dialogue with the private sector to build the capacity of private sector organizations and to develop a business enabling environment that will provide greater confidence to the business community and individual farmers to invest more in agriculture. The government is also committed to strengthening the capacity of public sector agencies to provide competent technical assistance and informed advisory services to the private sector.

Ministry of Agriculture and Fisheries

8. The Ministry of Agriculture and Fisheries is the lead agency for the sector and is mandated primarily by the Agriculture, Forests and Fisheries Ordinance 1959 to provide policy, regulation and technical support to the sector. Other mandates include:

- Animals Ordinance 1960
- Export of Meat Act 1997
- Fisheries Act 1988
- Fisheries (Ban on Driftnet Fishing) Act 1999
- Quarantine (Bio-Security) Act 2005
- Produce Export Ordinance 1961

9. The services provided by MAF are guided by its Corporate Plan July 2008 – June 2012, under the theme of:

...Let's go back to the land...

10. The theme reflects MAF's commitment to the revitalization of the sector. The Corporate plan identifies the prerequisites for the development of the sector to be the strengthening of support and extension services, administrative capacity, improved policy and regulatory frameworks, and capacity building of core divisions and staff to enable MAF to effectively engage and support stakeholders in all of the four subsectors of agriculture.

11. The MAF is comprised of the following core divisions tasked with providing key support services and policy regulations to its stakeholders:

- Crops Division
- Animal Production and Health Division
- Fisheries Division
- Quarantine Division
- Policy, Planning and Communications Division (PPCD)
- Corporation Services Division (CSD)

12. The two (2) latter divisions, PPCD and CSD, provide cross cutting support services to the four technical divisions. PPCD is responsible for overseeing the development, monitoring and evaluation of key sector planning and policy regulations.

13. The long term goals of the MAF corporate plan are:

- Improved local food security sources and nutritional security to ensure sufficient supply of traditional healthy food and other food products;
- Improved commercial development and biosecurity to improve trade;
- Integrated and sustainable resources management and development based on sound legislative and policy framework to ensure long-term production systems, technology pool and excellent service.

14. It is intended that the Corporate Plan will be revised and updated once the sector plan is completed to ensure that its functions, organisational structure and strategic priorities will be aligned with the objectives and strategies of the ASP as well as to clearly identify institutional and human resource capacities to be able to coordinate and deliver the effective implementation of the ASP strategies. Furthermore, a more formal sector wide organisation towards the planning, monitoring and evaluation of the MAF's activities will be developed within the ASP period.

Ministry of Natural Resources and Environment

15. Prior to the 2004 realignment of the public service, responsibility for management of the country's forestry resources was under the jurisdiction of the MAF. This responsibility has since been transferred to the Ministry of Natural Resources and Environment (MNRE)

16. The core function of the Forestry Management, Planning and Research Services Division under the MNRE is "... *to ensure sustainable development and management of forest resources in Samoa...*" The key component of the Division's functions to be addressed in this plan relates particularly to community and agro-forestry.

Ministry of Finance

17. The Ministry of Finance (MOF) is the core executing agency for all public sector investment programmes and provides key policy guidance and support for implementing agencies, like the MAF, in ensuring that the national development objectives are met and in line with the allocated resources over a given timeframe. The MOF, through its Aid Coordination and Debt Management Division (ACDM) and Finance Division, will assist the agriculture sector in ensuring that resources are available for the implementation of the sector priorities during the Agriculture Sector Plan (ASP) period. Furthermore, the Economic Policy and Planning Division of the MOF will provide the necessary policy advice and support to MAF and its key stakeholders to guide the implementation of the ASP.

Ministry of Women, Community and Social Development

18. The Ministry of Women, Community and Social Development (MWCSO) through its Village Based Development Services Division (VBDS) provides support services to the agriculture sector through its role of "...*provision of services to the villages to advance village-based development, promote good governance and revive/preserve good cultural practices, to ensure a stable and sustainable rural economy...*". The VBDS will assist the MAF in communicating sector related programs and issues to the communities through their Sui o le Nu'u, Sui o le Malo and Komiti o le Faleula who will then consult with the communities and provide feedback to the MWCSO and MAF. The VBDS also plays a key role in implementing food security programs through community participation in the maintenance of village plantation access roads (not tar sealed) and various community farm programs.

Samoa Bureau of Statistics

19. The Samoa Bureau of Statistics (SBS) is responsible for the collection and compilation of key statistical data that assists in the analysis of the performances of various sectors of the economy including agriculture. The provision of key income and expenditure, production and employment data

will be vital to the measurement and subsequent monitoring and evaluation of the progress of key components and outcomes of the ASP.

Ministry of Commerce, Industry and Labour

20. The Ministry of Commerce, Industry and Labour (MCIL) through its Investment Promotion and Industry Development Division (IPID) also contributes to the sector through its role of “... *to facilitate (the) development ... through active promotion of both local and foreign investment in the country... (and the) ... the development of a sound enabling environment through the provision of adequate, accurate and timely information for investor decision through effective administration of existing programs... aimed at sustaining private sector development...*”. Effective implementation of this key role will assist in ensuring the development of a sound enabling business environment that will encourage increased private sector participation and investment in the revitalisation of the agriculture sector.

Ministry of Foreign Affairs and Trade

21. The Ministry of Foreign Affairs and Trade (MFAT) contributes much to the development and future growth of the agriculture sector by promoting the interests of the agriculture sector in the negotiations of regional and global trade agreements Samoa is engaged in, and by the timely provision of key policy advice on market opportunities and information to ensure the sector is able to effectively respond to these opportunities and reaps as much of the benefits from these agreements as possible.

Ministry for Revenue

22. The Ministry for Revenue (MfR) through its Customs Department in collaboration with the Quarantine Division of the MAF will assist in ensuring that border controls are maintained to safeguard the agriculture sector from pests and invasive species. MfR and quarantine services will also provide exporters assistance not only to ensure export products meet the requirements of overseas markets but also to facilitate and expedite the clearance of exports for shipment.

Scientific Research Organisation of Samoa

23. The Scientific Research Organisation of Samoa plays a key role in the provision of vital research and development services into innovative technology for the possible expansion of value chains for crops and livestock within the agriculture sector. Furthermore, the potential to establish SROS as an accreditation facility would open up local products to international markets. Although SROS is the core research authority for new innovations, the research functions under the MAF will also need to be strengthened to support the Ministry’s efforts to promote high yield and more efficient farming systems and to provide the farmers of Samoa with seedlings and planting materials that are not only resistant to pests and diseases but also suitable for the different geographic characteristics including soil types of the different areas of the country.

3.2.3 Current role of the non government agencies

24. The ASP recognizes the critical role played by private enterprise in the past years in the development of agriculture and in the successful marketing and export of Samoa’s agricultural

commodities. This was during the period when the trading merchants operated an extensive network of trading stores in selected villages throughout the country that not only sold goods but also doubled as purchase centers for agricultural commodities, predominantly copra and cocoa, produced in the villages. The trading stores also became the medium for farmers to access cash advances or take goods on credit using proceeds from future product sales as collateral/guarantee. The merchants also provided land transport and shipping services to transport products to Apia for warehousing, quality control and eventual shipment overseas. The private sector also played a prominent role in the once booming taro export business until this crop was destroyed by pests and diseases.

25. In more recent years the success of Samoa's commercial fisheries, a major contributor to national export earnings, provided another example of what private enterprise initiative, investment and expertise appropriately supported by Government could achieve. The Women in Business Development Inc. initiatives to promote and support community participation in the production of pure coconut oil and organic agricultural products for niche export markets are another good example of the success stories in the sector where the private sector and civil society have taken the lead with good support and encouragement provided by the public sector.

26. The ASP therefore supports the private sector taking a prominent role in the redevelopment and revitalization of agriculture and promotes a framework of policy, legislative and institutional changes as well as an innovative enabling business environment to encourage the local business community to diversify their operations by investing in the agriculture sector in areas identified in the ASP where there is huge potential for exports and for import substitution.

Private Sector, Financial Institutions, Academia and Non Governmental Organisations

27. The private sector has been made a key platform for generating economic growth in the SDS 2008-2012. The willingness and capacity of the private sector to increase participation and investment in the agriculture sector is critical to the revitalisation of agriculture and to restoring the sector to its past dominant position in the Samoa economy. The challenge however is clearly defining the respective roles and expected obligations of the public and private sectors in the medium to longer term development of agriculture. The ASP advocates for clarity on policy and strategic directions for the sector and for the development of an enabling business environment to promote greater private enterprise participation and investment in agriculture development. It also recognizes the importance of providing the private sector with the key tools and policy confidence required to be the main driving force in the revitalization and development of the sector in the longer term.

28. The Samoa Chamber of Commerce, as the National Private Sector Organisation, plays a key role as the core representative agency of all private sector groups within the economy including most importers and some local processors of food products. The Chamber will continue to act as the voice for the private sector in public-private partnerships and dialogue to ensure that all key issues relevant to its role as the 'engine of growth' for Samoa are addressed at the national level.

29. The Samoa Association for Manufacturers and Exporters (SAME) will work closely with its members to assist MAF and the farmers and producers through the dissemination of market information to ensure there is public awareness of opportunities available that will assist them in the production and harvesting planning and investment purposes. SAME will also ensure that the interests of all its members are represented in consultations within the sector with regards to making maximum use of opportunities for increasing both domestic and export trade in products and services.

30. Women In Business Development Incorporated (WIBDI) was established in 1991 to address issues of cash poverty and reliance on remittances in rural areas by finding opportunities to earn income where they live. WIBDI has been trialing, processing and exporting organically certified and Fair-trade labeled products like virgin coconut oil, cocoa, coffee, bananas, nonu, spices, ginger and fruit and vegetables. These products are sourced from WIBDI members and clients, predominantly rural families that have been supported by WIBDI through its various technical assistance and training programmes. All WIBDI projects are linked through a micro-finance project tailored to meet the need of clients. WIBDI obtained a license in 2001 from the National Association for Sustainable Agriculture in Australia (NASAA) allowing it to certify farms, organise and undertake annual organic audits of all organic farms in Samoa as well as exports of organic products. WIBDI is also involved in Fair-trade labeling which generates premium prices for its products.

31. Other key NGO players include, Farmers and Fishers producers and exporters representative organisations including Samoa Organic Farmers Association, Samoa Flower Grower Organisation, Nonu Exporters Association etcetera and SUNGO as the representative organisation for civil society.

Financial Institutions

32. Addressing investment capital needs and credit access issues for the sector will require closer attention of the Government in consultation with the financial institutions. Strengthening the role of the Development Bank of Samoa (DBS) as the main conduit to the private sector of funding for agricultural development needs to be considered given that the commercial financial institutions are now better able to lend to sectors outside agriculture.

33. Established in October 1974, the DBS' main purpose was to facilitate and provide concessional financing primarily for the agricultural sector. However, DBS has long since diversified its lending operations to cover all sectors and is competing with the commercial banks. *Table 6* below summarises DBS' lending to agriculture against total lending to all sectors for the period 2004 – 2008 which illustrates the proportion of DBS lending to the sector decline from 52% to 33%. This declining trend is accentuated when compared to the leading role of DBS in agriculture financing when at least 80% of its total lending used to be directed to the sector in the early 1980s. The push for increased production and productivity in agriculture and for greater economic use of customary land through leasing which will enable the use of leaseholds as collateral for borrowings provides an opportunity for DBS to shift its focus back to being the major provider of credit to the sector. The projected funding requirements for the private sector during the ASP period and the ability to use customary leaseholds as collateral makes the DBS an ideal dedicated vehicle for channelling these resources to village groups and individual

farmers with the additional security provided through village group guarantees authorised by the traditional village authorities.

Table 6: DBS Lending to Agriculture 2004-2008

LOAN APPROVALS BY SECTOR										
Sector Category	FY2004		FY2005		FY2006		FY2007		FY 2008	
	Value (\$)	%	Value (\$)	%	Value (\$)	%	Value (\$)	%	Value (\$)	%
Agriculture	8,591,590	51.5	11,671,273	68.5	10,464,215	51	8,740,990	42.4	7,541,220	33
Industry	7,204,400	43.2	4,445,300	26.1	8,385,326	41	11,416,349	55.6	12,107,060	54
Social Service /Infrastructure	632,000	3.8	625,000	3.7	1,502,446	7.3	155,000	0.9	150,000	1
Fishing	235,100	1.47	252,100	1.56	120,000	0.58	169,544	1.0	62,000	0
Others (Personal)									2,713,000	12
Micro-Finance	5,000	0.03	24,000	0.14	4,000	0.01	23,500	0.1	18,500	0
Total	16,668,090	100.0	17,017,673	100.00	20,471,987	100.00	20,505,383	100	22,591,780	100

Source: Development Bank of Samoa

34. The Small Business Enterprise Center (SBEC) assists the development of small business enterprises in rural areas. SBEC provides business advisory services for small business operators and also currently administers the Small Business Loan Guarantee Scheme which was set up to provide clients with access to funds by guaranteeing 80% of an approved client's loan with one of the selected participating financial institutions. This is currently provided in collaboration with Development Bank of Samoa (DBS), National Bank of Samoa (NBS), ANZ, Westpac and Samoa Commercial Bank (SCB). There are currently 2 schemes in operation:

- NZAP funded Scheme: provides a guarantee valid for 2 years for loans up to \$5,000 .
- ADB funded Small Business Development Project Scheme (ADB SBDP): which provides guarantee for loans up to \$50,000.

35. South Pacific Business Development, a Grameen-style microfinance banking operation established in 2000, has lent over USD \$20 million in small loans to women for various projects including agriculture.

Academic Institutions

36. The role of academic institutions in the development of agriculture is the provision of academic and vocational training programmes leading to professional skills needed in agriculture as policy makers, researchers, teachers, extension advisers, veterinarians, commercial farmers/producers, manufacturers/processors. They are also repositories of valuable research documents and studies that provide useful reference materials to MAF and sector agencies.

37. The Institute for Research Extension and Training in Agriculture (IRETA) was established in 1983 as an institute of the University of the South Pacific (USP) and is located within the School of Agriculture Alafua Campus. IRETA provides research, training and extension services. Its main areas of research include root crop breeding, tissue culture (root crops in particular), farming systems, local livestock feeds and post harvest technology. It also provides extension services via its outreach programme

which includes national agricultural liaison officers, audiovisual media, and library services and publications.

38. Other key agencies include the National University of Samoa (NUS) and Australia Pacific Technical College (APTC).

3.2.4 Current development partners

39. Samoa's development partners have contributed many resources to the development of the agriculture sector in the form of concessional loans and TA grants, and grant funding over the years. While it will be the main responsibility of government, the private sector and the communities themselves to provide sustainable resource flows to support the sector in the longer term, the strong support of development partners during the plan period will be critical to kick-starting the revitalisation of the sector through the implementation of the priority investment and development programmes recommended in the ASP. Much of the resourcing required will be for strengthening the policy, legal, regulatory and strategic planning framework for the sector, developing accurate and up to date sector statistics, strengthening institutional and HR capacity development and training, provision of key economic infrastructure and strengthening the research capacity into high yield planting and breeding stocks, new farming technologies to improve productivity and diversification in the sector and for new market opportunities.

40. Key ongoing development work funded by development partners include:

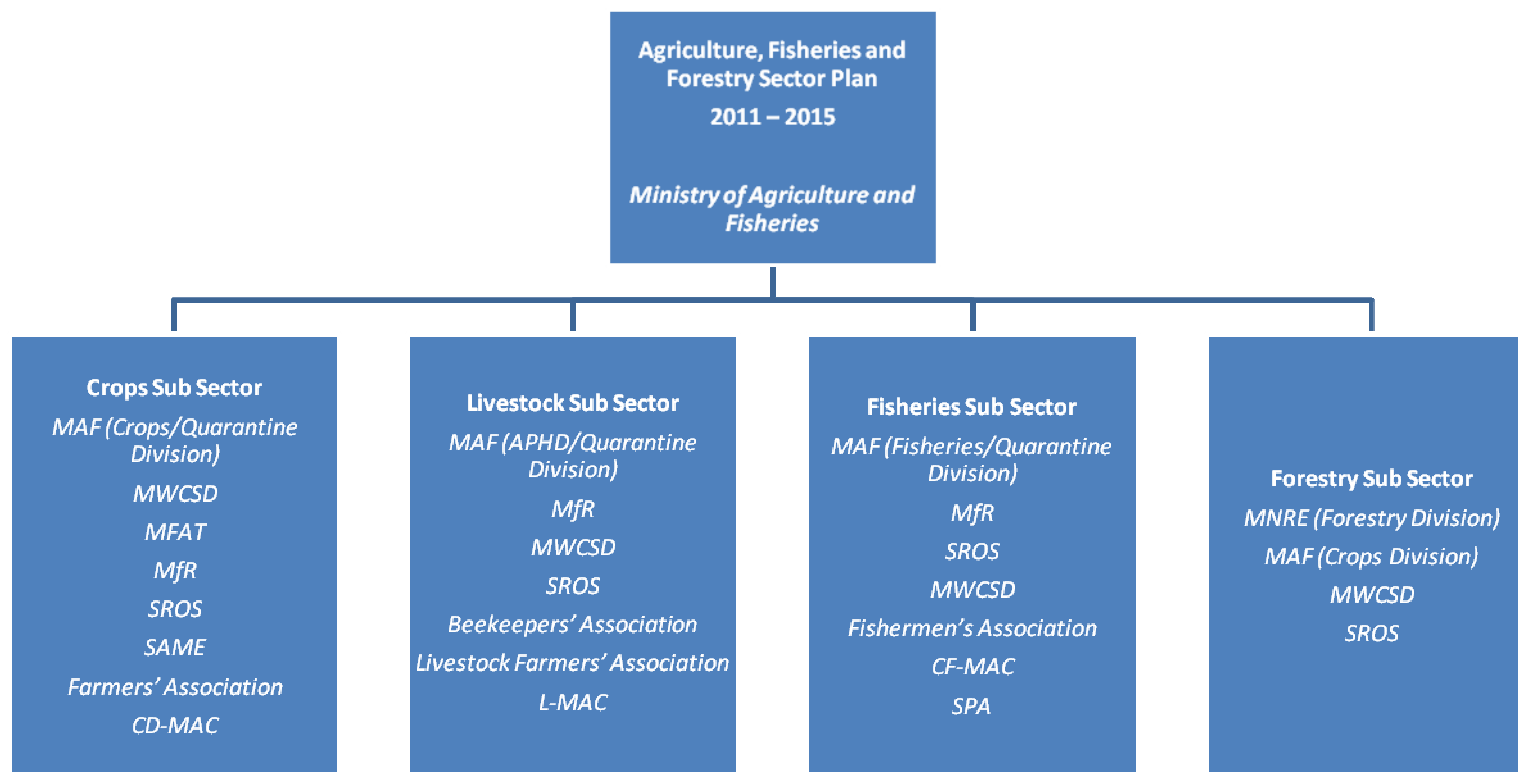
- The World Bank support program focussed on enhancing the competitiveness of the sector via public-private partnerships;
- AusAID has provided considerable support for public sector strengthening programmes including for agriculture²¹. Australia is now strengthening its support to the agriculture sector through a new bilateral partnership agreement that was finalised in early 2010;
- The UNDP coordinated donor-supported diagnostic trade integration study which is to be published in early 2011 provides a snapshot of the local impact of the implementation of trade agreements and its impact on key sectors including Agriculture;
- The Commonwealth Secretariat provided a TA for the development of a National Export Strategy and Trade Policy which are now finalised and are to be implemented;
- The Private Sector Support Facility established in 2009 is now assisting small to medium enterprises with funding support from NZAP, UNDP and GoS;
- NZAP continues to support the Small Business Enterprise Centre (SBEC) providing training for businesses. Eligible businesses may be considered for a loan under the guarantee scheme (supported by ADB) for small and medium size projects from local commercial banks;
- ADB (through DBS) micro-finance scheme;

²¹ At the time of the Australian ISP the Agriculture Ministry (MAFFM) included agriculture, forestry, fisheries and meteorology, subsequently forestry and meteorology responsibilities have been moved to the Ministry of Natural Resources and Environment (MNRE).

- The European Union development assistance focusing on improvements in the water sector through a sector-wide approach. Funding support is now via a sector budget support program;
- AusAID and EU have combined their small grants/micro projects program with the newly established Civil Society Support Fund targeting 5 key sectors including Agriculture and Fisheries;
- Japan's focal areas of assistance are: education, environment, social and economic infrastructure and income generation projects. There is an active Japanese volunteer programme in Samoa. Volunteers have been involved in programmes that include: livestock management; vegetable production, fish farming; port management; telecommunications; and income generation for women;
- China provides significant assistance mainly for government infrastructure and is currently supporting a pilot agriculture demonstration-farm;
- FAO and partner's programmes, is currently pursuing four key objectives in the sector (i) Strengthened policy, legal, regulatory and strategic frameworks for sustainable agriculture, forestry and fisheries development; (ii) increased production, productivity and resilience of crop, livestock and fisheries systems; (iii) Improved marketing systems and market access for livestock, traditional food crops and high value specialty commodities; (iv) sustainably managed terrestrial, freshwater and marine resources;
- Key Pacific Regional Organisations including SPC, FFA, SPREP each support the sector through specific programs for capacity building in fisheries, crops, livestock and forestry;

41. *Figure 17* below presents the framework illustrating the institutional context and current sector orientation for the agriculture sector:

Figure 17: Current Agriculture Sector Institutional Framework



3.3 Sector Funding

42. Prior to the 1960s, farmers depended on local merchants and exporters for finance and for marketing. Loans and advances were made in anticipation of crop harvests, and farmers were obliged to sell their crops to the merchants/exporters from whom they borrowed. This system continued until the banks became an alternative source of funds and the state owned marketing boards were established. Commercial lending to agriculture on a small scale started in 1959 when the Bank of Western Samoa was established. The Development Bank of Samoa was established by an Act of Parliament on 1 October 1974 with total lending from 1975 to 1983 of \$29.5 million of which \$16.4 million or 55.7% represented lending for agriculture. Lending by the SNPF from 1976 to 1984 totalled \$22.6 million of which \$1.7 million or 7.4% was for agriculture.

43. Agriculture remains predominantly a private sector activity as such farmers still largely depend on private funding sources from the development and commercial banks as well as special funding facilities provided by government and development partners such as micro financing schemes and private sector support funds.

3.3.1 Private Sector Funding

Private Equity

44. The perceived low returns and high risks associated with investing in agriculture have led to low investment by private companies into the sector over the years. Private sector intervention in one form or another has been limited and the growing reality is that it is a necessary and important partner for the long term growth and sustainability of the agricultural sector. However, it is highly unlikely that institutional private sector investors will want to invest in the sector unless the investment climate is favourable and proper financial incentives are available to these investors for the estimated risk involved. The immutable fact is that spurring private sector involvement, both external and internal, is critical to the successful long term socio-economic development for the sector.

Commercial Lending to Agriculture

45. As highlighted in the *Table 7* below, commercial bank lending to the agriculture sector, has declined from 2% in 2004/2005 to 1.5% at end March 2010. This represents a 0.5% decline in the total commercial bank lending portfolio to agriculture over the last five years.

Table 7: Commercial Bank Loans to Private Sector, March 2010

Commercial Bank Loans to Private Sector						
Percentage Share						
	2004/2005	2005/2006	2006/2007	2007/2008	2008/09	2009/2010
Agriculture, forestry and fisheries	2	1.8	1.9	2	2	1.5
Manufacturing	5	4.5	4	4	4	4.9
Building, construction, installation and purchase of la	43	49.4	50.2	51	48	46.8
Electricity, gas and water	1	0.6	0.7	1	3	2.8
Trade	19	18.3	20.4	17	17	16
Transportation, storage and communication	7	6.9	3.6	7	6	7.9
Professional and business services	16	7.3	7.5	10	10	9.4
Other Activities (1)	7	11.1	11.6	8	10	10.7
Total	100	100	100	100	100	100

Notes: (1) Including personal loans not classified elsewhere

Source: Central Bank Bulletin, March 2010

46. The non monetary financial institutions lending trends also indicate that the total percentage of lending to key productive sectors such as agriculture and fisheries has declined from 12% in 2004/2005 to 10.8% as at end March 2010, indicating a 1.2% decline in the total lending portfolio to agriculture (see *Table 8*).

Table 8: Non Monetary Financial Institutions Loans to Private Sector, March 2010

Non Commercial Bank Loans to Private Sector						
Percentage Share						
	2004/2005	2005/2006	2006/2007	2007/2008	2008/09	2009/2010
Agriculture, forestry and fisheries	12	12.2	11.4	11	11	10.8
Manufacturing	3	2.7	2.6	2	2	2.5
Building, construction, installation and purchase of la	23	20.0	19.7	17	17	16.6
Electricity, gas and water	-	0.0	0	-	-	0
Trade	12	12.0	12	6	11	10.2
Transportation, storage and communication	3	3.1	3	3	3	2.8
Professional and business services	8	9.0	8.3	13	7	7.1
Other Activities (1)	39	41.4	43.1	48	50	49.9
Total	100	100	100	100	100	100

Notes: (1) Including personal loans not classified elsewhere

Source: Central Bank Bulletin, March 2010

3.3.2 Public Sector Funding

47. Government has over the years invested considerable resources in providing economic infrastructure (access roads, communications, water, electricity, shipping), tariff based incentives for the sector as well as supporting the institutional strengthening of MAF and public sector agencies that are involved in agriculture including for marketing and research.

48. *Table 9* shows the level of funding support provided by the Government towards the agriculture sector over the period 2005/06 to 2009/10. The proportion of Government budget appropriation for the sector in 2009/10 was 2.8% and is projected to be about 3.6% for 2010/11, which is still proportionately low compared to a 6% appropriation in the late 1990's.

Table 9: Government of Samoa Current Expenditure Classified by Function

Expenditures (millions)	Actuals	Actuals	Actuals	Actuals	Budget
	05/06	06/07	07/08	08/09	09/10
General Services	98.9	82.8	90.2	132.3	121.5
General Administration	78.6	57.6	63.3	102.3	93.3
Law and Order	20.2	25.2	26.8	30.0	28.2
Social Services	116.6	166.3	179.3	156.6	143.0
Education	55.3	101.9	106.1	69.8	68.6
Health	47.3	50.2	58.0	71.4	59.0
Senior Citizen Pension	14.0	14.2	15.2	15.3	15.4
Economic Services	56.3	83.5	101.7	116.7	101.7
Agriculture	11.7	11.9	10.9	12.8	11.2
Works, Transport & Infrastructure	29.6	55.4	70.4	73.2	69.3
Post and telecommunications	2.6	2.8	3.0	6.4	4.3
Natural Resources	12.4	13.5	17.4	24.3	16.9
VAGST payable by					

Government Departments	-11.3	-10.4	-10.6	-63.1	-9.6
Interests on payments 1/					
Public Debt	4.5	4.4	8.9	11.7	13.6
Other Expenditures 2/	29.7	7.0	8.3	2.5	17.9
Total Current Expenditure 3/	294.7	333.6	377.8	356.7	388.1
1/ Includes domestically financed development expenditure					
2/ Other includes Residual: unexplained					
3/ Current Expenditure excludes Loan and grant funded expenditures.					

Source: Finance Statistics Division, Samoa Bureau of Statistics

49. In terms of agricultural incentives, incomes from primary agricultural production activities are currently not taxed while duty free concessions for commercial poultry farmers, manufacturers of agricultural products for import substitution and export are available under the Code 121 provision of the Customs Tariff Amendment Act 2008.

50. The Government has initiated discussions mainly with AusAid and the World Bank for significant funding and programme support aimed at the revitalisation of the agriculture sector. AusAid will focus on policy and institutional reforms to enhance the capacity of MAF and other sector institutions as well as private sector and civil society organisations towards a greater market orientation in the medium to longer term development of agriculture. On the other hand, the World Bank is expected to assist Government to increase productivity and competitiveness of both traditional (e.g. livestock) and non-traditional (fruit and horticultural products) value chains. Government will work closely with sector development partners and agencies to ensure timely delivery of counterpart contributions including domestic financing and the enabling environment required to achieve the development goal and outcomes established in the ASP.

4 Chapter 4: Key Issues in the Agriculture Sector

4.1 Overview

1. The methodology used for the preparation of the ASP, included a review of available sector related literature including studies and project reports, a questionnaire survey of key sector stakeholders to obtain their views on the main issues affecting the performance of the sector and a stakeholder validation workshop conducted to discuss and analyse these issues leading to the drafting of the Plan. The broad sector issues briefly discussed below were considered key to the revitalisation of the agriculture sector in the medium to longer term.

4.2 Broad Sector Issues

4.2.1 Lack of a coherent policy, legal, regulatory and institutional framework:

2. The lack of an overarching national sector plan that provides a coherent policy, legal and regulatory as well as institutional framework to guide the sustainable development of agriculture is one of the critical issues facing the sector. While the key role of agriculture has been duly recognised in every development plan produced in Samoa in the past several years, there has not been a dedicated sector plan that provides a coherent policy, regulatory and institutional framework to guide the development of agriculture. The main sector policies for agriculture development have not changed drastically over the years with the focus generally put on increased crop and livestock production and the rehabilitation and intensification of commercial operations for exports, providing raw materials for agro-processing and import substitution. Considerable government funding and external funding from grant and loan financing have been invested in a wide range of projects in crop and livestock development, forestry and forest plantations but these investments have not contributed to any real sustained improvement in agricultural production and productivity.

3. **Institutional capacity issues:** The continuing decline in the agricultural sector has been attributed to a number of issues explained in this chapter including weaknesses in policy, legal and planning frameworks to guide development as well as the failure of commercial agriculture to lead any sustained increases in agricultural production and exports.

4. The institutional and human resource capacity constraints of the MAF are identified as key areas to be addressed within the ASP period so as to ensure effective sector planning and policy making as well as the successful implementation, monitoring and evaluation of sector policies and programmes. The Institutional Strengthening Project of the MAF in 2001 had targeted these specific areas to improve the capacity of the MAF to provide quality and effective support services to sector stakeholders however, employee turnover has affected the sustainability of this effort thus indicating the need for measures to attract and retain qualified and experienced human resources including through resourcing of ongoing capacity development programmes.

5. **Availability of data:** The availability and quality of agricultural statistics has declined over the years and is one of the key challenges now facing the sector. Decisions about aid and/or investment efforts to foster agricultural growth need to be based on sound information on land use, factors of

agricultural production, and the prevailing economic and social situation faced by producers. These decisions need to be made under a broader framework that takes into account the different variables that affect the environment and influence global warming and the overall production systems. The overall impact of these factors can only be effectively measured and evaluated with appropriate statistics.

6. The agriculture census is conducted once every 10 years with the results of the last census in 2009 yet to be released. Supplementary data are provided through the four yearly HIES and the annual agriculture survey. Due to limited funding, the last annual agriculture survey was conducted in 2005 with the data now becoming quite outdated. Timely availability of correct and updated agricultural data and business statistics is critical to the formulation of policies and strategies as well as the monitoring and evaluation of sector performance. This baseline data required for quantitative analysis of sector performance and for setting quantitative targets for the subsectors is incomplete, out of date or not available at all. The lack of reliable data led to the discontinuation of the publication of key indicators of agricultural production by CBS in 1997. The unavailability of production data has also led to the weakening of the MAF Management Information System (MIS). The monthly market surveys conducted by SBS and MAF for agricultural and fisheries production are currently the primary basis for estimating national production.

7. ***Leasing of customary land:*** Increasing agricultural production and productivity will also largely depend on the greater economic use of customary land either by the landowners themselves or by others through leasing. In that regard, Government has taken steps to explore how to achieve greater economic utilisation of customary land through leasing arrangements. This initiative aims to clearly define and improve the terms and conditions for leasing of customary land including appropriate amendments to existing legislation which if adopted will provide more land resources for investment in agriculture and other industries such as tourism contributing to increased production and agro – processing activities and to increase employment and income generating opportunities especially for the rural sector. Improved accessibility to customary lands for agricultural development may lead to a marked increase in the level of commercial farming activity in the country. Government has also promoted the leasing of some of its own land properties, through Samoa Land Corporation and Samoa Trust Estates Corporation, to the private sector for agriculture and commercial development.

4.2.2 Village agriculture to support national food and nutritional security

8. ***Blending of village traditional authorities and commercial practices to achieve national food and nutritional security*** -Given 80% of land in Samoa belongs to customary landowners and that some two thirds of the Samoan population, in particular in the rural sector, depends on agriculture for food, nutritional security and livelihood, there are significant gains to be achieved in engaging village traditional authorities to mobilise and motivate the community to produce more to meet their subsistence and cash needs. The Talomua programme is an excellent example of village authorities taking effective leadership in promoting the production of traditional crops to meet these needs and to also generate sufficient supplies that could be the basis for agro-processing industries for export and import substitution. This is not a new initiative as in the past the village

chiefs would require the untitled men from each family to plant crops, and also set quantitative targets for new plantings, to ensure their villages would always be self sufficient in food supplies. The success of the Talomua programme provides a good model for engaging the rural communities in the implementation of the fruit and vegetable strategy.

9. Strengthening agriculture extension services to provide technical support and advice to farmers and fishers on cost efficient and high yielding production practices will increase productivity in the sector. The timely dissemination of market and pricing information will assist producers in assessing which crops are profitable for them to invest in. Low productivity compounded by low returns to producers and the devastating effects of natural disasters and pest and diseases, as well as the seasonality of crops mainly fruits and vegetables have been responsible for lack of consistency of supply of agricultural produce for both food security and for agro-processing. For example, the inconsistent supply of coconuts due to low world market price for copra led to diseconomies of scale that eventuated in the closure of the coconut mill in Upolu. The costs of imported agricultural inputs contributed greatly to low productivity and the stagnating performance of the sector over the past years.

10. The growth in the importation of agriculture based products to meet the demands of the tourism industry and for domestic consumption due to the inability of domestic agriculture and manufacturing sectors to provide consistent supplies of fresh and processed substitutes is placing significant pressure on Samoa's balance of payments. In 2009, balance of payments and trade statistics indicated that Samoa imported around \$165 million of agriculture related products, including live animals.

4.2.3 Private sector involvement in agriculture

11. The private sector has been tasked by Government in its development strategies to be the engine of growth for the national economy. In the SDS 2008 – 2010, agriculture is described as the key sector for achieving private sector led economic growth and improved wellbeing for the people of Samoa through employment creation and income generation leading to poverty alleviation. Agriculture is regarded by Government as predominantly a private sector activity, although Government itself is a major partner through its landholdings and plantation estates first developed during the period when Samoa was under German administration and which continued until the late 1980s. Government also provides a lot of funding and technical support from the national budget and from the donor community. This support is delivered through the MAF and several other public agencies. There have been several examples in the past where the private sector, civil society and NGOs have been catalysts for successful commercial initiatives in agriculture.

12. Prior to the 1960s for example, farmers depended on local merchants and exporters for finance and for marketing. Loans and advances were made in anticipation of crop harvests, and farmers were obliged to sell their crops to the merchants/exporters from whom they borrowed. This system continued until the banks became an alternative source of funds and the state owned marketing boards were established. The success of Samoa's commercial fisheries development and export industry in the 1980s was primarily instigated by private entrepreneurs who were prepared

to risk their own resources to exploit the commercial potential of the country's tuna resources. The booming taro export industry in the 1980s was driven by private exporters who were prepared to invest in transport and warehousing facilities in Samoa and in distribution networks in the New Zealand and Australia. WIBDI has successfully developed and trialled organic agricultural products for exports.

13. All these examples have demonstrated that private sector led investment in agriculture supported by Government providing the basic economic infrastructure, a strong facilitation role and the enabling business environment can create viable business opportunities in the sector generating employment and other economic and social benefits for the people of Samoa. There is room for both the government and the private sector to work collaboratively to replicate these successes in all sub sectors of agriculture. These actions will include the consideration of a stimulus package of policy and institutional changes and fiscal incentives to promote the introduction of private sector led development of agriculture leading to increased investment and adoption of private enterprise management principles and approaches into the sector.

14. ***Incentivizing private sector led and funded agricultural commercial operations*** – Previous studies have indicated that Samoan village and commercial farming are responsive to prices. Farmers as well as the business community are reluctant to commit own capital and borrowed funds to the sector unless there is some certainty that markets are available and they will receive reasonable returns on their investment on a consistent basis. The market for agricultural products is increasing with new opportunities now becoming available for organic and Fair-trade products prices and niche type value added products as well as the stronger push for reducing reliance on imported food products. The latter interest is creating a huge market for fresh and processed food products to substitute for imports and an apparent interest by some of the main wholesalers and retailers of food products to diversify into the commercial production and processing of crops, fruit and vegetables, livestock and fisheries products to meet their needs and also reduce the risks associated with any restrictions of imports should there be any balance of payments problems in the future.

15. Incentivising the business community and farmers to increase production and productivity of agriculture linked to the adoption of high yield and pest/disease resistant planting materials/seedlings, breeding stocks; diversification into new crops that are resistant to climate change impacts on soil and water conditions and adopting more efficient production systems and use of technology will help address the problem of declining and low productivity in village agriculture. Appropriate incentives may also promote greater diversification within the sector including the under-developed area of aquaculture. Some incentives may be required to encourage private farmers and the business community to use own equity capital and/or borrowed funds to develop commercial type operations integrating production (including contracted sourcing from individual and village community producers); agro processing and value adding as well as marketing of agricultural products specifically targeting either export markets or import substitution or both. Incentives may also be considered to encourage private sector commercial investment in rural areas including Savaii to promote employment and income earning opportunities in the rural sector.

16. Economic infrastructure -Government has recognised the provision of quality, cost effective and modern economic infrastructure as essential to generating economic growth and promoting private sector development. Considerable investment has been made therefore in the past several years to improve the country's roading, power, water and telecommunications infrastructure including extending them to the rural areas and will in effect benefit the agriculture sector. The expansion of the mobile phone network to rural areas will also improve the delivery of extension services to farmers and dissemination of market price intelligence information.

17. There is already in existence a network of plantation access roads to facilitate access to plantation lands and transport of commodities from farm gates to collection points in the villages or to markets. Already operating are a number of private sector led initiatives and agro-processing facilities that would benefit the sector as a whole. These are a feedmill, coconut oil processing plants, meat processing and distribution networks that could be readily converted to supporting the delivery of planting materials to farmers and collection of agriculture products for marketing and processing in Apia. The financing of essential harvest and post harvest infrastructure required to meet hygiene, handling and processing standards required of agriculture products for both the domestic and export markets has been identified by sector stakeholders as a major problem.

18. The identified priority infrastructure include an abattoir(s) for the livestock subsector, storage and packing infrastructure and a heat treatment plant to support fruit exports. A World Bank project currently being negotiated with Government is considering funding for the development of an abattoir for the livestock subsector as well as storage and packing facilities and a heat treatment plant to support the crops subsector through the export of fruits.

19. Access to finance - The continuity and success of research and development efforts in agriculture, at least in the revitalization phase covered by the ASP requires major investment and funding to support programmes aimed at increasing productivity in all the four sub sectors including the provision of essential infrastructure to facilitate the transportation of products from farm gates to markets and improve post harvest processing and value adding. Government funding of the sector in the next five year period will need to increase substantially if the policy objectives of the ASP are to be realised. These resources will need to be supplemented by external assistance from Samoa's development partners. The World Bank and AusAID have already made commitments to provide funding support toward the revitalisation of the sector with additional funding expected to come from the EU, China, ADB, New Zealand and ADB. Timely access by farmers and the private sector to credit and credit arrangements that recognise long gestation periods for crop development and the high risk nature of agriculture is critical.

20. There is also the potential for the traditional authorities to provide village group guarantees for borrowings by village individual producers as a way to address the reluctance of financial institutions to lend to agriculture projects on customary lands. Village guarantees are commonly used for commercial loans taken out for financing community projects such as the construction of village schools and church facilities.

21. **Market Access and Value Adding Opportunities-** Opportunities exist for increasing agro processing and value adding of agricultural products for exports and import substitution and for growth in trade in organic and fair-trade products based on the work already done by WIBDI in these areas. The establishment of coconut oil and coconut cream plants has increased the demand for copra to sustain these plants and also raised opportunities for further value adding of coconut oil into other products such as cooking and health products which will reduce imports of these in the future. These activities involving coconuts have highlighted the need for research to explore opportunities for agro processing of other traditional food and tree crops to increase the economic benefits from these crops that are commonly developed and harvested throughout the country. SROS has been doing research into possible commercial uses of crops including the breadfruit. There is also potential for innovative value adding of cocowood, based on the usage of old coconut trees as timber. The processing of cocowood will lead to opportunities for diversification of timber based products into furniture and building materials resulting in more income generating opportunities for farmers. The use of old and senile coconut trees will also pave the way for revitalizing a nation-wide coconut replanting programme.

22. One of the difficulties faced by Samoan exports in breaking into international markets is the absence of an internationally accredited standards authority in the country. Such an authority will be crucial to the facilitation of market access for local products by helping to minimize non compliance with the strict standards and requirements of importers and of the importing countries. The establishment of the SROS has provided an opportunity for the commercial farmers to tap into the resources available for research into viable commercial products as well as processes not only for crops but also for fisheries, livestock and forestry. Furthermore, the potential establishment of the SROS as an SPS and HACCP accreditation facility will create opportunities for making agricultural exports more internationally competitive whilst the certification and verification of fish exports will continue to be undertaken by the MAF. Improved market opportunities, market access, processing and value adding of agriculture commodities are considered critical areas for the longer term sustainable development of the sector.

23. A number of factors have impacted on export market opportunities and market access for Samoa's agriculture commodities. These include insufficient production, the lack of knowledge about profitable markets and lack of capacity for exporters to meet the specific requirements of these markets. This particular bottleneck has been compounded by the increasing complexities of current trade access arrangements, lack of proper market research information, and the lack of key post harvest and processing infrastructure. The fluctuating prices of Samoa's exports in the global markets have become disincentives for many producers over the past years. Various consultations conducted for the agriculture sector indicated that farmers often shifted production from crop to crop depending on yield value and profitability more than any other reason. Samoa's exports also face high transport costs and limited air freight capacity to markets outside the Pacific islands region.

24. The organic sector is small but has good potential for future growth based on the work done and experience of Women in Business Development Inc (WIBDI) in successfully developing and marketing organic products like virgin coconut oils.

25. The accession to the WTO and the effectivity of Pacific regional trade agreements opens up access opportunities of Samoa based export products to other Pacific island countries.

4.2.4 Sustainable management of agricultural resources

26. Samoa needs to ensure that its agricultural resources are managed and developed in a sustainable way to protect its resource base for the future. The implications of climate change and global food crisis have further highlighted the importance of taking concrete measures to promote sustainable resource management. Effective land use policies and practices can help to maintain the productivity of land resources. Improved awareness and education regarding the environmental, social and economic implications of different land-use and farming practices will assist in improving management of land resources.

27. The economic viability of crop farming depends on production efficiency which can be achieved when farmers are well informed and supported in the use of good husbandry practices. The prevention of pests, diseases and weeds that negatively impact on agro ecosystems using integrated pest management regimes with minimal pesticide use is an issue. Marine product harvests from inshore reefs and lagoons have been in decline mainly because of habitat loss and the use of more efficient and sometimes destructive technologies. Land reclamation and road construction have destroyed fish nursery areas and poor land management has led to erosion and consequent siltation of lagoons. The adoption of community-based sustainable fisheries management plans and conservation areas have helped to reverse the decline in inshore fisheries. The sustainability of natural forest resources has been severely affected by indiscriminate logging in the 1970 to 1990s. Developing new ways of protecting the remaining indigenous forest resources and accelerating reforestation is becoming increasingly important. The Government is currently promoting the development of community forestry involving local communities and use of customary lands.

28. The decline in agricultural activity has also been attributed to the shortage of labour in the rural sector partly as a result of migration overseas and also the movement of people to urban areas in search of relatively more secure and longer term cash employment opportunities. Access to remittances from families residing overseas and the lack of more permanent cash employment opportunities in the rural sector have also been cited as disincentives for people working in agriculture.

5 Chapter 5: Agriculture Sector Strategy and Interventions

5.1 A Vision and Goal for the Sector

1. The ASP and the interventions outlined in this section are government's plan to revitalise agriculture and ensure its contribution to the national economy is improved. This constitutes a road map that will guide public action and investments in the sector over the next five years. The encompassing vision for the sector is defined as:

AGRICULTURE FOR FOOD AND INCOME SECURITY

2. The Government, through the MAF and with the support of development partners, has in the past undertaken a number of individual programs and projects to address the issues identified in Chapter 4. With the completion of the ASP for 2011 – 2015, Government will adopt a sector wide approach for agriculture development, taking a holistic approach to addressing sector issues and consolidating all sector related development projects and programs under the overarching sector development goal of:

'To revitalize the agriculture sector to increase its relative contribution to the national GDP from its current level of 10 percent to 20 percent by 2015'

5.2 Key High Level Development Outcome

3. Based on the stated vision and goal the key high level development outcome is:

Increased food and income security by 2015

5.3 Key Sector Policy Objectives

4. To achieve this goal and in line with the SDS 2008-2012 priority for an invigorated agriculture sector, the key sector policy objectives (SPO) for the ASP, 2011 – 2015, have been defined as follows:

- *To strengthen policy, legal, regulatory and strategic planning framework for sustainable agriculture development;*
- *To improve national self reliance in food production and nutritional security;*
- *To enhance private sector capacity in improving agricultural productivity, value adding and marketing;*
- *To ensure sustainable adaptation and management of agriculture resources;*

5. Based on these key objectives the following anticipated sector strategies have been established:

SPO1: To strengthen policy, legal, regulatory and strategic planning framework for sustainable agriculture development

Sector Strategies

1.1: Make use of the implementation of the Agriculture Sector Plan, 2011 – 2015, to further develop and refine the policy, regulatory and strategic planning framework to support the longer term development of agriculture and to achieve the Plan's outcomes in terms of the

sector's contribution to Samoa's economic growth.
1.2: Invest as a matter of highest priority in the collection of good, reliable and up to date agriculture statistics including, but not limited to, data on agriculture production, land holdings, productivity trends, employment, domestic consumption, markets and prices. These statistics are essential to formulating sound and evidence-based policy advice and for designing well targeted sector and sub sector strategies. They are also critical to the establishment of realistic quantitative production and trade targets and for ongoing monitoring and evaluation of sector performance.
1.3: Introduce as soon as practically possible the sector wide approach to the development of the agriculture sector to ensure a nationally coordinated and clearly defined framework that guides the collective responsibilities, inputs and resources of Government, the private sector and development partners toward the delivery of mutually agreed national development impact.
1.4 : Strengthen the institutional capacity and capability of MAF and its public sector partner agencies to provide professional advice and support to all stakeholders in the implement of the ASP, 2011 – 2015 ; Including strengthening the capacity and capability of MAF to provide market oriented and private sector based strategies for promoting agriculture e.g. extension services.
1.5: To develop legal and administrative arrangements to ensure certainty in the leasing and use of customary land for agricultural purposes;

SPO 2: To improve national self reliance in food production and nutritional security;

Sector Strategies
2.1: Promote and support increased production, productivity and the resilience of village agriculture to ensure self sufficiency in food and nutrition supplies for the people of Samoa and to raise rural incomes. This increase will be driven mainly by community based programmes such as the 'Talomua' under the leadership of village traditional authorities.
2.2: Strengthen research into new, high yield and pest resistant crop varieties and livestock as well as efficient production systems to support increased productivity of village agriculture. There is also the need to improve the availability and timely distribution of agriculture inputs - planting materials, fertilisers, breeding stocks, animal feed, tools etc - to village farmers
2.3: To promote production and consumption of locally produced food products with high nutritional value to substitute for imports of poor quality nutritional products;

SPO3: To enhance private sector capacity in improving agricultural productivity, value adding and marketing;

Sector Strategies
3.1: Foster a business enabling environment that will provide confidence to the business community to fund and invest private resources in commercial agricultural operations targeting fresh and agro-processing products for both the export and import substitution markets. Increased private sector participation in agriculture development will lead to the introduction of

<p>proven commercial management skills, practices and approaches to the sector.</p> <p>Provide time and performance bound innovative commercial credit and tax arrangements to support sustainable investment by the business community and individual commercial farmers and fishers aimed at increasing production and agro-processing resulting in export earnings and import substitution.</p> <p>Improve capacity of private sector organisations to enhance their understanding of opportunities for increased trade under various trade arrangements being negotiated.</p>
<p>3.2: Support ongoing improvements to economic infrastructure in the sector such as power, water, transport and communications as well as market access and post harvest processing and marketing of agriculture products. These include treatment and packing facilities for crops, slaughtering/abattoir facilities for livestock, and ice making and cold storage facilities for fisheries, and village or district based markets where farmers and fishers are able to sell products directly to the public.</p>
<p>3.3. Improve access to finance facilities and finance arrangements tailored to the specific needs of village agriculture including incentives for merchant financing granted against future purchase of products from borrowing farmers. Consideration for long gestation periods of crops and merchant financing granted against future purchase of products at harvest time.</p>
<p>3.4: Strengthen research and market development to identify the commercial market potential of products derived from agro - processing and value adding of locally grown and harvested crops, livestock and fisheries resources. The research should also explore opportunities for greater diversification in the four sub sectors of agriculture to minimise vulnerability of food security and raw materials for agro – processing to natural disasters.</p>
<p>3.5: Strengthen the capacity of national institutions, sector stakeholders and exporters through training and technical assistance to enable them to meet and comply fully with food safety standards, phytosanitary and other market access requirements of the importing countries.</p>
<p>3.6: Assess the likely impacts of global and regional trade agreements currently being negotiated on Samoa’s agriculture sector, including increased opportunities for fisheries and niche type exports such as organics and fair trading products. This will include taking steps to establish sustainable production levels through organic certification and marketing of these new products which have currently been promoted by WIBDI and similar NGOs. This will require keeping the sector stakeholders fully informed and engaged including in the preparation of negotiation positions.</p>

SPO 4: To ensure sustainable adaptation and management of agriculture resources;

Sector Strategies
<p>4.1: Strengthen capability, resourcing and effectiveness of extension services to promote sustainable resource management practices in agriculture in close consultations with MNRE, landowners and the community within the framework of the National Adaptation Plan of Action (NAPA);</p>
<p>4.2: Implement environmentally friendly production and farming systems to appreciate value of</p>

natural resources such as livestock and crop farming close to or inside watershed areas affecting water supplies and overfishing of inshore fishery resources leading to depleted supplies and destruction of reefs and corals.

5.4 Key Sub-Sector Strategies

6. The following sub sector strategies have been identified to contribute to the achievement of the overall agriculture sector goal, policy objectives and strategies.

CROPS SUB-SECTOR STRATEGIES

Sector Policy Objective Ref:	Sector Strategies	Sub Sector Strategies
<p><u>SPO1: To strengthen policy, legal, regulatory and strategic planning framework for sustainable agriculture development</u></p>	<p>1.1: Make use of the implementation of the Agriculture Sector Plan, 2011 – 2015, to further develop and refine the policy, regulatory and strategic planning framework to support the longer term development of agriculture and to achieve the Plan’s outcomes in terms of the sector’s contribution to Samoa’s economic growth.</p>	<p>1.1.1: To develop a two prong approach for the development of traditional tree and root crops (primarily for subsistence) and the high value fruit and vegetable crops (primarily cash);</p> <p>1.1.2: Establish listing of priority traditional and high value crops based on suitable geographical locations, recent findings of soil mapping as well as gross profit margin and market studies;</p> <p>1.1.3: Review the National Export Strategy, existing strategies for traditional tree crops and high value fruit and vegetables to ensure consistency with the sector objectives, strategies and institutional arrangements of the ASP;</p>
	<p>1.2: Invest as a matter of highest priority in the collection of good, reliable and up to date agriculture statistics including, but not limited to, data on agriculture production, land holdings, productivity trends, employment, domestic consumption, markets and prices. These statistics are essential to formulating sound and evidence-based policy advice and for designing well targeted sector and sub sector strategies. They are also critical to the establishment of realistic quantitative production and trade targets and for ongoing monitoring and evaluation of sector performance.</p>	<p>1.2.1: Establish production baseline data and targets for key selected crops;</p>

	1.3: Introduce as soon as practically possible the sector wide approach to the development of the agriculture sector to ensure a nationally coordinated and clearly defined framework that guides the collective responsibilities, inputs and resources of Government, the private sector and development partners toward the delivery of mutually agreed national development impact.	1.3.1: Formalise, strengthen and reactivate the Crops Sub-Sector Working Group as part of the overall Agriculture Sector Steering Committee framework;
	1.4 : Strengthen the institutional capacity and capability of MAF and its public sector partner agencies to provide professional advice and support to all stakeholders in the implement of the ASP, 2011 – 2015 ; Including strengthening the capacity and capability of MAF to provide market oriented and private sector based strategies for promoting agriculture e.g. extension services.	1.4.1: Improve the capacity including the appointment of crop specialists and develop capability plans for MAF Crops Division;
		1.4.2: Enhance the capacity and capability of crops extension services to be able to provide market oriented technical and advisory services on crop selection and crop farming systems.;
	1.5: To develop legal and administrative arrangements to ensure certainty in the leasing and use of customary land for agricultural purposes;	1.5.1: Formalise leasing arrangements to improve certainty and access to customary land for crop development by non matais in the villages;
<u>SPO 2: To improve national self reliance in food production and nutritional security;</u>	2.1: Promote and support increased production, productivity and the resilience of village agriculture to ensure self sufficiency in food and nutrition supplies for the people of Samoa and to raise rural incomes. This increase will be driven mainly by community based programmes such as the ‘Talomua’ under the leadership of village traditional authorities;	2.1.1: Encourage the adoption of village community production initiatives like the Talomua. Establish pilot schemes using the Talomua model to develop commercial farming approaches;
		2.1.2 Developing model/demonstration production units (like the present Chinese vegetable demo plot at Nu'u) to encourage transfer and adoption of modern and more effective agricultural practices to the village farmers.
	2.2: Strengthen research into new, high yield and pest resistant crop varieties and livestock as well as efficient production systems to support increased productivity of village agriculture. There is also the need to improve the availability and	2.2.1: Strengthen capacity of the research unit of MAF to conduct research and field trials on high yield and pest resistant varieties and provide technical advice on variety selection, crop nutrition, and post harvest handling to farmers;
		2.2.2: Establish nurseries at strategic locations to produce and multiply seedlings and planting materials to improve accessibility by farmers;

	timely distribution of agriculture inputs - planting materials, fertilisers, breeding stocks, animal feed, tools etc - to village farmers	2.2.3: Ensure availability and timely distribution of essential farming inputs such as fertilizers and tools to farmers;
	2.3: To promote production and consumption of locally produced food products with high nutritional value to substitute for imports of poor quality nutritional products;	2.3.1: Identify and promote production of crops with high nutritional value and collaborate with MOH for public awareness on nutrition value of locally produced food products;
<u>SPO3: To enhance private sector capacity in improving agricultural productivity, value adding and marketing;</u>	3.1: Foster a business enabling environment that will provide confidence to the business community to fund and invest private resources in commercial agricultural operations targeting fresh and agro-processing products for both the export and import substitution markets. Increased private sector participation in agriculture development will lead to the introduction of proven commercial management skills, practices and approaches to the sector. Provide time and performance bound innovative commercial credit and tax arrangements to support sustainable investment by the business community and individual commercial farmers and fishers aimed at increasing production and agro-processing resulting in export earnings and import substitution. Improve capacity of private sector organisations to enhance their understanding of opportunities for increased trade under various trade arrangements being negotiated.	3.1.1: Discuss with the private sector opportunities to commercialise the production, processing and marketing of priority crops based on successful pilots initiated by community and NGOs like WIBDI;
		3.1.2: Introduce private sector business skills and practices to farm management, agro processing and marketing;
		3.1.3: Facilitate the formation of business-oriented farmer marketing groups through a variety of operational models to improve access to technical and market knowledge and facilitate aggregation of product for more efficient marketing;
		3.1.4: Undertake an assessment of commercial oriented fiscal and non fiscal stimulus packages to attract private sector funding and investment in crop production, processing and value adding to increase the marketability and value of agriculture exports and reduce imports of food products for which locally produced substitutes are available, especially of products which currently have good export prospects but cannot be sustained without major investment in raising production levels;
	3.1.5 Leasing of facilities of the MAF commercial pilot projects (like the HTFA) to NGO and private farmers as part of the private sector facilitative role of MAF.	
3.2: Support ongoing improvements to economic infrastructure in the sector	3.2.1: Improve quality of plantation access roads and availability of water to crop farming areas ;	

	such as power, water, transport and communications as well as market access and post harvest processing and marketing of agriculture products. These include treatment and packing facilities for crops, slaughtering/abattoir facilities for livestock, and ice making and cold storage facilities for fisheries, and village or district based markets where farmers and fishers are able to sell products directly to the public.	3.2.2: Invest in packing and storage facilities in both Savaii and Upolu for crops earmarked for export such as taro, and in increasing the capacity of treatment facilities for perishable fruits, vegetables and fresh agriculture commodities for export markets;
		3.2.3: Support studies undertaken by interested grower groups to assess the export market for fruits and vegetables and the associated need for more High Temperature Forced Air (HTFA) capacity;
	3.3. Improve access to finance facilities and finance arrangements tailored to the specific needs of village agriculture including incentives for merchant financing granted against future purchase of products from borrowing farmers. Consideration for long gestation periods of crops and merchant financing granted against future purchase of products at harvest time.	3.3.1: Explore innovative grant/loan financing schemes targeting the needs of small and commercial farmers including access terms to recognise the long gestation periods and level of mechanisation of some food crops, village group guarantees on borrowings by individual village farmers, merchant financing and viable combination of matching grants and bank loans;
	3.4: Strengthen research and market development to identify the commercial market potential of products derived from agro - processing and value adding of locally grown and harvested crops, livestock and fisheries resources. The research should also explore opportunities for greater diversification in the four sub sectors of agriculture to minimise vulnerability of food security and raw materials for agro – processing to natural disasters.	3.4.1: Strengthen the resourcing and research capacity of MAF and SROS into improving the productivity, value adding and market opportunities of current crops as well as potential for diversification into new export crops such as organics and fair-trading products successfully piloted by WIBDI;
		3.4.2: Promote the growth of organic products through the provision of TA and funding assistance toward increasing the number of commodities and farms to be organically certified, market development and compliance with quarantine and other market access requirements;
	3.5: Strengthen the capacity of national institutions, sector stakeholders and exporters through training and technical assistance to enable them to meet and comply fully with food safety standards, phytosanitary and other market access requirements of the importing countries.	3.5.1: Improve awareness and compliance with international commodity food safety, phytosanitary and other market access standards;
		3.5.2: Encourage information sharing through training and collaborative efforts between SROS, MAF, SPC, FAO, IRETA and USP;

	3.6: Assess the likely impacts of global and regional trade agreements currently being negotiated on Samoa's agriculture sector, including increased opportunities for fisheries and niche type exports such as organics and fair trading products. This will include taking steps to establish sustainable production levels through organic certification and marketing of these new products which have currently been promoted by WIBDI and similar NGOs. This will require keeping the sector stakeholders fully informed and engaged including in the preparation of negotiation positions.	3.6.1: Identify export opportunities for local products that may become available under the bilateral and multilateral trade agreements/arrangements currently being negotiated and implemented such as PICTA, EPA and PACER Plus and start investing in their production if Samoa is to benefit from these arrangements; 3.6.2: Identify possible risks to the crop sub-sector associated with the opening up of domestic markets as result of regional integration;
<u>SPO 4: To ensure sustainable adaptation and management of agriculture resources;</u>	4.1: Strengthen capability, resourcing and effectiveness of extension services to promote sustainable resource management practices in agriculture in close consultations with MNRE, landowners and the community within the framework of the National Adaptation Plan of Action (NAPA); 4.2: Implement environmentally friendly production and farming systems to appreciate value of natural resources such as livestock and crop farming close to or inside watershed areas affecting water supplies and overfishing of inshore fishery resources leading to depleted supplies and destruction of reefs and corals.	4.1.1: Identify impacts of climate change on crops production and develop mitigating strategies;
		4.1.2: International treaties on genetic resources for food and agriculture ratified and supported;
		4.1.3: Strengthen the integrated climate change adaptation measures in crop and ground cover and water irrigation for farming;
		4.1.4: Review current regulations on import and use of agricultural chemicals;
		4.2.1: Promote sustainable farming technique/practices to protect the environment;

LIVESTOCK SUB-SECTOR

Sector Policy Objective Ref:	Sector Strategies	Sub Sector Strategies
<u>SPO1: To strengthen policy, legal, regulatory and strategic planning framework for</u>	1.1: Make use of the implementation of the Agriculture Sector Plan, 2011 – 2015, to further develop and refine the policy, regulatory and strategic planning framework to support the longer term development of agriculture and to	1.1.1: Develop the livestock sub-sector primarily around the key objectives of achieving national food security and reducing reliance on the importation of livestock products during the ASP period, 2011-2015;
		1.1.2: Identify priority livestock production based on availability of suitable land, feed, water and markets;

<u>sustainable agriculture development</u>	achieve the Plan's outcomes in terms of the sector's contribution to Samoa's economic growth.	1.1.3: Strengthening production supply chain for improved breeding and rearing of priority livestock with MAF providing technical advice;
		1.1.4: Develop an export development strategy for the livestock sub-sector beyond 2015;
		1.1.5: Review current livestock legislations to focus on strengthening the framework for hygiene in the slaughtering and processing standards;
	1.2: Invest as a matter of highest priority in the collection of good, reliable and up to date agriculture statistics including, but not limited to, data on agriculture production, land holdings, productivity trends, employment, domestic consumption, markets and prices. These statistics are essential to formulating sound and evidence-based policy advice and for designing well targeted sector and sub sector strategies. They are also critical to the establishment of realistic quantitative production and trade targets and for ongoing monitoring and evaluation of sector performance.	1.2.1: Establish accurate database of herd numbers and productivity statistics and meat marketing data for public information;
		1.2.2: Upgrade and maintain database of improved breeds and livestock farmers to provide marketing advice to the sector;
	1.3: Introduce as soon as practically possible the sector wide approach to the development of the agriculture sector to ensure a nationally coordinated and clearly defined framework that guides the collective responsibilities, inputs and resources of Government, the private sector and development partners toward the delivery of mutually agreed national development impact.	1.3.1: Formalise, strengthen and reactivate the Livestock Working Group as part of the overall Agriculture Sector Steering Committee framework;
	1.4 : Strengthen the institutional capacity and capability of MAF and its public sector partner agencies to provide professional advice and support to all stakeholders in the implement of the ASP, 2011 – 2015 ; Including strengthening the capacity and capability of MAF to provide market oriented and private sector based strategies for promoting agriculture e.g. extension services.	1.4.1: Update capability plan for APHD division and review functional organizational structure accordingly;
		1.4.2: Provide in-services training for staff and strengthen veterinary services through more qualified veterinarians;
		1.4.3: Increase resourcing and capacity of APHD to monitor and provide technical advice for the outsourced breeding units to selected farmers;
		1.4.4: Assist farmers with designing feasible livestock farming projects;
1.5: To develop legal and administrative arrangements to ensure certainty in the	1.5.1: Formalise leasing arrangements to improve certainty and access to customary land for livestock development by non matais in the	

	leasing and use of customary land for agricultural purposes;	villages;
<u>SPO 2: To improve national self reliance in food production and nutritional security;</u>	2.1: Promote and support increased production, productivity and the resilience of village agriculture to ensure self sufficiency in food and nutrition supplies for the people of Samoa and to raise rural incomes. This increase will be driven mainly by community based programmes such as the ‘Talomua’ under the leadership of village traditional authorities	2.1.1: Provide technical advice on breed selection and breeding management, nutrition, animal health and improved husbandry practices;
		2.1.2: Improve long term sustainable livestock nutrition through the use of locally produced feeds with similar nutritional standards as the current imported feeds as well as upgrading pastures for cattle and sheep;
		2.1.3: Develop small pig and poultry holdings for village households;
	2.2: Strengthen research into new, high yield and pest resistant crop varieties and livestock as well as efficient production systems to support increased productivity of village agriculture. There is also the need to improve the availability and timely distribution of agriculture inputs - planting materials, fertilisers, breeding stocks, animal feed, tools etc - to village farmers	2.2.1: Improve farmer access to superior breeding stock for cattle, pigs, sheep poultry as well as apiculture;
		2.2.2: Improve livestock management and breeding capacities;
	2.3: To promote production and consumption of locally produced food products with high nutritional value to substitute for imports of poor quality nutritional products;	2.3.1: Promote consumption of hygienic local fresh animal products as healthier alternatives to imported products;
2.3.2: Improve public perception of domestically produced meat through improved meat hygiene from the farm gate through to the retail level;		
<u>SPO3: To enhance private sector capacity in improving agricultural productivity, value adding and marketing;</u>	3.1: Foster a business enabling environment that will provide confidence to the business community to fund and invest private resources in commercial agricultural operations targeting fresh and agro-processing products for both the export and import substitution markets. Increased private sector participation in agriculture development will lead to the introduction of proven commercial management skills, practices and approaches to the sector. Provide time and performance bound innovative commercial credit and tax arrangements to support sustainable investment by the business community and individual commercial farmers and	3.1.1: Undertake an assessment of commercial oriented fiscal and non fiscal stimulus packages to attract private sector funding and investment in livestock production, processing and value adding to reduce imports of livestock based food products;
		3.1.2: APHD to take a proactive role in the matching and monitoring of livestock exchanges amongst farmers to minimize the untimely slaughtering of good breeders and improvement of production efficiency through the establishment of an appropriate database of individual livestock farmers;

	<p>fishers aimed at increasing production and agro-processing resulting in export earnings and import substitution.</p> <p>Improve capacity of private sector organisations to enhance their understanding of opportunities for increased trade under various trade arrangements being negotiated.</p>	<p>3.1.3: Leasing of facilities of the MAF commercial pilot projects (like meat processing) to NGO and private farmers as part of the private sector facilitative role of MAF</p>
	<p>3.2: Support ongoing improvements to economic infrastructure in the sector such as power, water, transport and communications as well as market access and post harvest processing and marketing of agriculture products. These include treatment and packing facilities for crops, slaughtering/abattoir facilities for livestock, and ice making and cold storage facilities for fisheries, and village or district based markets where farmers and fishers are able to sell products directly to the public.</p>	<p>3.2.1: Improve meat quality and hygiene through construction of fixed and mobile abattoir facilities in Upolu and Savaii, with associated cold storage facilities.</p> <p>3.2.2: Establish a viable livestock transportation system (including access roads and vehicles, yards) to enable livestock movement for sale and slaughter;</p> <p>3.2.3: Establish new quarantine facilities at the border to prevent import of pests and diseases;</p>
	<p>3.3. Improve access to finance facilities and finance arrangements tailored to the specific needs of village agriculture including incentives for merchant financing granted against future purchase of products from borrowing farmers. Consideration for long gestation periods of crops and merchant financing granted against future purchase of products at harvest time.</p>	<p>3.3.1: Finance eligible farm enterprise investments to improve stock handling and livestock housing and provide start-up working capital, through a combination of demand-driven matching grants and bank loans;</p>
	<p>3.4: Strengthen research and market development to identify the commercial market potential of products derived from agro - processing and value adding of locally grown and harvested crops, livestock and fisheries resources. The research should also explore opportunities for greater diversification in the four sub sectors of agriculture to minimise vulnerability of food security and raw materials for agro – processing to natural disasters.</p>	<p>3.4.1: Strengthen the resourcing and research capacity of MAF and SROS into improving the productivity, value adding and market opportunities of current livestock as well as potential for diversification into new meat products for the domestic market;</p>
	<p>3.5: Strengthen the capacity of national institutions, sector stakeholders and</p>	<p>3.5.1: Establish and enforce appropriate local and international standards for food safety standards</p>

	exporters through training and technical assistance to enable them to meet and comply fully with food safety standards, phytosanitary and other market access requirements of the importing countries.	for domestic consumption and exporting of livestock products;
	3.6: Assess the likely impacts of global and regional trade agreements currently being negotiated on Samoa's agriculture sector, including increased opportunities for fisheries and niche type exports such as organics and fair trading products. This will include taking steps to establish sustainable production levels through organic certification and marketing of these new products which have currently been promoted by WIBDI and similar NGOs. This will require keeping the sector stakeholders fully informed and engaged including in the preparation of negotiation positions.	3.6.1: Identify export opportunities for local products that may become available under the bilateral and multilateral trade agreements/arrangements currently being negotiated and implemented such as PICTA, EPA and PACER Plus and start investing in their production if Samoa is to benefit from these arrangements;
		3.6.2: Identify possible risks to the livestock sub-sector associated with the opening up of domestic markets as result of regional integration;
<u>SPO 4: To ensure sustainable adaptation and management of agriculture resources;</u>	4.1: Strengthen capability, resourcing and effectiveness of extension services to promote sustainable resource management practices in agriculture in close consultations with MNRE, landowners and the community within the framework of the National Adaptation Plan of Action (NAPA);	4.1.1: Identify impacts of climate change on livestock production and develop mitigating strategies;
		4.1.2: International treaties on genetic resources for food and agriculture ratified and supported;
	4.2: Implement environmentally friendly production and farming systems to appreciate value of natural resources such as livestock and crop farming close to or inside watershed areas affecting water supplies and overfishing of inshore fishery resources leading to depleted supplies and destruction of reefs and corals.	4.2.1: Livestock Sustainable Management Plans (LSMP) developed;

FISHERIES SUB-SECTOR

Sector Policy Objective Ref:	Sector Strategies	Sub Sector Strategies
<u>SPO1: To strengthen policy, legal,</u>	1.1: Make use of the implementation of the Agriculture Sector Plan, 2011 – 2015,	1.1.1 Develop strategies for promoting export s based on offshore fisheries and inshore fisheries, including aquaculture;

<u>regulatory and strategic planning framework for sustainable agriculture development</u>	to further develop and refine the policy, regulatory and strategic planning framework to support the longer term development of agriculture and to achieve the Plan's outcomes in terms of the sector's contribution to Samoa's economic growth.	1.1.2: Review all fisheries legislations and regulations to ensure sustainable management of fisheries resources;
		1.1.3: Consolidate all fisheries management plans under one major fisheries plan;
		1.1.4: Review the implications of WTO accession and LDC graduation for the Fisheries sector particularly the tariff reduction on all fishing business inputs.
	1.2: Invest as a matter of highest priority in the collection of good, reliable and up to date agriculture statistics including, but not limited to, data on agriculture production, land holdings, productivity trends, employment, domestic consumption, markets and prices. These statistics are essential to formulating sound and evidence-based policy advice and for designing well targeted sector and sub sector strategies. They are also critical to the establishment of realistic quantitative production and trade targets and for ongoing monitoring and evaluation of sector performance.	1.2.1: Harmonize and sharing of fisheries information to data providers and data users (MAF, CBS, MOF, Customs, SPA);
		1.2.2: Improve resourcing and data management for monitoring and policing of EEZ;
1.3: Introduce as soon as practically possible the sector wide approach to the development of the agriculture sector to ensure a nationally coordinated and clearly defined framework that guides the collective responsibilities, inputs and resources of Government, the private sector and development partners toward the delivery of mutually agreed national development impact.	1.3.1: Formalise, strengthen and reactivate the Fisheries Sub-Sector Working Group as part of the overall Agriculture Sector Steering Committee framework;	
1.4 : Strengthen the institutional capacity and capability of MAF and its public sector partner agencies to provide professional advice and support to all stakeholders in the implement of the ASP, 2011 – 2015 ; Including strengthening the capacity and capability of MAF to provide market oriented and private sector based strategies for promoting agriculture e.g. extension services.	1.4.1: Increase resourcing and strengthen capacity of the Fisheries Division and stakeholders through training programs;	
	1.4.2: Strengthen awareness of Fisheries stakeholders on key issues for management and policy decision;	
1.5: To develop legal and administrative arrangements to ensure certainty in the leasing and use of customary land for	1.5.1: Formalise leasing arrangements and access for use especially for aquaculture and land based fisheries;	

	agricultural purposes;	
<u>SPO 2: To improve national self reliance in food production and nutritional security;</u>	2.1: Promote and support increased production, productivity and the resilience of village agriculture to ensure self sufficiency in food and nutrition supplies for the people of Samoa and to raise rural incomes. This increase will be driven mainly by community based programmes such as the ‘Talomua’ under the leadership of village traditional authorities	2.1.1: Improve compliance with village by laws and Village Fisheries Management Plans relating to marine protected areas; 2.1.2: Encourage village level fish and shellfish farms; 2.1.3: Increase seedlings and fingerlings production for distribution to fishers/farmers; 2.1.4: Encourage aqua-culture farming systems; 2.1.5: Increase availability of locally produced fisheries products;
	2.2: Strengthen research into new, high yield and pest resistant crop varieties and livestock as well as efficient production systems to support increased productivity of village agriculture. There is also the need to improve the availability and timely distribution of agriculture inputs - planting materials, fertilisers, breeding stocks, animal feed, tools etc - to village farmers	2.2.1: Develop and improve management of culture species diversification;
	2.3: To promote production and consumption of locally produced food products with high nutritional value to substitute for imports of poor quality nutritional products;	2.3.1: Promote the consumption of local fresh fish as healthier alternatives to imported fish products;
<u>SPO3: To enhance private sector capacity in improving agriculture productivity, value adding and marketing;</u>	3.1: Foster a business enabling environment that will provide confidence to the business community to fund and invest private resources in commercial agricultural operations targeting fresh and agro-processing products for both the export and import substitution markets. Increased private sector participation in agriculture development will lead to the introduction of proven commercial management skills, practices and approaches to the sector. Provide time and performance bound innovative commercial credit and tax arrangements to support sustainable investment by the business community	3.1.1: Discuss with the private sector opportunities to commercialise the production, processing and marketing of priority livestock;
		3.1.2: Increase number of Fish Aggregating Devices accessible to villages and commercial fishermen;
		3.1.3; Undertake an assessment of commercial oriented fiscal and non fiscal stimulus packages to attract private sector funding and investment in livestock production, processing and value adding to increase the marketability and value of agriculture exports and reduce imports of food products for which locally produced substitutes are available, especially of products which currently have good export prospects but cannot be sustained without major investment in raising production levels;

	<p>and individual commercial farmers and fishers aimed at increasing production and agro-processing resulting in export earnings and import substitution.</p> <p>Improve capacity of private sector organisations to enhance their understanding of opportunities for increased trade under various trade arrangements being negotiated.</p>	<p>3.1.4; Promote FD networking with farmers and fishers as well as with relevant private sector organisations;</p>
	<p>3.2: Support ongoing improvements to economic infrastructure in the sector such as power, water, transport and communications as well as market access and post harvest processing and marketing of agriculture products. These include treatment and packing facilities for crops, slaughtering/abattoir facilities for livestock, and ice making and cold storage facilities for fisheries, and village or district based markets where farmers and fishers are able to sell products directly to the public.</p>	<p>3.2.1: Upgrade Alia Fleet;</p> <p>3.2.2: Improve management and maintenance of onshore infrastructure and facilities;</p> <p>3.2.3: Seek funding for the construction of infrastructure and related onshore facilities for processing and value adding that will enable industry and exporters to meet EU and other key markets access requirements;</p> <p>3.2.4: Revision of current strategies for commercial fisheries exports in the light of reduced air and sea freight capacity and escalating freight costs;</p>
	<p>3.3. Improve access to finance facilities and finance arrangements tailored to the specific needs of village agriculture including incentives for merchant financing granted against future purchase of products from borrowing farmers. Consideration for long gestation periods of crops and merchant financing granted against future purchase of products at harvest time.</p>	<p>3.3.1: Explore innovative grant/loan financing schemes targeting the needs of small and commercial farmers including access terms to improve stock handling and livestock housing, village group guarantees on borrowings by individual village farmers, merchant financing and viable combination of matching grants and bank loans;</p>
	<p>3.4: Strengthen research and market development to identify the commercial market potential of products derived from agro - processing and value adding of locally grown and harvested crops, livestock and fisheries resources. The research should also explore opportunities for greater diversification in the four sub sectors of agriculture to minimise vulnerability of food security and raw materials for agro – processing to natural disasters.</p>	<p>3.4.1: Research into potential alternatives to reduce the impact of fuel prices on the operation of fishing fleets;</p> <p>3.4.2: Promote value adding and processing of fisheries products primarily for exports and niche markets;</p>
	<p>3.5: Strengthen the capacity of national</p>	<p>3.5.1: Maintain and improve stake-holders'</p>

	institutions, sector stakeholders and exporters through training and technical assistance to enable them to meet and comply fully with food safety standards, phytosanitary and other market access requirements of the importing countries.	compliance to market access requirements as a result of HACCP and Seafood Safety Programs;
	3.6: Assess the likely impacts of global and regional trade agreements currently being negotiated on Samoa's agriculture sector, including increased opportunities for fisheries and niche type exports such as organics and fair trading products. This will include taking steps to establish sustainable production levels through organic certification and marketing of these new products which have currently been promoted by WIBDI and similar NGOs. This will require keeping the sector stakeholders fully informed and engaged including in the preparation of negotiation positions.	3.6.1: Establish market access via bilateral and multi-lateral agreements;
		3.6.2: Maintain and expand the export of tuna and tuna products from Samoa;
<u>SPO 4: To ensure sustainable adaptation and management of agriculture resources;</u>	4.1: Strengthen capability, resourcing and effectiveness of extension services to promote sustainable resource management practices in agriculture in close consultations with MNRE, landowners and the community within the framework of the National Adaptation Plan of Action (NAPA);	4.1.1: Promote sustainable use of small Exclusive Economic Zone (EEZ) through sustainable catch practices;
		4.1.2: Promote long-term sustainability of coastal fishery resources including the protection of mangroves and coral reefs;
		4.1.3: Identify impacts of climate change on fisheries production and governance and develop mitigating strategies;
		4.1.4: Promote Ecosystem Approach to Fisheries Management (TMDFP, CBFM, NAPA)
	4.2: Implement environmentally friendly production and farming systems to appreciate value of natural resources such as livestock and crop farming close to or inside watershed areas affecting water supplies and overfishing of inshore fishery resources leading to depleted supplies and destruction of reefs and corals.	4.2.1: Develop strategies to mitigate sea safety during natural disasters and emergency situation (fisheries diseases outbreaks, securing fisheries asset, crew);

FORESTRY SUB-SECTOR

Sector Policy Objective Ref:	Sector Strategies	Sub Sector Strategies
<p><u>SPO1: To strengthen policy, legal, regulatory and strategic planning framework for sustainable agriculture development</u></p>	<p>1.1: Make use of the implementation of the Agriculture Sector Plan, 2011 – 2015, to further develop and refine the policy, regulatory and strategic planning framework to support the longer term development of agriculture and to achieve the Plan’s outcomes in terms of the sector’s contribution to Samoa’s economic growth.</p>	<p>1.1.1: Develop strategies for the sustainable development of the domestic forestry industry and the conservation of the remaining indigenous forest and long term revitalisation of plantation forests through sustained replanting programs;</p>
		<p>1.1.2: Establish and enforce national policies and legislations for sustainable management of forest resources;</p>
		<p>1.1.3: Update Samoa forestry standards and compliance with code of logging practice and Forestry Act 1967 and Forest Regulation 1969;</p>
	<p>1.2: Invest as a matter of highest priority in the collection of good, reliable and up to date agriculture statistics including, but not limited to, data on agriculture production, land holdings, productivity trends, employment, domestic consumption, markets and prices. These statistics are essential to formulating sound and evidence-based policy advice and for designing well targeted sector and sub sector strategies. They are also critical to the establishment of realistic quantitative production and trade targets and for ongoing monitoring and evaluation of sector performance.</p>	<p>1.2.1: Update inventory of remaining indigenous forestry resources including species etc;</p>
	<p>1.3: Introduce as soon as practically possible the sector wide approach to the development of the agriculture sector to ensure a nationally coordinated and clearly defined framework that guides the collective responsibilities, inputs and resources of Government, the private sector and development partners toward the delivery of mutually agreed national development impact.</p>	<p>1.2.2: Upgrade as well as ensure stakeholder access to the SFRIS;</p>
	<p>1.4 : Strengthen the institutional capacity and capability of MAF and its public sector partner agencies to provide professional advice and support to all stakeholders in the implement of the ASP, 2011 – 2015 ; Including strengthening the capacity and</p>	<p>1.3.1: Formalise, strengthen and reactivate the Forestry Sub-Sector Working group as part of the overall Agriculture Sector Steering Committee framework;</p>
		<p>1.3.2: Ensure integration and implementation of the Samoa Agro-forestry Project (SAP) as well as the Integrated Climate Change Risks into the Forestry Sector Project (ICCRIFS) into the ASP;</p>
		<p>1.4.1: Maintain the responsibility for developing and conserving national forest resources within the MNRE as the national focal agency of government responsible for the sustainable management of all national resources;</p>

	capability of MAF to provide market oriented and private sector based strategies for promoting agriculture e.g. extension services.	1.4.2: increase the resourcing and capacity of forestry division and especially extension services to provide advisory services and information on forestry related issues;
	1.5: To develop legal and administrative arrangements to ensure certainty in the leasing and use of customary land for agricultural purposes;	1.5.1 Formalise leasing arrangements to enable forest replanting programs including community agro-forestry;
<u>SPO 2: To improve national self reliance in food production and nutritional security;</u>	2.1: Promote and support increased production, productivity and the resilience of village agriculture to ensure self sufficiency in food and nutrition supplies for the people of Samoa and to raise rural incomes. This increase will be driven mainly by community based programmes such as the ‘Talomua’ under the leadership of village traditional authorities	2.1.1: Increase replanting under the community agro-forestry programs to meet subsistence needs;
		2.1.2: To encourage traditional village authorities to lead the conservation and replanting programs in such as the community agro-forestry using customary land and village labour;
	2.2: Strengthen research into new, high yield and pest resistant crop varieties and livestock as well as efficient production systems to support increased productivity of village agriculture. There is also the need to improve the availability and timely distribution of agriculture inputs - planting materials, fertilisers, breeding stocks, animal feed, tools etc - to village farmers.	2.2.1: Develop farming models to target smallholders who are expected to incorporate some timber species within their existing mixed cropping systems. This will provide a future source of income while maintaining a strong subsistence base and minimising exposure to risk;
		2.2.2: Establishment of nurseries for planting materials for distribution to the communities;
2.3: To promote production and consumption of locally produced food products with high nutritional value to substitute for imports of poor quality nutritional products;	Not applicable	
<u>SPO3: To enhance private sector capacity in improving agriculture productivity, value adding and marketing;</u>	3.1: Foster a business enabling environment that will provide confidence to the business community to fund and invest private resources in commercial agricultural operations targeting fresh and agro-processing products for both the export and import substitution markets. Increased private sector participation in agriculture development will lead to the introduction of proven commercial management skills, practices and approaches to the sector.	3.1.1: Provide incentives for the private sector to be involved in the replanting and commercial harvesting of forest under strict guidelines monitored by MNRE;
		3.1.2: Undertake an assessment of commercial oriented fiscal and non fiscal stimulus packages to attract private sector funding and investment in agro-forestry production, processing and value adding to increase the marketability and value of agriculture exports and reduce imports of forestry products for which locally produced substitutes are available.

	<p>Provide time and performance bound innovative commercial credit and tax arrangements to support sustainable investment by the business community and individual commercial farmers and fishers aimed at increasing production and agro-processing resulting in export earnings and import substitution.</p> <p>Improve capacity of private sector organisations to enhance their understanding of opportunities for increased trade under various trade arrangements being negotiated.</p>	
	<p>3.2: Support ongoing improvements to economic infrastructure in the sector such as power, water, transport and communications as well as market access and post harvest processing and marketing of agriculture products. These include treatment and packing facilities for crops, slaughtering/abattoir facilities for livestock, and ice making and cold storage facilities for fisheries, and village or district based markets where farmers and fishers are able to sell products directly to the public.</p>	<p>3.2.1: Develop appropriate access roads and nurseries for the production of seedlings;</p>
	<p>3.3. Improve access to finance facilities and finance arrangements tailored to the specific needs of village agriculture including incentives for merchant financing granted against future purchase of products from borrowing farmers. Consideration for long gestation periods of crops and merchant financing granted against future purchase of products at harvest time.</p>	<p>3.3.1: Access to finance for the purchase of seedlings, land clearance and labour for planting;</p>
	<p>3.4: Strengthen research and market development to identify the commercial market potential of products derived from agro - processing and value adding of locally grown and harvested crops, livestock and fisheries resources. The research should also explore opportunities for greater diversification in the four sub sectors of agriculture to minimise vulnerability of food security and raw</p>	<p>3.4.1: Undertake research of new forest species with commercial potential (e.g. sandalwood);</p> <p>3.4.2: Strengthen laws for protection against illegal and unauthorised exports of indigenous forest species and secure property rights for indigenous forest species (e.g. mamala) which have medicinal and commercial potential;</p>

	materials for agro – processing to natural disasters.	
	3.5: Strengthen the capacity of national institutions, sector stakeholders and exporters through training and technical assistance to enable them to meet and comply fully with food safety standards, phytosanitary and other market access requirements of the importing countries.	3.5.1: Strengthen capacity of forestry division to monitor and enforce the code of logging practices; 3.5.2: Develop credible standards and related certification systems for both domestic use and export of forest products;
	3.6: Assess the likely impacts of global and regional trade agreements currently being negotiated on Samoa’s agriculture sector, including increased opportunities for fisheries and niche type exports such as organics and fair trading products. This will include taking steps to establish sustainable production levels through organic certification and marketing of these new products which have currently been promoted by WIBDI and similar NGOs. This will require keeping the sector stakeholders fully informed and engaged including in the preparation of negotiation positions.	3.6.1: Identify opportunities for trading in forestry products utilising the regional trade agreements; 3.6.2: Develop strategy to enable trade of local forest resources on international carbon markets in the long term;
<u>SPO 4: To ensure sustainable adaptation and management of agriculture resources;</u>	4.1: Strengthen capability, resourcing and effectiveness of extension services to promote sustainable resource management practices in agriculture in close consultations with MNRE, landowners and the community within the framework of the National Adaptation Plan of Action (NAPA);	4.1.1: Identify impacts of climate change on forestry production and develop mitigating strategies;
		4.1.2: International treaties on genetic resources for food and agriculture ratified and supported;
		4.1.3: Development of sustainable forestry plans and strategies;
4.2: Implement environmentally friendly production and farming systems to appreciate value of natural resources such as livestock and crop farming close to or inside watershed areas affecting water supplies and overfishing of inshore fishery resources leading to depleted supplies and destruction of reefs and corals.	4.2.1: Identify areas for protection and production through proper forest resource management and planning at the community level;	
	4.2.2: Enhance biodiversity conservation to increase carbon sequestration;	

6 Chapter 6: Implementation Framework

6.1 Overview

1. Implementation of the plan necessitates adopting a sector wide approach, identification of institutional responsibilities and related strategies to ensure that the key objectives of the sector are achieved.

6.2 Adopting a Sector-Wide Approach

2. Improving performance of the agriculture sector will require changes in the way government, the private sector and development partners plan for, and deliver investments in the sector. In the past, the sector has suffered from having to implement too many stand alone projects and activities, which have created some 'islands of excellence' but led to little change in the performance of the sector as a whole. Recognising these issues, the ASSC will work with development partners to establish the necessary policies and mechanisms to make the transition to a program- based approach to supporting the sector.

3. The key components of the sector programme are:

- A clear sector policy and strategy, distinguishing government's regulatory role from its service delivery role, clarifying the roles of the private sector and civil society and outlining necessary institutional reforms;
- A Medium Term Expenditure Framework based on a comprehensive action plan, capturing expected internal and external resources and indicating how these resources will be allocated in pursuit of agreed policy;
- A performance monitoring system;
- A formalised process for donor coordination; and
- An agreed process for moving towards harmonised systems for reporting, budgeting, financial management and procurement.

4. The move to a sector based approach will improve coherence between the sector's policy, budgeting and actual results. The approach broadens the notion of impact beyond the scope of one project or programme and focuses on the combined impact of coordinated initiatives from Government, development partners and other important private sector and NGO stakeholders.

5. The potential benefits of the sector approach include greater ownership, improved efficiency, better management of resources, greater development impact as well as raised accountability for results. Nevertheless, there are important challenges in developing and implementing sector programmes that will be addressed throughout the implementation of this sector plan.

6.3 Enhanced Sector Institutional Framework and Responsibility Matrix

6. Based on experiences of other key sectors such as Water and Education, the proposed institutional setup for the sector highlighted in *Figure 18* will be enhanced with the establishment of the proposed National Agriculture Sector Steering Committee (ASSC) to be chaired by a private

sector person and appointment of committee members. The ASSC will undertake the following key functions (refer to **Annex 3: National Agriculture Sector Steering Committee and Lead Agency** for the detailed Terms of Reference) and guide the implementation of the ASP.

- Coordinate and harmonise the ASP implementation to ensure that it is in line with the SDS goals and objectives;
- Ensure ASP investment programmes/projects are in line with sector priorities;
- Pursue solutions to structural, institutional and other constraints to effective ASP implementation at central and community levels;
- Review mechanisms for enhancing stakeholder participation in implementing the ASP;
- Finalise and review the sector MTEF as a basis on which the annual budget for the sector is compiled;
- Provide the main forum for the sector-wide approach to planning and budgeting for the sector;
- Identify, on the basis of sector expenditure and investment plans and the MTEF, policy issues for consideration and action by the key sector agencies;
- Monitor budget implementation vis-à-vis the aims and objectives set out in the ASP and MTEF.

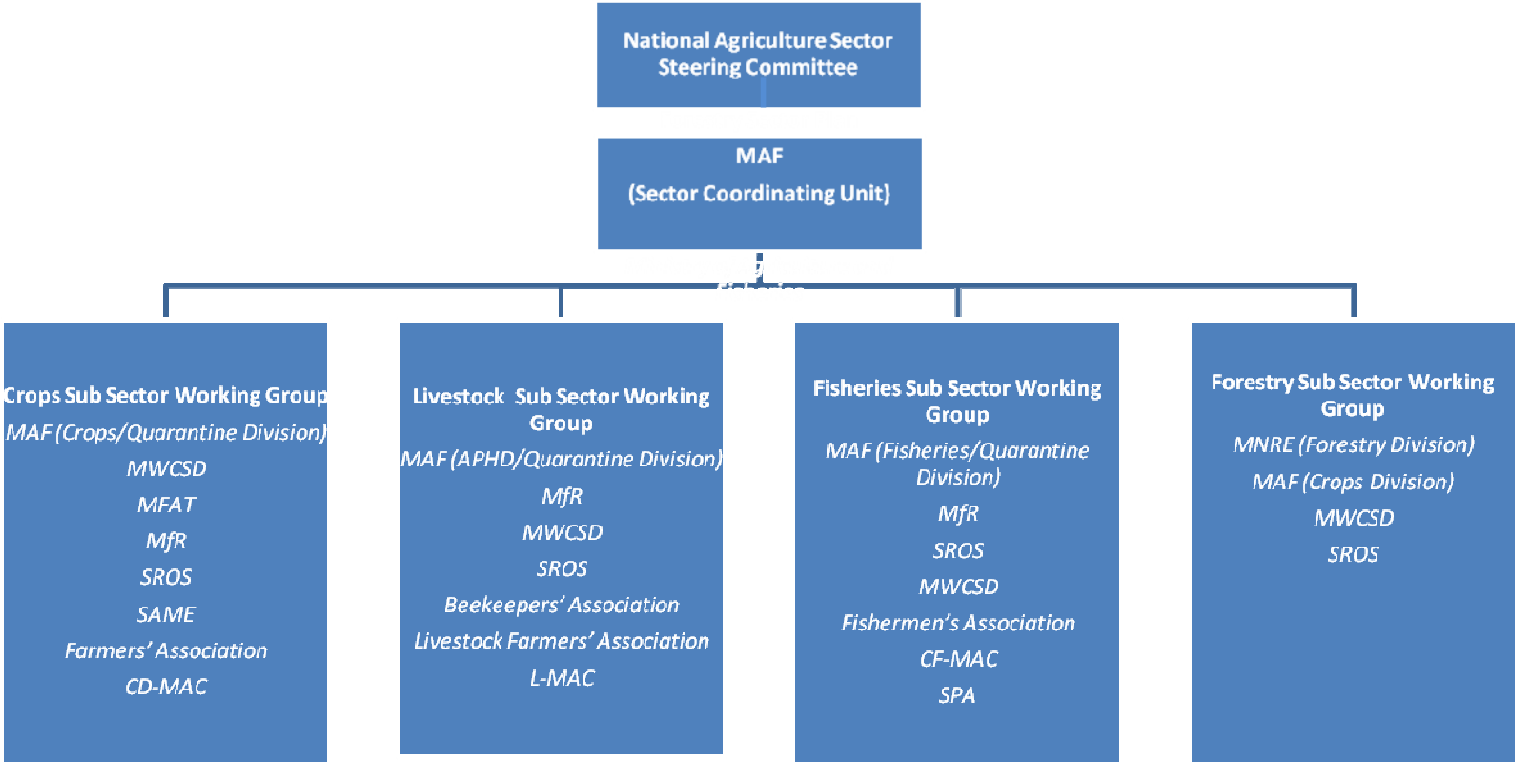
7. To support the ASSC, a sector coordination unit or secretariat will need to be quickly formed within MAF. The secretariat should ideally have a core team of professional staff with expertise in the key areas of strategic planning and policy analysis, project management, procurement, budget/finance, and monitoring and evaluation.

8. The current ASP only captures the big picture and although it defines the section vision, objectives, strategic priority areas of investments, sub-sector strategies to be implemented, it does not cover detailed implementation strategies and plans for each of the sub-sector strategies. Detailed strategies and plans are important to guide day-to-day implementation decisions.

9. Accordingly, as soon as the ASP is approved, detailed implementation strategies and action plans will be prepared by the implementing agencies for the sub-sector strategies they contribute to with guidance provided by the sector coordination secretariat. This will include the activities to be carried out, the timing, location, performance indicators, institutions and positions responsible and accurate costs. Particularly critical will be an analysis of implementation arrangements at central level (by MAF) and at community and private sector levels (by villages and business operators).

10. In terms of the sector wide capacity needs, MAF's fiduciary capacity was assessed recently by the WB under the preparatory work for the SACEP and found to be inadequate to manage large development projects. Addressing these institutional weaknesses will be a priority task for MAF and the ASSC.

Figure 18: Enhanced Agriculture Sector Institutional Framework



11. The key stakeholders for the agriculture sector who will contribute to the implementation and monitoring of the ASP are listed below. Some of them and their key roles have been discussed in Chapter 3.

<p>Government ministries, departments and corporations</p> <p>Ministry of Agriculture and Fisheries Ministry of Finance Ministry of Natural Resources and Environment Ministry of Women, Community and Social Development Ministry of Commerce, Industry and Labour Ministry of Foreign Affairs and Trade Ministry for Revenue Samoa Bureau of Statistics Scientific Research Organisation of Samoa Development Bank of Samoa Agriculture Store Corporation Samoa Qualifications Authority</p>
<p>Non Government Organisations</p> <p>Samoa Umbrella for Non Government Organisations</p> <p>Academic /Tertiary Organisations</p> <p>University of South Pacific National University of Samoa Australian-Pacific Technical College (APTC) Institute for Research Extension and Training in Agriculture (IRETA)</p> <p>Private Sector</p> <p>Samoa Association of Manufacturers and Exporters Samoa Chamber of Commerce & Industry Inc Women in Business Development Inc. Farmers' Association Beekeepers' Association Crops Development Advisory Committee (CDMAC) Livestock Advisory Committee (LMAC) Fisheries Advisory Committee (CFMAC) Financial Institutions Hotels and Restaurants</p> <p>Donor Community</p> <p>AusAID NZAP UNDP World Bank FAO SPREP ITC UNCTAD JICA GEF SPC FFA PRC</p>

12. The responsibility matrix in **Annex 4: Agriculture Sector Responsibility Matrix** describes the key role of each stakeholder in the implementation of the ASP strategies.

Government Role

13. The development of an effective sector wide approach requires a well coordinated public policy, legal and institutional framework involving inputs from several government ministries. The key role of the government is to ensure that its ministries and agencies work collaboratively in partnership with the private sector and the donor community to produce an enabling framework to guide the implementation, and monitoring and evaluation of sectoral and national efforts to revitalise the agriculture sector. The Ministry of Agriculture and Fisheries (MAF), will require technical assistance to improve and strengthen its capacity and capability to provide strong leadership in coordinating the implementation of the ASP and in delivering the necessary policy, regulatory and technical support to the farming and fishing communities and to the commercial private sector to ensure the achievement of the ASP overall goal and policy objectives.

Community and NGO Involvement

14. The success and sustainability of targeted community programmes in the Sector Plan will depend to a large extent on engaging the communities in the design of these initiatives and obtaining ownership throughout the plan period.

Private Sector Participation

15. In support of the Strategy for the Development of Samoa 2008 – 2012, the sector plan is putting a lot of focus on the private sector taking a lead role in increasing agricultural production and productivity. The plan therefore proposes the creation of a more focussed business enabling environment as well providing key resource and infrastructure support services to stimulate increased funding and investment by private enterprise in agriculture. Much of the success stories for the Agriculture Sector have been a result of private sector efforts and these will be strengthened within the sector plan period through close collaboration with the public sector and development partners so that efforts will continue to ensure that the private sector capacity is well developed to implement and further improved upon.

Development Partner Community

16. Bilateral and multilateral cooperation is key not only to the development of the Samoan economy as a whole but also to the implementation of the key strategies and objectives as stipulated under the Agriculture Sector Plan. According to the Budget documents from the Ministry of Finance, about SAT 4 million is foreign aid flowed into the Agriculture Sector for the fiscal year 2009/10 and about SAT 2 million is expected for 2010/11.

6.4 Sector Institutional Strategies

Sector Policy Objective Ref:	Sector Strategies Ref:	Sub Sector Strategies
<u>SPO1: To strengthen policy, legal,</u>	1.1: Make use of the implementation of the Agriculture	1.1.1: MAF to consult with sector stakeholders to inform them of key policy objectives and sector strategies in the ASP;

<u>regulatory and strategic planning framework for sustainable agriculture development</u>	Sector Plan, 2011 – 2015, to further develop and refine the policy, regulatory and strategic planning framework to support the longer term development of agriculture and to achieve the Plan’s outcomes in terms of the sector’s contribution to Samoa’s economic growth.	1.1.2 MAF and MOF to undertake consultations with development partners on key policy objectives and sector strategies in the ASP;
		1.1.3: Conduct annual reviews of agriculture related policies, regulations and strategies to ensure their ongoing relevance and effectiveness in achieving the ASP key policy objectives.
		1.1.4: Ensure proper Intellectual Property Rights (IPR) in place to protect new research and development findings;
	1.2: Invest as a matter of highest priority in the collection of good, reliable and up to date agriculture statistics including, but not limited to, data on agriculture production, land holdings, productivity trends, employment, domestic consumption, markets and prices. These statistics are essential to formulating sound and evidence-based policy advice and for designing well targeted sector and sub sector strategies. They are also critical to the establishment of realistic quantitative production and trade targets and for ongoing monitoring and evaluation of sector performance.	1.2.1: Enhance capacity of SBS and MAF to develop accurate and up to date baseline data of key commodities and collect other agriculture statistics required to enable both qualitative and quantitative sector -wide monitoring and evaluation system to be integrated into the existing Management Information System (MIS) of MAF. Some specific studies and surveys including on a subsector basis will need to be undertaken in the first year of the ASP, 2011 – 2015, to establish accurate and up to date baseline data;
		1.2.2: Enhance capacity of SBS and MAF to ensure timely completion and dissemination of the 2009 Agriculture Census report and findings;
		1.2.3: Enhance capacity of SBS to undertake annual surveys for Agriculture Sector;
		1.2.4: MAF to collaborate with the CBS and SBS on the conduct of monthly market surveys to build data base on key agricultural commodities sold through markets for domestic consumption
	1.3: Introduce as soon as practically possible the sector wide approach to the development of the agriculture sector to ensure a nationally coordinated and clearly defined framework that guides the collective responsibilities, inputs and resources of Government, the private sector and development partners toward the delivery of mutually agreed national development impact.	1.3.1: Obtain Cabinet approval for the development and financing of agriculture to be on a sector-wide approach.
		1.3.2 Appoint an Agriculture Sector Steering Committee (ASSC), under the chairmanship of a private sector person, comprising representatives of key sector stakeholders to coordinate the implementation of the sector wide approach.
		1.3.3: Establish a sector coordinating unit within MAF to support the ASSC in the implementation of the Agriculture Sector Plan and associated projects ²² ;
	1.3.4: Undertake consultations with all development partners to reach agreement on support of sector wide approach and pooling of resources;	

²² The World Bank funded SACEP project will require incremental staff to coordinate and administer the project effectively - specifically project coordination, procurement, financial management, environment/social screening, monitoring and evaluation, and beneficiary loan facilitation and monitoring;

	1.4 : Strengthen the institutional capacity and capability of MAF and its public sector partner agencies to provide professional advice and support to all stakeholders in the implement of the ASP, 2011 – 2015 ; Including strengthening the capacity and capability of MAF to provide market oriented and private sector based strategies for promoting agriculture e.g. extension services.	1.4.1: Redefine the roles, reorganize and strengthen the key national institutions leading the development of the sector including the Ministry of Agriculture and Fisheries.
		1.4.2: Undertake a review of the current institutional and organisational capacity of MAF to perform its responsibilities under the ASP, 2011 – 2015, to identify weaknesses and recommend specific measures to address them. The review should also identify capacity development needs in other sector agencies and private sector organisations;
		1.4.3: Improve capacity and capability of Quarantine and Customs officials to inform and provide advice to sector stakeholders on bio security and pest control management practices at the border, including bio security and related access requirements of Samoa’s main export markets;
		1.4.4: Strengthen private sector capacity to access and analyse opportunities for quality and niche products and to assist with technical advice to meet the often specialized requirements of these markets.
	1.5: To develop legal and administrative arrangements to ensure certainty in the leasing and use of customary land for agricultural purposes;	1.5.1 Develop legal administrative arrangements for leasing and use of customary land for agricultural purposes;

7 Chapter 7: Funding Requirements

7.1 Introduction

1. The achievement of the stated key objectives and strategies for the sector relies much on the timely availability of financial and human funding to support the necessary investment programmes needed to revitalise and sustain the development of the agriculture sector. Despite some success stories within the sector over the past decade the longer term sustainability of projects will always be influenced by skills and capacity constraints of MAF and key sector stakeholders and by inadequate capital and investment flows into the sector.

2. Due to the lack of detailed costing schedules for the identified priorities in the ASP, proxies for estimating the required funding over the next five years have been based on the best available information currently available. These proxies include public sources via budgetary allocations for agriculturally related activities being funded by the government as well as development projects that are ongoing and are earmarked for funding from development partners. In terms of private sources key indicators include the percentage of lending being made to agriculture sector and private equity financing to agriculture portfolio.

3. It is envisaged that the revitalisation of the agriculture sector would require significant public and private sources of investments if the primary ASP target of increasing the contribution to GDP from 10% in 2010 to 20% in 2015.

4. The ASP is expected to be funded from both public and private sources. Public sector funding comprises of funding appropriated annually through the government budget for MAF and other sector related government agencies, as well as external assistance provided by the donor community. Private sector funding comprises mainly of commercial lending from financial and non-financial institutions supplemented by a relatively micro-financing schemes and private equity.

5. For the 2011-2015 ASP timeframe the funding requirements are estimated as follows:

• **Baseline Costing Scenario**

Public Funding	SAT 148 million
Private Funding	SAT 26 million
Total Funding	SAT 174 million

• **Medium Costing Scenario**

Public Funding	SAT 248 million
Private Funding	SAT 146 million
Total Funding	SAT 394 million

• **High Costing Scenario**

Public Funding	SAT 485 million
Private Funding	SAT 461 million
Total Funding	SAT 946 million

7.2 Priority Setting

6. Funding allocation in the sector in the past two decades or so has been fragmented mainly as a result of the lack of an overarching plan to set clear strategies and prioritised action plans to guide investments in the sector. The ASP is a key tool for setting priorities that form the basis for defining funding and investment plans each year. Although, specific priorities can change in the course of a year, having a broad strategic framework enables any such changes to be seen in a full strategic context. The key issue is to define a clear strategic goal linking the sector to the priority national development outcomes as set out in the SDS and to establish prioritised strategies and implementable action plans for the key sub sectors that will contribute to the achievement of the overall sector goal.

7. The funding required for the implementation of the ASP will be determined by needs of the following key policy objectives:

- **Sector Policy and Institutional Framework** - The policy, regulatory and planning framework as well as the institutional capacity development of MAF and sector agencies will need to be given first priority in terms of resource support as they will underpin the development of the other three sector policy objectives ;
- **Improved National Self Reliance in Food Production and Nutritional Security** - Funding will be required to support the strengthening of village production systems which are seen to be the main drivers for improving self reliance. This will include the development of nurseries for high yield planting materials and breeding stocks.
- **Private Sector Capacity** - Strengthening the capacity of the Private Sector to contribute to the revitalisation of the sector. This has been accorded second priority as a significant level of technical assistance and funding need to be injected into the sector during the plan period. A large component of funding is required for the development and improvement in efficiency of economic infrastructure for the sector;
- **Sustainable Adaptation and Management of Agricultural Resources** - Strengthening the resilience of agriculture will increasingly require appropriate adaptation strategies to mitigate the risks and adverse impacts associated with climate change on economic infrastructure, agriculture production and food security. This will require tapping into global facilities for climate change adaptation. The priority nature of this policy objective may eventually be elevated across the sector as funding from the global adaptation facilities become more accessible.

7.3 Sources of Funds

Public Sources

8. In general, support including both GoS funding and donor funds (both on- and off budget) has historically made a significant contribution to overall funding of agriculture sector expenditure. However, based on a review of the national accounts, the agriculture sector has received on average about 5% of the GoS financed budget²³ over the last decade or so. This is in sharp contrast to budget allocations in the 1980's and early 1990's when the sector received on average more than 10% of the national budget.

²³ including grants and loans

9. It has been noted that the current practice for determining the total allocation for agriculture sector vis-a-vis the national budget is based primarily on the MAF annual budget allocation. Development projects are not currently linked to identified agricultural inputs, but are reflected in the summary of projects being funded by development partners. However, in order to have a holistic picture of the total funding being allocated to agricultural related outputs, the sum of all these outputs need to be reflected as indicated in *Table 10* below. This represents a snapshot of the current priorities of the sector and is the sum of the budgets of all relevant outputs and projects that have been derived from existing ministry allocations and projects associated with the sector in the current government budget²⁴. The budget estimates represents what the Government and Development partners are currently allocating towards the agriculture sector through the budget in the FY 2010/11.

Table 10: Current Sector Budget FY 2010/11 (Government Sources)

	FY 2010/11 (SAT\$)
Agriculture Foreign Aid Utilisation	2,278,531
Ministry Outputs	
MAF Output 1: Policy Advice to Responsible Minister	478,683
MAF Output 2: Ministerial Support	795,776
MAF Output 3: Agricultural Quarantine and Regulation Services	1,124,393
MAF Output 4: Crops, Research, Commercial Development & Advisory Services	3,425,627
MAF Output 5: Animal Production, Health & Research Services	1,438,592
MAF Output 6: Fisheries Management, Planning & Research Services	1,800,578
MAF Output 7: Policy Development, Planning & Communication Services	581,582
MAF Outputs Provided by Third Parties	20,080
MAF Transactions on Behalf of the State	2,041,024
MAF Sub-Total	11,706,335
MNRE Output 6: Forestry Management, Planning & Research Services	1,863,407
MNRE Output 3: Land Management	984,656
MNRE Sub-Total	2,848,063
SBS Output 2: Compilation of Economic Statistics	437,578
Agriculture Census	75,000
SBS Sub-Total	512,578
SROS Output 3: Food Science and Technology	621,650
SROS Sub-Total	621,650
LTA Output 5: Programming and Procurement - Rural Access Roads	10,000,000 ^[1]
LTA Sub-Total	10,000,000
MWCSO Output 5: Village Based Development Services ^[2] - Talomua Programme & Maintenance of unsealed rural access roads	483,115
MWCSO Sub-Total	483,115
GoS Funded	26,171,741
ASP Total Budget	28,450,272
Total Receipts and Grants	596,247,276
ASP Total Budget as % of Total Receipt and Grants	5%

Notes: ^[1] Estimates provided by LTA via MAF counterparts, based on current market estimates this indicates four 5km long access roads at SAT100, 000 each.

^[2] The estimated cost for agriculture related activities undertaken by MWCSO Output 5 was taken as 20 % of total appropriation for output 5 in FY 10/11.

Source: Ministry of Finance and Ministry of Agriculture

²⁴ Approved Estimates of Receipts and Payments of the GoS for the FY Year Ending 30th June 2011

10. As such, based on the current trends in the budgetary allocations the total annual allocation to the agriculture sector is 5%, with 2% through the MAF budget, 2.5% to other Ministries undertaking agricultural related activities and approximately 0.5% from externally funded development projects (both capital and TA) currently not directly linked to specific outputs in the MAF or other Ministry budgets.

11. One of the main issues highlighted is that MAF has direct control of only SAT 11.7 million (40%) of the total funding SAT 28.4 million earmarked for agriculture which restricts effectively the ability of MAF to influence the development direction.

12. The level of development financing of existing projects is estimated to be around SAT 15 million and SAT 12 million is funded by development partners with SAT 3.3 million under government. The bulk of these ongoing projects presented in **Annex 5: List of Ongoing and Pipeline Projects** are expected to be completed between 2011 and 2014. The major pipeline projects identified in the draft PSIP 2009-2013 include the World Bank funded project (SAT 27 million) are expected to start in mid 2011 and AusAID have also indicated their support for the sector with funding details to be finalised. These projects will be integrated into the proposed ASP MTEF and appropriate budgetary outputs to ensure all funding related to the sector are fully captured and are allocated towards the agreed sector objectives and strategies.

13. The modality for support in the past has been predominantly project based, however, the GoS are now advocating a sector wide approach (SWaP) and sector budget support (SBS) through its National Aid and Development Cooperation Policy issued in early 2010. The main purpose of the SWaP would be to harmonise development assistance to the agriculture sector and to cover areas where there might be financing gaps. However, several other development partners can be expected to continue to provide off-budget support to the sector, including UNDP, NZAP, FAO, Japan and China. This presents MAF with some difficulties in directing investment towards sectoral development goals if agencies insist on operating independently. MAF would prefer that funds are provided on and through the national budget.

14. There is a strong need for increased government support for agriculture to enable it to provide more public goods, with the key requirement being the need to improve the quality of public expenditure in the sector. The intention is that, by demonstrating its capacity to prepare plans and to implement them, this ASP will show the Government and Samoa's development partners MAF's commitment to efficient and effective spending in the sector and thereby make its case for a larger share of the national budget. In time, this share is expected to rise during the ASP 2011-2015 period, closer to the 10% level that was achieved in the 1980s.

Private Sources

15. Whilst the overall commercial lending portfolio has grown by an average of 3% p.a., the value or percentage of lending to the agriculture sector has averaged between 1 to 2 % p.a. over the last decade. The bulk of the lending to the sector has been from non-financing institutions including SNPF and DBS with most of the lending to the sector directed towards fisheries projects with relatively small portion going towards crops and livestock projects. The commercial lenders have

shied away from the relatively high risks involved with a declining sector. The situation is aggravated by the lack of security or guarantee that can be provided by farmers to commercial lending institutions. Central Bank of Samoa also opened up a SAT 5 million special credit facility via DBS as part of their stimulus package following the tsunami and global financial crisis. DBS will need to be restructured to focus primarily on agricultural based developments.

16. Organisations such as WIBDI, SBEC and Farmer's Association have in recent years become significant players in the agriculture sector, particularly through facilitation and provision of finances as well as agricultural inputs and technical advice to rural communities. MAF would need to liaise and coordinate sector programs closely with the respective NGO's to ensure investments are made in relation to agreed sectoral development goals.

17. In the context of declining productivity and profitability equity financing for the sector has been lacking. At the village level sweat equity has been the main mode of equity by funding seeking commercial loan financing. There are some expectations in equity financing in agriculture as far as the lenders are concerned. They want the borrowers to provide a certain amount of risk capital and normally prefer lending at fixed rates of interest.

7.4 Funding Scenarios

18. The ASP provides three scenarios based on indicative projections of funding required from public and private sources to support the implementation of key policy objectives and strategies during the plan period. General assumptions for the estimates include (i) continued policy reform and enhanced economic growth driven by the more rapid agricultural growth achieved through investments and (ii) the calculation of equity financing is estimated to be 30% of total incremental lending to agriculture. The condition of equity financing in agriculture is not as good as it should be, however planned efforts are being made to tackle these issues. One of the basic features of equity financing in agriculture is that the lender looks to minimize his risks. Further detailed assumptions used for making the projections are provided under each scenario.

7.4.1 Baseline Cost Scenario

19. The estimates are based on the current level of identified public and private funding allocated for existing policies as such total estimated resources to agriculture is SAT 174 million.

Table 11: Baseline Cost Scenario

Baseline Cost Scenario						
Source	Year 1	Year 2	Year 3	Year 4	Year 5	Total
SAT (000) millions						
Public Source						
- MAF Budget	11	11	12	12	13	59
- Other Ministry/Corporation Budgets	13	14	15	16	16	74
- Externally funded development projects (1)	3	3	3	3	3	15
Sub-Total	27	28	30	31	33	148
Private Source						
- Private Equity to Agriculture (2)	2	1	1	1	1	5
- Private Lending to Agriculture (3)	5	3	3	3	3	16
- Special Credit Facility (4)	1	1	1	1	1	5
Sub-Total	8	4	5	5	5	26
Total Resources to Agriculture	35	33	34	36	38	174
Memorandum Items :						
Total Government Revenue(including grants and loans) (5)	537	563	592	621	652	
Total Private Lending	1,039	1,091	1,145	1,203	1,263	
Total Private Lending for Agriculture	52	55	57	60	63	
<i>Notes:</i>						
(1) - including capital and TA						
(2) - Private equity based on 30% of incremental increase of total private lending to agriculture						
(3) - Incremental increase for total Lending to Agriculture						
(4) - annual pro rata estimates						
(5) - 6% increase driven by expenditure growth in MAF, other ministries and external development projects						

Public Source

20. Funding to agriculture as part of overall government financing remains at 5 with annual allocations of 2% from MAF, 2.5% from Other Ministries and the 0.5% from externally funded development projects over the next five years. As indicated in *Table 11* the estimated existing level of development funding for the plan period include:

- Existing Commitments:
 - NZAP funding of SAT 3 million with continued support to WIBDI and the Private Sector Support Fund;
 - AusAID funding of SAT 2 million for private sector development and support to SROS and SBS for the agriculture census
 - EU funding of SAT 3 million for STABEX support for crop initiatives on pest control and fruit flies as well as continued support to Microprojects through the Civil Society Support Fund;
 - FAO funding of SAT 1.5million to institutional and selected sector studies
 - UNDP funding of SAT 1.5 million for climate change (ICCRAS) and Private Sector Support Fund;
 - FFA funding of SAT 2 million for fisheries institutional, infrastructural and capacity building activities;
 - JICA funding of SAT 100,000 for follow up on fisheries community based projects
 - ACIAR funding of SAT 500,000 for selected commodity studies
 - GoS funding of SAT 1.4 million for stimulus package and remaining tsunami related reconstruction in agriculture sector;

21. Total public funding allocated to agriculture is SAT 148 million with SAT 59 million appropriated via the MAF budget, SAT 74 million via other Ministry budgets undertaking agricultural related activities and SAT 15 million via externally funded developments.

Private Source

22. Private equity contribution to agriculture is estimated to be SAT 5 million based on overall growth of 10% for private lending to agriculture. The total estimated incremental private lending to agriculture is SAT 16 million and special credit lines for agriculture is estimated to be SAT 5 million over the next five years. Total private funding to the sector over the next five years is SAT 26 million.

7.4.2 Medium Cost Scenario

23. The estimates are based on the level of additional funding from both public and private sources needed to implement existing and new policy initiatives being proposed in the ASP. The bulk of financing is expected to be from external development funded sources. Total estimated resources to the sector over the next five years is SAT 394 million.

Table 12: Medium Cost Scenario

Medium Cost Scenario						
Source	Year 1	Year 2	Year 3	Year 4	Year 5	Total
SAT (000) millions						
Public Source						
- MAF Budget	17	19	20	22	25	103
*Counterpart Financing (1)	0.6	1	1	3	8	13
- Other Ministry/Corporation Budgets	11	12	14	15	16	69
- Externally funded development projects (2)	3	3	5	14	39	64
Sub-Total	31	34	39	51	80	248
Private Source						
- Private Equity for Agriculture(3)	1	3	6	8	14	33
- Private Lending to Agriculture (4)	5	11	20	26	47	104
- Special Credit Facility (5)	2	2	2	2	2	10
Sub-Total	8	16	28	36	63	146
Total Resources to Agriculture	39	50	67	88	142	394
Memorandum Items:						
Total Domestic Revenue (6)	562	618	680	748	823	
Total Private Lending	1,088	1,197	1,317	1,449	1,593	
Total Private Lending to Agriculture	51	62	82	109	155	
<i>Notes:</i>						
(1) - counterpart costs are calculated as 20% of externally funded development projects						
(2) - including capital and TA						
(3) - Private equity based on 30% of incremental increase of total private lending to agriculture						
(4) - Incremental increase for total Lending to Agriculture						
(5) - annual pro rata estimates						
(5) - 10% increase driven by expenditure growth in MAF, other ministries and external development projects						

Public Sources

24. The estimates for government sources assumes a 10% allocation to agriculture sector with annual allocations of 3% from MAF, 2% from Other Ministries and the 5% from externally funded development projects over the next five years. Following a review and analysis of the existing and pipeline development projects in the agriculture sector, development financing is expected to increase to SAT 64 million. Additional development funding is based on the following:

- Existing funding from baseline projects 15 million

- Identified Additional Commitments:
 - WB funds estimated to be SAT 27 million over 5 years. Developments to focus on commercially viable sub-sectors such as crops (fruit and vegetables), livestock and institutional strengthening;
 - AusAID Partnership Agreement for Agriculture estimated to be SAT 5 million over five years focused on strengthening sector capacity for planning and policy and infrastructure development;
- Estimated Additional Commitments
 - NZAP funding increased by SAT 1 million for additional support to WIBDI, SBEC and Private Sector Support Fund;
 - UNDP funding increased by SAT 500,000 for additional support to PSSF and selected sub-sector capacity support;
 - FAO funding increased by SAT 1.5 million for the next five years focussed on sector policy and planning development (TA) and Telefood programmes;
 - ADB funding of 1.5 million for TA on customary land project;
 - China funding increased by 1 million over the plan period targeting additional demonstration farms for selected crops;
 - Climate Change Funding increased by SAT 5 million over the plan period focussing on TA provision²⁵ and minor capital investment to follow;
 - EU funding increased by SAT 2.5 million focussing on trade and market development of key commodities;
 - SPC and FFA funding increased by SAT 4 million over the next five year focussing on capacity building and institutional strengthening of key sub-sectors;
 - Other key development projects to be identified

25. Based on these estimates, total government funding allocated to agriculture is SAT 248 million with SAT 116 million appropriated via MAF budget inclusive of the SAT 13 million for counterpart costs, SAT 69 million via other Ministry budgets undertaking agricultural related activities and SAT 64 million via external development projects.

Private Sources

26. A total of SAT 33 million of private equity contribution to agriculture is expected with a 15% growth in overall lending portfolio to agricultural related loans. Total estimated incremental private lending to agriculture over the next five years is SAT 104 million. Special credit lines to agriculture are expected to increase to SAT 10 million. Total private funding to agriculture is SAT 146 million.

7.4.3 High Cost Scenario

27. The estimates are based on international best practices for the level of funding needed in order to ensure adequate funding in revitalising key investment programs and sustaining recurrent costs in the sector. Total funding allocated to the sector over the next five years is SAT 946 million

²⁵ TA daily rate estimated at SAT 2,500 per day

Table 13: High Cost Scenario

High Cost Scenario						
Source	Year 1	Year 2	Year 3	Year 4	Year 5	Total
SAT (000) millions						
Public Source						
- MAF Budget	29	34	39	45	51	198
*Counterpart Financing (1)	1	2	3	8	14	28
- Other Ministry/Corporation Budgets	18	20	23	27	31	119
- Externally funded development projects (2)	3	8	15	42	72	140
Sub-Total	50	63	77	113	154	485
Private Source						
- Private Equity for Agriculture (3)	2	4	8	20	69	103
- Private Lending to Agriculture (4)	7	14	26	68	229	338
- Special Credit Facility (5)	4	4	4	4	4	20
Sub-Total	13	23	38	93	302	461
Total Resources to Agriculture	63	85	114	206	457	946
Memorandum Items:						
Total Domestic Revenue	588	676	777	894	1,028	
Total Private Lending	1,138	1,309	1,505	1,731	1,990	
Private Lending for Agriculture	54	68	94	162	391	
<i>Notes:</i>						
<i>(1) - counterpart costs are calculated as 20% of externally funded development projects</i>						
<i>(2) - including capital and TA</i>						
<i>(3) - Private equity based on 30% of incremental increase of total private lending to agriculture</i>						
<i>(4) - Incremental increase for total Lending to Agriculture</i>						
<i>(5) - annual pro rata estimates</i>						
<i>(5) - 15% increase driven by expenditure growth in MAF, other ministries and external development projects</i>						

Public Sources

28. For public sources, a 15% contribution to the total agricultural budget over the next 5 years is foreseen with 5% from MAF, 3% from other Ministries and 7% from external development funds. Additional development funding is based on the following:

- Existing funding from baseline projects of SAT 15 million
- Identified Additional Commitments:
 - WB funds estimated to be SAT 27 million over 5 years. Developments to focus on commercially viable sub-sectors such as crops (fruit and vegetables), livestock and institutional strengthening;
 - AusAID Partnership Agreement for Agriculture estimated to be SAT 5 million over five years focused on strengthening sector capacity for planning and policy and infrastructure development;
- Estimated Additional Commitments
 - NZAP funding increased to SAT 5 million for continued support to WIBDI, SBEC and Private Sector Support Fund;
 - UNDP funding increased to SAT 2 million for Private Sector Support Fund and identified sub-sector strategies related to community based support;
 - FAO funding increased by SAT 5 million for the next five years focussed on sector policy and planning development (TA) and Telefood programmes and priority infrastructural support;
 - ADB funding of SAT 10 million for TA on customary land project and priority infrastructural support;
 - China funding increased by 5 million over the plan period targeting both private and public demonstration farms for selected crops;
 - Climate Change Funding increased by SAT 30 million over the plan period focussing on TA provision²⁶ and major infrastructural projects in the sector;

²⁶ TA daily rate estimated at SAT 2,500 per day

- EU funding increased by SAT 5 million focussing on trade and market development of key commodities;
- IF funding of SAT 5 million targeting sub-sector strategies related to trade development and poverty alleviation;
- SPC and FFA funding increased by SAT 5 million over the next five year focussing on capacity building and institutional strengthening of key sub-sectors;
- Other key development projects to be identified.

29. Based on these estimates, total government funding allocated to agriculture is SAT 485 million with SAT 226 million appropriated via MAF budget inclusive of SAT 28 million for counterpart costs, SAT 119 million via other Ministry budgets and SAT 140 million from external development funding.

Private Sources

30. Private equity contribution stands at SAT 103 million based on a 20% growth rate for overall lending portfolio to agricultural related loans. The total incremental private lending to agriculture is SAT 338 million. Special credit lines to agriculture are expected to increase to SAT 20 million to cater for the growth in concessionary financing mechanisms in the sector. Total private funding to agriculture is SAT 461 million.

7.5 Challenges

7.5.1 Absorption Capacity

31. The sustainability of the ASP and the achievement of its key objectives rely heavily on the ability of the MAF to maintain its role as the lead agency in the provision of key support and advisory services to the private sector. The relatively significant mobilisation of funding for the ASP to meet its objectives is therefore being planned to ensure that the appropriate key institutional policy instruments and regulatory initiatives are put in place in the first phase of the ASP 2011-2015 plan.

7.5.2 Improving Returns and Reducing Risks of Investments in Agriculture

32. Incentivising the business community and farmers to increase production and productivity of agriculture (through adoption of high yield and pest/disease resistant planting materials/seedlings, breeding stocks; diversification into new crops that are resistant to climate change impacts on soil and water conditions as well as diversification into aquaculture), to use own equity capital and/or borrowed funds to develop commercial type operations integrating production (including contracted sourcing from individual and village community producers) agro processing and value adding as well as marketing of agricultural products specifically targeting either export markets or import substitution or both. Incentives may also target private sector commercial investment in agriculture located in rural areas including Savaii. Possible incentives may include the following:

- Tax exemption or reduced tax on personal and corporate income derived directly from an approved (investment must be first approved by either the current investment committee chaired by CEO of Finance or some other committee to be appointed specifically to consider investment in agriculture) investment in an agricultural commercial enterprise;
- Reduce interest rates on DBS lending to approved agriculture (ie agriculture venture approved by the Investment Committee) development projects and businesses by 30 – 35% of weighted average interest rate on commercial loans by the commercial banks;

- Price and input subsidies will need to be developed and linked to production and performance based indicators to ensure sustainable access to such benefits;
- The current SBEC and Village Group Guarantee Schemes are to be expanded and additional resources allocated to ensure the benefits are widespread and sustained;
- Central Bank of Samoa to examine the viability and options of appropriate insurance schemes to minimise risks to producers from natural disasters and other related commercial risks such as the export guarantee scheme;
- Government funding for cost of surveying customary land leased for agricultural purposes;
- A review of the DBS role as the main conduit of commercial lending to the agriculture sector using customary land leaseholds as collateral and village group guarantees is critical in order to ensure timely and targeted delivery of resources to key beneficiaries in the community;

7.6 The Medium Term Expenditure Framework

33. The Public Finance Management Reform Plan 2008 – 2013 requires the formulation of a medium term expenditure framework (MTEF) as a means of linking sector plans to the national budgetary process so as to ensure the actual allocation of public funding in support of sector development is aligned to sectoral and national development priorities. The ASP Budget will need to be operationalised through an MTEF linked to the national budget process.

34. The current practice under the national budget process involves developing forward estimates for ministries based on a three year basis. This process needs to be closely linked to the proposed sector MTEF. At this stage a fully developed and functional MTEF for the sector can only be developed after the sector strategies have been fully articulated and associated development activities have been prioritized. A draft MTEF framework for the sector plan is highlighted in *Figure 19*.

35. The sector MTEF will involve the costing of sector plans as noted in the 2009 Sector Planning Guidelines Sector. This indicates that planners will be engaged in a bottom-up exercise of 3-year cost projections, which should cover both capital and recurrent expenditure, and programs and subprograms of activities or inputs, which consist of human funding, technology (for example: equipment and work processes) and finance (public and private). These inputs produce designated outputs, which in turn contribute to the achievement of sectoral objectives. In general, to ensure the effective achievement of sector plan objectives, there is a need for sector stakeholders/agencies to cost both existing and proposed new programmes of activities, and two types of costs of implementing such programmes, namely:

- Recurrent costs (operational and personnel); and
- Development or capital costs (existing and proposed pipeline capital investments and technical assistance).

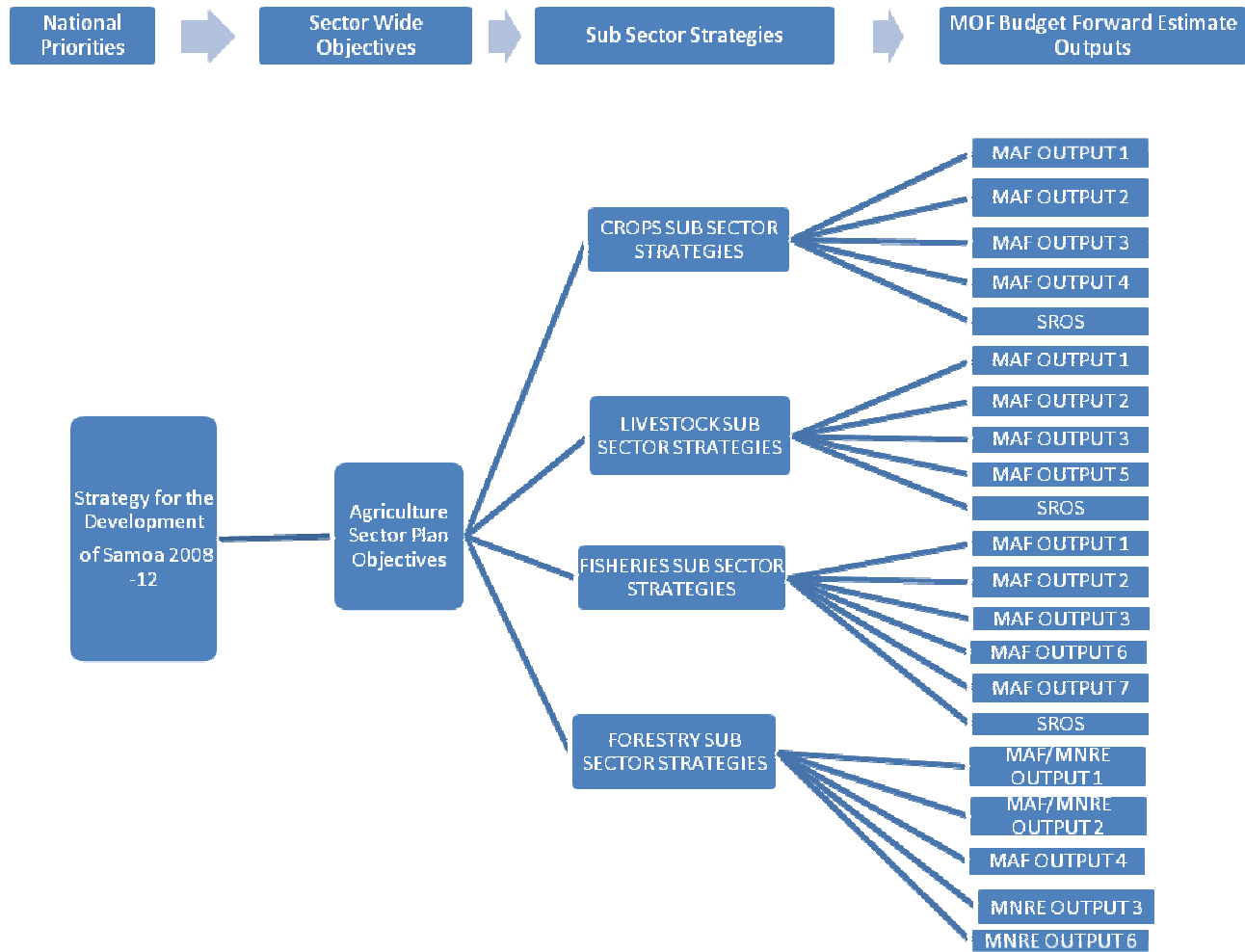
36. The MAF or the sector working group will need to ensure the following steps are taken:

- **Step 1:** *Establish where the individual responsibilities of sector agencies (Government agencies, civil society agencies, private sector agencies, community groups) lie in respect of sector plan implementation;*

- **Step 2:** *Establish with the sector agencies what the nature and extent of costs are (recurrent or development);*
- **Step 3:** *Establish with the sector agencies the total cost of the projects/programmes;*
- **Step 4:** *Establish with sector agencies the sequencing of the total cost of projects/programmes in future years;*
- **Step 5:** *Summarise the sector costs in terms of objectives/goals;*
- **Step 6:** *Summarise the total sector costs by adding the estimated costs of achieving sector objectives*

37. The sector MTEF should therefore be used as a point of reference when MAF and sector related ministries prepare their annual budget estimates for consideration by MoF.

Figure 19: Proposed Medium Term Expenditure Framework Outline



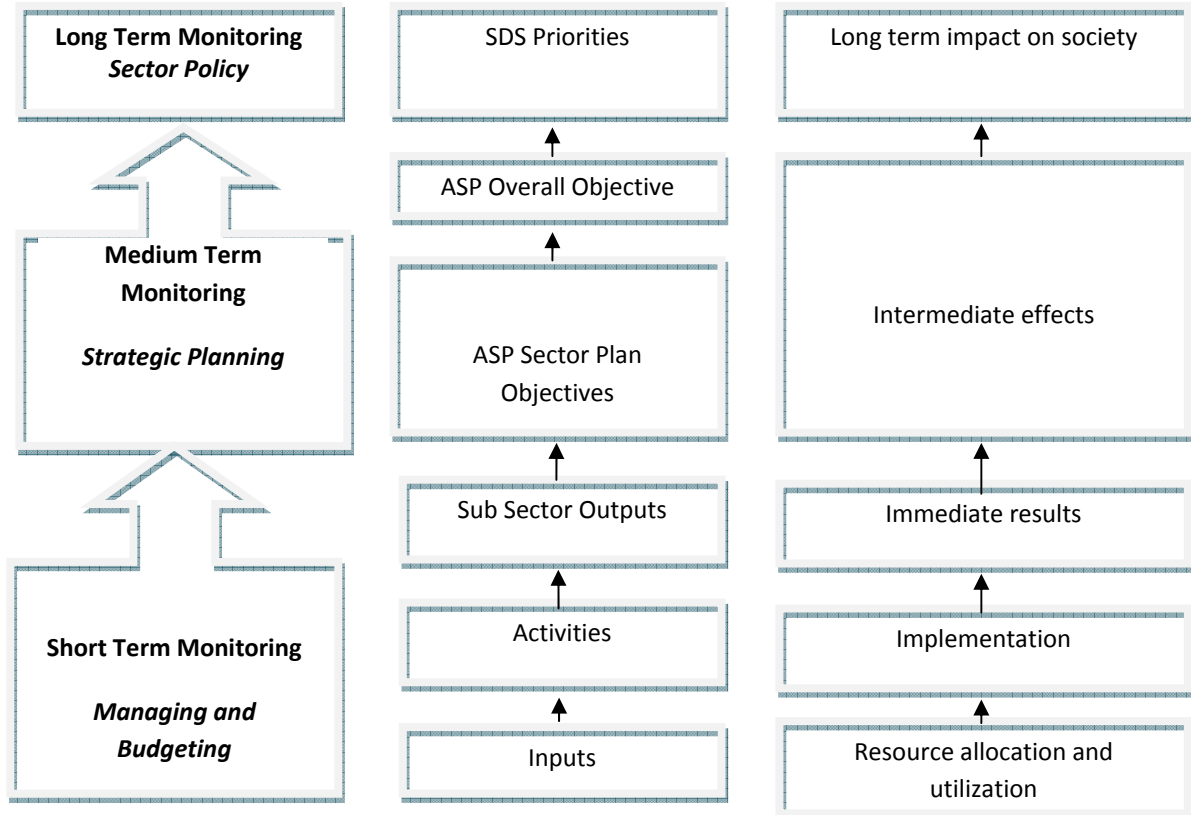
8 Chapter 8: Monitoring and Evaluation

8.1 Introduction

1. The close monitoring and evaluation of sectoral and sub-sectoral strategies based on their respective established indicators is essential to the reviewing of the implementation of the ASP. Furthermore, the establishment of a comprehensive and detailed Monitoring and Evaluation Framework is key to measuring and assessing the long term impacts of key policy objectives on the livelihood of the people of Samoa and on the economy as a whole.

2. Determining the overall success of the sector policies will depend on the monitoring and evaluation of sector strategies and measuring or assessing its effects on the long term impacts on society. The medium term strategies will be monitored and evaluated based on the achievement and effectiveness of intermediate targets and goals for each sub sector. In addition, the short term goals or objectives are monitored according to the achievement of outputs by activities based on the level of inputs within the budgetary timeframe of one financial year and is reviewed and evaluated on an annual basis which is in line with new performance budgeting framework as implemented by the Ministry of Finance. This is further illustrated in *Figure 20* below.

Figure 20: Monitoring and Evaluation Levels



8.2 Current Monitoring and Evaluation Framework

3. Work done as preparation for the ASP has revealed how much there is to do in establishing a functioning M&E system inside MAF and the sector. A significant amount of current work presently undertaken by MAF is only a partial sub-set of what is required. Short term general monitoring is currently being undertaken by MAF and other key agencies within the public sector vis-a-vis the annual budget process, three year corporate plans and annual capability plans. Periodic external project reviews of donor funded projects have also assisted in MAF getting a selective assessment of the sector. However, accessing reliable data on agriculture production, marketing and trade presents a major challenge in developing and monitoring appropriate policy interventions in the sector. The general unavailability of data on the sector has therefore limited the development of a functional monitoring system with baselines and targets for the ASP.

4. The need now is to redesign the system and this must be done within the parameters of functionality and affordability. This work should take as its starting point the work done for the ASP, in particular the drafting of an integrated set of baseline data and targets based on the outcome based indicators framework in *Table 14*. The risks associated with each sector policy objective are provided in **Annex 6: Agriculture Sector Risk Matrix**.

Table 14: Sector Outcome Indicators Framework

Sector Vision	Agriculture for Food and Income Security		
Sector Theme	“... farming and fishing first...”		
Overall Sector Goal:	‘To revitalize the agriculture sector to increase its relative contribution to the national GDP from its current level of 10 percent to 20 percent by 2015’		
Key High Level Development Outcomes	Increased food and income security by 2015		
Sector Policy Objectives			
Sector Policy Objective 1: To strengthen policy, legal, regulatory and strategic planning framework for sustainable agriculture development;	Sector Policy Objective 2: To improve national self reliance in food production and nutritional security.	Sector Policy Objective 3: To enhance private sector capacity in improving productivity, value adding and marketing;	Sector Policy Objective 4: To ensure sustainable adaptation and management of agriculture resources;
Sector Policy Indicators			
<ul style="list-style-type: none"> ASP approved by Cabinet and implemented; Proportion of MAF budget allocation for agriculture 	<ul style="list-style-type: none"> Increased volume and value of domestic production of agriculture products; Contribution of locally grown foods to diet 	<ul style="list-style-type: none"> Increased agricultural production index; Increased value adding from agro-processing based 	<ul style="list-style-type: none"> Resilience and adaptation strategies developed and implemented; Area of arable, forested,

<i>increased;</i>	<i>increased;</i>	<i>industries;</i> <ul style="list-style-type: none"> • <i>Increased export earnings and import substitution;</i> • <i>Increased number of people engaged in agriculture activities;</i> 	<i>reserved/protected land as proportion of total land area and % of arable land used;</i> <ul style="list-style-type: none"> • <i>Rate of land degradation (e.g. soil erosion)</i>
Sector Strategic Outcomes			
Outcome 1.1: <i>Agriculture Sector Plan effectively implemented by 2015;</i>	Outcome 2.1: <i>Increased food self reliance and nutrition;</i>	Outcome 3.1: <i>Increased private sector investments in the sector;</i>	Outcome 4.1: <i>Enhanced capacity for sustainable practices in the sector;</i>
Outcome 1.2: <i>Reliable and timely availability of key agricultural statistics for planning and monitoring of sector performance;</i>	Outcome 2.2: <i>Increased productivity from adoption of high yield crops, livestock and aquaculture species;</i>	Outcome 3.2: <i>Improved efficiency of economic infrastructure in the sector;</i>	Outcome 4.2: <i>Enhanced adaptation of environmentally friendly production systems;</i>
Outcome 1.3: <i>Coherent and well coordinated sector vis-à-vis adoption of the sector wide approach;</i>	Outcome 2.3: <i>Enhanced nutritional dietary intake from locally produced agriculture products;</i>	Outcome 3.3: <i>Increased access to tailor made financing arrangements for farmers and fishers;</i>	
Outcome 1.4: <i>Enhanced policy, planning and monitoring capacity of MAF including delivery of market oriented extension services;</i>		Outcome 3.4: <i>Increased diversification and access to commercially viable products in the sector;</i>	
Outcome 1.5: <i>Enhanced legal and administrative framework for leasing of customary land for agriculture formalized;</i>		Outcome 3.5: <i>Increased compliance with food safety, phytosanitary and market access requirements in the sector;</i>	
		Outcome 3.6: <i>Increased exports of fisheries and niche type products;</i>	

8.3 The Proposed Framework and Approach

5. Establishing an effective performance measurement system requires developing an understanding and agreement among all stakeholders as to what is to be achieved and how important performance management decision will be made. The specific intention is to establish a functioning and appropriate sector information and management system (including statistics and ICT) to support planning, monitoring and evaluation. The information system should therefore have at least three stages:

- The compilation, processing, analysis, understanding, write up and presentation of the data around a set of key performance indicators;
- Understanding of lessons and policy messages from the data collected and;
- Absorption of the lessons learnt and subsequent management action to improve implementation and performance.

6. A recent scoping study²⁷ of agriculture data in six Pacific Island Countries indicated that a Global Strategy for agricultural indicators has established a minimum set of core indicators (refer **Volume II: Appendix IX**) for each country. The SPC preliminary list of minimum indicators recommended for agriculture and forestry is highlighted in **Volume II: Appendix X**. The ASSC may wish to review and adapt as appropriate the SPC framework which highlights the importance of collecting and collating the following agricultural data:

- **Essential**

- Proportion of household income from agriculture and forestry activities (disaggregated by income from subsistence and income from sales);
- Number of people (disaggregated by gender and youth, formal and informal) engaged in agriculture and forestry activities;
- Volume and value of domestic production of agriculture and forestry products;
- Area of arable, forested, reserved/protected land, as proportion of total land area and % of arable land used;
- Volume and value of trade (imports, exports and re-exports) of agricultural and forestry products;
- Prices of domestic and international agriculture and forestry commodities;
- Rate of deforestation;
- Rate of land degradation (e.g. soil erosion)

- **Desirable**

- Rate of biodiversity loss;
- Number of people suffering from diet-related diseases (diabetes, obesity, heart disease, and if possible cost of treating them);
- Contribution of locally grown foods to diet;
- Diversity of diets;
- Level of remittances;
- Proportion of budget allocation for agriculture

7. Data collation should also target activities directly implemented by MAF and key implementing agencies, looking at the direct impact of those activities. This principle of manageable interest ensures that the results reported by the sector M&E system are within the key implementing agencies ability to influence. MAF will also design and implement specific M&E surveys and studies to investigate secondary impacts on agriculture where appropriate. Details concerning indicator definitions, units of measure, collection methods, report frequency, and responsible parties are some of the critical issues still to be finalized.

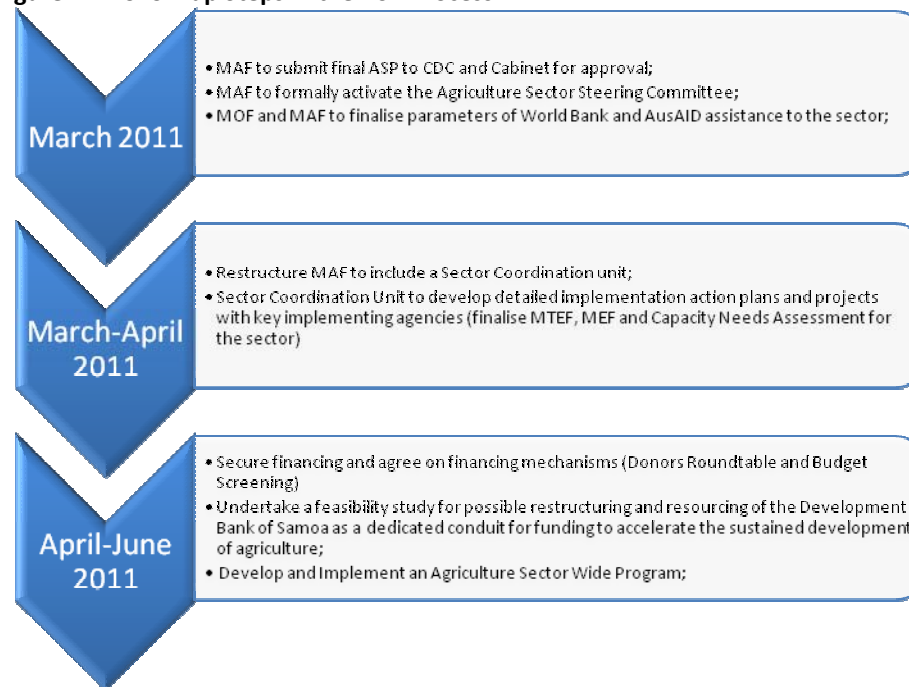
²⁷ "Agriculture Data – report on a scoping study in six Pacific Island Countries", FAO, November 2010.

9 Chapter 9: Follow up Actions and Conclusion

9.1 Follow Up Actions

1. This section covers the following key immediate actions (refer to *Figure 21*) that should be taken to initiate the implementation of the Agriculture Sector Plan.

Figure 21: Follow up Steps in the ASP Process



2. A key concern for the development of the ASP is the need to avoid the emergence of parallel policies, planning and implementation processes. That will be avoided if there is adequate leadership 'buy in' largely through ensuring that the political priorities are captured in the ASP. In this context, the political leadership and approval of the ASP by CDC and Cabinet is considered critical to national buy in. The official activation of the national ASSC is also critical in this process.

3. The key upcoming projects (e.g. SACEP) and proposed new portfolio of projects will be delivered or implemented via a sector wide approach. As such, the proposed Sector Coordination Unit needs to be quickly established in order to spearhead these programmes and ensure the priorities of the ASP are being adequately reflected in the proposed programmes/projects.

4. In securing financing and agreeing on financing mechanisms, it is noted that intention of MAF as it moves towards SWAp resourcing, that in time, a new portfolio of projects be designed to implement the ASP. These would be funded by GoS using domestic finance, including donor budget support vis-à-vis

the budget process and donors' roundtable. The basis for such a new portfolio, and the priorities on which it is based, should derive from this ASP and be high on the agenda for the ASSC.

9.2 Conclusion

5. The Agriculture Sector Plan sets out the key strategies and priority objectives for the agriculture sector in the medium term in an attempt to re-invigorate the sector to its former position as the lead contributing sector to GDP as well as to revive its huge export and import substitution potential. The plan also sets out the priority strategic areas for priority attention to ensure that the financial, institutional and human resources are re-directed as needed and on a sustainable basis to address current issues and problems in the sector and to position it for sustained development and growth in the medium to longer term.

6. The key challenges for MAF are to ensure a strong leadership and commitment as well as coordination with sector agencies to implement the ASP; and to develop and maintain strong active partnerships between Government, the private sector and donors to achieve the goals and outcomes of the ASP thereby contributing to the achievement of the SDS 2008 – 2012 national vision of *“Improved Quality of Life for All Samoans”*.

10 References

Laws and Regulations

- Animals Ordinance 1960
- Export of Meat Act 1997
- Fisheries Act 1988
- Fisheries (Ban on Driftnet Fishing) Act 1999
- Produce Export Ordinance 1961
- Forests Act 1967
- Fisheries Management Bill 2010
- Pesticides Regulation 1990 (under review)
- Bio – security Act 2005 (under review)
- Export Control Bill 2008 (draft)
- Abattoir Bill 2009 (draft)
- Animal Welfare Act (pipeline)

National Plans and Strategies

- Ministry of Agriculture, Fisheries, and Forestry Corporate Plan 2008 – 2012
- Strategy for the Development of Samoa 2008 – 2012 (SDS 2008 – 2012)
- Issues Paper – Agriculture Sector 2008
- Policy Statement of Forestry – MNRE 2007
- MNRE – Capability Plan Implementation 2008-2011
- MNRE – Management Plan 2008-2011
- MNRE – Corporate Plan 2008-2011
- SAME – Strategic Plan 2010-2015
- National Export Strategy 2008-2012
- Trade Policy Statement 2008
- National Fruit and Vegetable Strategy 2009-2015
- Sustainable Forest Management Programs in Samoa 2002
- Tuna Management and Development Plan 2011-2015 (draft)
- Public Sector Investment Plan 2009 – 2013 (draft)
- Ministry of Agriculture and Fisheries Emergency Response Plans

National Project Documents and Reports

- Agriculture Sector Review 2008
- ADB – Promoting the Use of Customary Land for Economic Purposes 2010
- Agro – forestry Programme Design Document 2007
- An Assessment of Existing Information Systems and Databases for National FIVIMS – An Overview Report 2002
- Livestock Sector Review 2004

- Coconut Sector Review 2003
- Capacity Building in Agribusiness and Marketing Agricultural Produce and Management for Young Farmer Groups 2005
- Agriculture Survey 2005
- Agriculture Census 1999
- Household Income and Expenditure Report 2008
- Poverty Report: A Report on the Estimation on Basic Needs Poverty Lines and the Incidence and Characteristics of Hardship and Poverty 2010 – Analysis of the 2008 HIES Report
- Samoa Agriculture Competitiveness Enhancement Project (SACEP) Project Pre-Appraisal Mission – Draft Aide Memoire 2010
- SACEP Project Design Document 2010
- Soil Resources Interpretative Reference Manual for Samoa 2010
- World Bank Project Design Document 2010
- FAO Agriculture Sector Review 2008
- FAO Agriculture Sector Review – Draft Outcome of Consultations 2009
- FAO Samoa Forestry Outlook Study Working Paper 2009
- FAO Market Appraisal Study for Agriculture Sector 2004
- FAO Samoa Morinda citrifolia (Nonu) Case Study 2009
- Samoa Diagnostic Trade Integration Study 2010 – Agriculture Sector Chapter – Final Draft
- Economic Valuation of Aquaculture Opportunities in Samoa
- Agriculture Data – Report on a scoping study in six Pacific Island Countries, November 2010
- Central Bank Monthly Bulletins 2000-2009
- Development Bank of Samoa Annual Reports 2005-2008
- Sustainable Forest Management and Protected Area Management Project (PIB) for CDC April 2010

Regional and International Documents

- European Union Dossier on Intellectual Property Rights and Agriculture
- Review of Institutional Reform and Institutional Strengthening in Pacific Fisheries 2008
- Cocoa Action Plan: The Feasibility of Reviving Cocoa as a Major Industry 2004
- Investing in Food Security 2009
- SPC Framework for Action on Food Security in the Pacific
- SPC Youth in Agriculture Strategy 2011 – 2015
- SPC The Future of Pacific Island Fisheries 2010
- SPC Fish and Food Security Policy Brief January 2008

Annex 2: Detailed Key Initiatives in the Sector

Key National Strategies:

1. Samoa-Australia Partnership for Development Initial Implementation Strategy, AusAID

The Partnership's 'Private Sector Growth & Employment' priority aims to increase the contribution of agriculture and fisheries to GDP by supporting private sector development, promoting regional economic development and trade liberalisation, improving economic infrastructure and lowering the costs of doing business.

A key area of support under the Partnership is support to the formulation of the Agriculture Sector Plan. It is proposed that the new Agriculture Sector Plan will be focussed on six strategies at four levels as follows:

1. Market Access Level Strategies

- Strategy 1: Facilitating access to market opportunities, for subsistence farmers and fishers and for commercial / export-orientated farmers. Trade access negotiation is to be strengthened and regional and international trade agreements operationalised (including PICTA and PACER). The mandate and functions of the Private Sector Support Facility will be expanded to more proactively seek out and address market failures and opportunities for expansion into new markets.
- Strategy 2: Enhanced market connectivity. Subsistence farmers and fishers will be encouraged to organise and cluster to improve their ability to share new practices, reduce costs and improve market access (including expansion of the scope and reach of WIBDI). For export-oriented commercial operations, the function is one of securing markets and ensuring market standards are developed.
- Strategy 3: Use of research and technology (through Scientific Research Organisation of Samoa) to create a competitive edge and facilitate market access, and to certify that products meet required standards. Government will provide support to subsistence farmers and fishers in accessing inputs and extension services.

2. Secondary Processing Level Strategies

- Strategy 4: Enhancing the business environment by improving the quality of economic infrastructure and lowering the costs of doing business through investment in infrastructure and regulation of service standards.

3. Primary Level Strategies

- Strategy 5: Encouraging investment in and finance for agriculture. Targeted tariff and tax measures will be considered and a robust market framework promoted by taking steps to define and secure property rights for customary lands and inshore lagoons. A pilot agro-forestry programme for customary lands will be developed. Commercial farmers and fishers will be assisted to access new labour skills through overseas recruitment in the short term and through development of educational curricula and training programmes.

4. National Policy and Planning Strategies

- Strategy 6: The business enabling environment will be enhanced by amending policy and regulatory frameworks better to suit private sector led development, including redefinition of the role and responsibilities of the Government, and MAF in particular, in bringing about sector development. Equally important is the capacity of the private sector and its representative organisations to engage effectively in policy dialogue.

2. National Export Strategy of Samoa 2008 - 2012

The National Export Strategy of Samoa (NES) 2008 – 2012 identifies the deterioration of the export sector over the period between 1980 and 2006 and attributes this to a combination of domestic supply and international demand effects.

The NES highlights Agricultural development as key to the revitalization of the export sector stating that “...Agriculture development will target increased agricultural activity for local consumption as well as commercial investment...” and establishes a vision for the Agriculture Sector as:

To be the leading export earner through increased productivity and improved quality for crops and livestock

Key crops identified in the NES 2008-2012 include Bananas, Cocoa, Taro and Cassava whereas livestock includes Beekeeping (Apiculture), Cattle, Piggery and Poultry. The main markets for agricultural products are:

- (i) Domestic markets
 - a. tourism industry (livestock products, fruits and vegetables for hotels and restaurants)
 - b. local markets (local markets requiring lower grade produce, super markets)
 - c. local agro processing (feed, coconut oil, coconut cream, soap etc)
- (ii) Export markets
 - a. Exports (off season fruit and vegetables, niche markets, the expatriate Samoan and Polynesian communities in American Samoa, New Zealand and Australia.)
 - b. Exports of traditional crops like coconuts and taro to the expatriate Samoan and Polynesian communities in American Samoa, New Zealand and Australia
 - c. Exports for niche products like nonu juice and kava for Asian markets

The NES also establishes a vision for the Fisheries Sector as:

To sustain fish exports as one of the top exporting sectors and foreign exchange earners of the Samoan economy

Furthermore, the NES indicates that vital to the overall development of the sector is the need to address the sustainable and productive use of available arable lands as well as the diversification of local produce/exports.

3. Fruits and Vegetable Strategy 2009

The Fruits and Vegetables Sector Strategy for Samoa 2009 was developed by a Coordinating Committee of key stakeholder representatives under the leadership of MAF with technical assistance provided by the International Trade Centre through the auspices of the Food and Agriculture Organisation.

The vision for the Fruits and Vegetable Sector is:

A competitive and sustainable sector growing the future for a healthy and wealthy Samoa

The Strategy has 3 main overall objectives:

- To enable the sector to become a more significant contributor to the Samoan economy by better capitalizing on existing and future market opportunities and attracting direct investment;
- To articulate and implement value chain actors to address the main issues and challenges faced by the sector in order to respond to market requirements;
- To engage with and mobilize resources from Government and development partners for implementation of the strategy.

The FVS 2009 is supported by the following 7 key strategies:

1. Improve coordination in the sector to ensure successful implementation;
2. Improve market intelligence, promotion and dissemination across the whole value chain;
3. Build a supply sub sector that can guarantee consistent quality and supply of fresh fruit and vegetables;
4. Build a sector that is well trained and supported by a comprehensive and properly executed capability plan;
5. Improve financial situations of sector farmers and enterprises;
6. Promote integrated management of resources and ensure sustainability of the fruit and vegetable sector;
7. Strengthen SAME to provide services that will increase returns and overall value for the sector.

Key National Projects

4. Integrating Climate Change Risks in the Agriculture and Health Sectors in Samoa (ICCRA & HSS) 2008 – 2012, UNDP (part of NAPA 1 initiatives)

The goal of the project is to safeguard human development in Samoa from new and additional risks associated with climate change. The objective of the project is to increase the resilience

and adaptive capacity of coastal communities in Samoa to the adverse impacts of on agricultural production and public health. The key outcomes include:

- Outcome 1: Enhanced technical and organizational capabilities of the Samoa Meteorological Division (MD) to monitor and provide information on climate change risks and early warning communications to the agricultural and health sectors and augment existing Disaster Risk Management processes;
- Outcome 2: Capacity of Samoa's agricultural sector improved to design adaptive policies and perform short-term (seasonal) and long-term (decadal) agricultural planning and crop management;
- Outcome 3: Capacity of Samoa's public health planners and public health workers strengthened to reduce the impact of climate change on public health

5. Samoa Agricultural Competitive Enhancement Project, World Bank

To assist the revitalization of the Agriculture Sector, the Government of Samoa has sought assistance from the World Bank to strengthen the livestock and fruits and vegetables sub sectors through market development support. It is hoped that the project will contribute to improving farm productivity so as to increase local production and raise income generation.

The project is divided into 3 key components:

1. Component A: Livestock Production and Marketing

The objective of this component would be to encourage interested livestock producers to upgrade livestock, improve husbandry practices and stock management, make productivity enhancing on-farm investments, and improve the quality meat sold in the local market. The component would comprise a number of activities, including:

- improving farmer access to superior breeding stock for cattle, pigs, sheep and poultry;
- financing eligible farm enterprise investments to improve stock handling and livestock housing and provide start-up working capital, through a combination of demand-driven matching grants and bank loans;
- providing technical advice on breed selection and breeding management, nutrition, animal health and improved husbandry practices;
- improving livestock nutrition by fostering locally grown feedstuffs and upgrading pastures for cattle and sheep;
- improving meat quality and hygiene through construction of an abattoir on Upolu and initiation of a field slaughter service on Upolu and Savaii, with associated cold chains.
- improving market access through spot improvements of unsealed rural access roads in collaboration with the Land Transport Authority.

2. Component B: Fruit and Vegetable Production and Marketing

The objective of this component would be to enable interested fruit and vegetable growers to have access to new, higher yielding varieties, adopt improved technology and production

techniques, make productivity enhancing investments, and organize themselves to strengthen their presence in the market and meet the demands of local retailers and foodservice operators for year-round supplies of fresh fruits and vegetables. The component would be comprised of a number of interrelated activities, including:

- enhancing farmer access to planting material of a broad range of improved fruit and vegetable varieties, shown in local trials to be suitable for Samoan conditions;
- financing eligible farm enterprise investments to facilitate land preparation, address problems with seasonal rainfall excesses and shortfalls, increase mechanization and provide start-up working capital - through a combination of demand-driven matching grants and bank loans;
- providing technical advice on variety selection, crop nutrition, improved husbandry practices, and post harvest handling;
- facilitating the formation of business-oriented farmer marketing groups through a variety of operational models to improve access to technical and market knowledge and facilitate aggregation of product for more efficient marketing;
- promoting the growth of organic products through assistance in market development and arrangements for certification;
- supporting studies undertaken by interested grower groups to assess the export market for fruits and vegetables and the associated need for more High Temperature Forced Air (HTFA) capacity; and
- improving market access through spot improvements of unsealed rural access roads in collaboration with the Land Transport Authority.

3. Component C: Institutional Strengthening

The objective of this component would be to improve (a) the effectiveness of agricultural institutions (Government and non-government) providing extension and adaptive research services to Samoan farmers; and (b) the ability of these same institutions working individually or in collaboration with each other to implement and monitor the project effectively. This would be done by:

- enhancing institutional technical and management capacity to address identified skill-gaps in staff and the operational procedures of implementing agencies, through (i) short-term local and overseas training, secondments and exposure visits for agency staff; (ii) targeted short-term technical assistance, sourced locally whenever this is available;
- providing incremental staff needed to coordinate and administer the project effectively - specifically project coordination, procurement, financial management, environment/social screening, monitoring and evaluation, and beneficiary loan facilitation and monitoring;
- improving work facilities and providing adequate vehicles, equipment and operating expenditure to maximize operational effectiveness; and
- Designing and implementing a monitoring and evaluation system which is integrated into the existing Management Information System (MIS) of MAF.

Annex 3: National Agriculture Sector Steering Committee and Lead Agency – TOR

The following TORs have been extracted from EPPD internal guidelines for Sector Steering Committee composition, roles and responsibilities:

Terms of Reference for a Lead Agency/MAF (Chairmanship and Secretariat) of Sector Steering Committee

1. To identify and provide all potential stakeholders in a sector to the Sector Steering Committee.
2. To assume chairmanship²⁸ and secretarial²⁹ support for the Sector Steering Committee.
3. To establish the membership³⁰ and composition of the Sector Steering Committee.
4. To provide guidelines and direction together with MOF for the Sector Steering Committee.
5. To provide sectoral issues and information to Sector Steering Committee.
6. To provide technical assistance/support for Steering Committee should the need arises.
7. To provide resources (financial or human) for Sector Steering Committee should the need arises.
8. To estimate the resource (financial, human, capital, etc) requirements in collaboration with MOF for Steering Committee.
9. To ensure the achievement of corporate plan outputs.

Terms of Reference for Sector Steering Committee:

1. To conduct and administer all meetings with stakeholders.
2. Set the minimum required quorum for a meeting.
3. To ensure that stakeholder consultations are effective and efficient.
4. To review line agencies and stakeholders' roles and responsibilities to ensure consistency among and within sectors.
5. To identify sources for data collection.
6. To co-ordinate and monitor (1. Planning and Designing, 2. Approval and Funding, 3. Implementation and Monitoring, 4. Annual Reviewing and Reporting, 5. Printing and Distribution) of Sector Plans.
7. To identify the resource (financial, capital, human, etc) requirements for the formulation of Sector Plans
8. To ensure that all line agencies are involved in the sector planning process.
9. To undertake a situational analysis.
10. To ensure that the Sector Plans follows the Sector Planning Guidelines.

Terms of Reference for Line Agencies

1. To ensure consistent, effective and efficient membership in Sector Steering Committee.
2. To ensure consistent, effective and efficient participation in stakeholders consultations.
3. To provide sectoral issues and information to Sector Steering Committee.

²⁸ This function could be undertaken by the CEO or an appointed Assistant CEO of the Lead Agency.

²⁹ This function could be provided by the Lead Agency.

³⁰ MOF will play an advisory role in the Sector Steering Committee.

4. To provide technical assistance/support for Sector Steering Committee should the need arises.
5. To provide resources (financial or human) for Sector Steering Committee should the need arises.
6. To ensure the achievement of corporate plan outputs.
7. To reflect stakeholder feedback into corporate plans.

Terms of Reference for Civil Societies/Private Sector, etc

1. To ensure consistent, effective and efficient membership in Sector Steering Committee.
2. To ensure consistent, effective and efficient participation in stakeholders consultations.
3. To provide sectoral issues and information to Sector Steering Committee.
4. To provide technical assistance/support for Sector Steering Committee should the need arises.
5. To provide resources (financial or human) for Sector Steering Committee should the need arises.
6. To ensure the achievement of business plan objectives or tasks specified in their strategic institutional documents.

Terms of Reference for Ministry of Finance (MOF)

1. To facilitate and advise Lead Agencies and Sector Steering Committees on the sector planning process.
2. A member of Sector Steering Committees.
3. Advice on the availability of financial resources to Lead Agencies and Sector Steering Committees (based on the merits of proposal)
4. To monitor the budget provisions for Sector Plans.
5. To provide technical assistance to sectors.
6. To impose realistic time frames on when Sector Plans should be ready.
7. To mediate or act as a conciliator in sector issue differences or disagreements.
8. To ensure annual sector reporting is adhered.

Proposed Composition:

CEO – MAF (Chair), CEO – MOF, CEO – MNRE, CEO – MCIL, CEO – SROS, CEO – SBS, CEO – WIBDI,
President – Farmers Association, President – Chamber of Commerce, Dean of Agriculture School - USP

Annex 4: Agriculture Sector Responsibility Matrix

L – Lead agency;

C – In collaboration with;

S – Supporting agencies;

AGRICULTURE SUB-SECTORS RESPONSIBILITY MATRIX																	
No.		MAF	MOF	MNRE	MWCSD	MCIL	MFAT	DBS	SROS	SBS	Private Sector	AGO	SUNGO	WIBDI Chamber	Academic Institution	Communi	
0	Agriculture Sector Coordination																
	<i>Sector Lead Organisation Agriculture Sector Steering Committee</i>	L									L						
1	Crops																
	Policies	L	C	L	S	S	S				C						
	Legislation	L										C					
	Planning	L	C								C						
	Financing	C	L					L								S	
	Monitoring & Evaluation	L									L						
	Education / R&D	L	C						L							S	
	Awareness Raising	L		C	C	C	C		C		S		S	S	S		
2	Fisheries																
	Policies	L	C		S	S	S				C						
	Legislation	L										C					
	Planning	L	C								C						
	Financing	C	L													S	
	Monitoring & Evaluation	L									L						
	Education / R&D	L	C						L								
	Awareness Raising	L			C	C	C				S		S	S	S		
3	Livestock																

AGRICULTURE SUB-SECTORS RESPONSIBILITY MATRIX																	
No.			MAF	MOF	MNRE	MWCSD	MCIL	MFAT	DBS	SROS	SBS	Private Sector	AGO	SUNGO	WIBDI Chamber	Academic Institution	Communi
		Policies	L	C		S	S	S				S		S	S		
		Legislation	L										C				
		Planning	L	C								C					
		Financing	C	L													S
		Monitoring & Evaluation	L									L					
		Education / R&D	L	C						L							
		Awareness Raising	L			C	C	C				S		S	S	S	
4	Forestry																
		Policies	C	C	L	S	S	S				S		S	S		
		Legislation			L								C				
		Planning	C	C	L							C					
		Financing	C	L	C												S
		Monitoring & Evaluation	C		L							L					
		Education / R&D	L	C	L					L							
		Awareness Raising	L		L	C	C	C				S		S	S	S	

Annex 5: List of Ongoing and Pipeline Projects

Ongoing and Pipeline Agricultural Projects and Programmes												
Exchange Rates: USD = \$2.4569 AUD = \$2.3988 NZD = \$1.8390												
Donor	Project Name	Objective	Implementing Agency(s)	Crops	Livestock	Fisheries	Forestry	Capacity Building	From	To	Amount	Currency
Ongoing Projects												
Turkey	Ethanol Extraction from Breadfruit	Fund the research of ethanol extraction from breadfruit and its potential benefits	MAF	x					2008	2009	\$238,000	USD
ACIAR	Improving the Value and Marketability of Cocowood	Ensuring producers increase value of cocowood through workshops aimed at marketing the product	MAFF				x		2007	2010	\$182,590	AUD
											\$437,997	SAT
AusAID	Samoa Private Sector Development	Provide support to the SROS and Agriculture sector under the private sector development priority of Samoa-Australia Partnership	MAFF/SROS	x	x	x		x	2010	2010	\$577,500	AUD
E.U	STABEX - Pest Control and Capacity exports	To reduce the fruit fly pest problem and build capacity to benefit from market opportunities	MAFF	x					2008	2010	\$500,000	SAT
E.U	STABEX - Agriculture Diversification through the Microprojects	Provision of small grants to extended families in support of agriculture income generation activities	MAFF/ Aid Coordination Division (MoF)	x	x	x		x	2010	2010	\$977,442	SAT
E.U	STABEX Project	Funding support for initiatives within Crops Section	MAF	x				x	2008	2010	\$1,460,000	SAT
FAO	Sheep Integration into traditional farming	Introduction of sheep into herding practices in Samoa	MAF		x			x	2007	2010	\$135,329	USD
											\$332,490	SAT
FAO	Post Harvest Treatment Project (Breadfruit and Papaya)	Treating of harvested breadfruit and papaya for consumption	MAF	x					2007	2010	\$1,440,000	SAT
GoS	Tsunami Reconstruction	To rebuild the agriculture sector following the 2009 tsunami	MAF	x	x	x	x		2010	2010	\$2,500,000	SAT
GoS	Agricultural Development Project		MAF						2009	2010	\$300,000	SAT
GoS			SBS								39,000	SAT
AusAID	Agricultural Census	To undertake the 2009 Agricultural Census	MAF	x	x	x	x	x	2009	2011	783,000	SAT
NZAID	Women In Business Development Inc (WIBDI)	Training, support and development of income generating activities in rural communities.	Private Sector	x	x	x		x	2008	2012	\$2,436,190	NZD
											\$4,480,153	SAT
UNDP	Integrating Climate Change Risks in the Agriculture and Health Sectors in Samoa (ICCRA & HSS)	GoS proposes an integrated approach to address climate change impacts in the agriculture and health sectors.	MNRE/MAF/MOH	x	x			x	2008	2012	\$538,000	USD
GoS	Stimulus Package	Revitalization of Coconut, Cocoa and Coffee	MAF	x					2010	2012	\$450,000	SAT
FFA	EU Dev Fish Project	4 stroke outboard motor engine trial	MAF			x					\$23,000	SAT
FFA	EU ACP Fish II	Fisheries Development and Management & MCS	MAF			x					\$272,000	SAT
JICA	Follow up projects	Community Based Fisheries Management	MAF			x					\$40,000	SAT
			GoS Funded								\$3,289,000	SAT
			Donor Funded								\$14,037,943	SAT
Total Ongoing											\$17,326,943	SAT

Pipeline (Draft PSIP 2009-2013)													
WB	Agricultural Development Program (SROS Building, HTFA)	General overall support for the Agricultural Ministry	MAF	x	x				x	2011	2016	\$27,000,000	SAT
AusAID	Partnership Priority 1	Private sector development through Agriculture	MAF	x	x	x	x		x	2010	2015	\$0	SAT
Pipeline (submitted by MAF but not costed)													
AusAID	Pacific Horticultural and Agricultural Market Access Program (PHAMA)	A structure, strategic approach for assisting Pacific Island Countries, maintain and improve access to key markets for selected high value Pacific products	MAF							2009	2017		
SPC	SciCo Fish	Stock Assessment (regional level)	MAF			x							
FAO	Review of Pesticide Legislation and Harmonization of Pesticide Registration	i. Review pesticide regulations;											
		ii. Clean up contaminated sites;											
		iii. Assist container management;											
		iv. Procure alternatives to pesticides;											
		v. Enhance communication and awareness about pesticide usage & safety;	MAF	x					x				
ACIAR	Cleaner export pathways for Pacific Commodities		MAF										
NZAid	Enhancement of Biosecurity and Quarantine Services in the Pacific	To strengthen the diagnostic capabilities of officers in the Quarantine services;	MAF										
ACIAR/SPC	Research into pathways for taro exports to NZ and Australia		MAF										
ACIAR	Cost effective disinfestations treatments for Pacific Horticulture	Facilitate export of products of smallholder agriculture and horticulture products from selected PICs and establish commodity chains that help to improve the livelihoods of resource poor producers and their communities;	MAF										
Total Pipeline												\$27,000,000	
Overall Total												\$44,326,943	SAT

Annex 6: Agriculture Sector Risk Matrix

Objectives	Risk Assessment	Mitigating Measures
<p><i>SPO 1: To strengthen policy, legal, regulatory and strategic planning framework for sustainable agriculture development;</i></p>	<p>Need to establish the different roles currently being played by the MAF in research, certification and verification as opposed to roles and responsibilities of the SROS so as to ensure that duplication of functions does not occur;</p>	<p>The move to a sector wide approach for agriculture development under the leadership of a sector steering committee comprising senior representatives of MAF, MoF, MNRE, MWCSO, private sector organizations, and producer associations to coordinate the implementation of the Plan. The SWAP will help ensure certainty in future funding support for all sector priorities.</p>
	<p>High employment turnover may offset capacity building and training efforts;</p>	<p>Funding commitments already received from AusAID and the World Bank to support the key policy, institutional and legislative framework for the sector and to assist in funding the priority projects and infrastructure identified in the ASP</p> <p>Strengthening the capacity of MAF research and extension services will assist in raising management skills in agriculture.</p>
<p><i>SPO 2: To improve national self reliance in food production and nutritional security;</i></p>	<p>Efforts towards food security and those towards commercial production might be perceived as opposing issues, however, it needs to be clarified that these can be harmonized through proper management and monitoring;</p>	<p>A private sector - led revitalization of agriculture will lead to new and longer term cash employment opportunities in the rural sector which will lead to a reversal of the rural- urban drift evident in the last two decades.</p>
<p><i>SPO 3: To enhance private sector capacity in improving agricultural productivity, value adding and marketing;</i></p>	<p>Raising investment and financing for the agriculture sector depends largely on the current lending policies of commercial banks which are based on the level of security provided by farmers;</p>	<p>The development of the enabling business environment Government is committed to as part of its facilitating role will provide greater confidence to the private sector to invest in agriculture. The private sector</p>

		will be engaged in the development of the business environment.
	Potential opening up of Samoa's market to the international arena will mean local produce will be faced with more imported competition on the home front. Efforts must be concentrated on ensuring producers and farmers are aware that whether they are exporters or not, potential increase in competition will call for raised efforts to provide a better product on the local market;	Increased investment by private enterprise in agriculture will also introduce private sector management and business approaches and discipline to developments in the four subsectors of agriculture.
<i>SPO 4: To ensure sustainable adaptation and management of agriculture resources;</i>	The effects of climate change and natural disasters are unpredictable whilst mitigation and adaptation measure largely depends on how quickly innovations and technology can catch up;	Lessons learned from past natural disasters and their impact on the four sub sectors including close collaboration with Pacific regional organizations with technical expertise in the areas of disaster management,(SOPAC), environment protection (PREP), crops, livestock, and fisheries research and development (SPC,FFA, USP).