



## Ministry of Agriculture



**ANNUAL REPORT 2014**  
Parliamentary paper no. 80





# CORPORATE PROFILE

## VISION STATEMENT

“To influence market forces through vibrant and sustainable agriculture activity that reduces poverty, reduces the risk of food insecurity and increases the contribution to GDP.”

## MISSION STATEMENT

To excel in the provision of customer-focused and market-driven services in the Agricultural Sector

## VALUES

- Good Governance
- Commitment
- Honesty
- Integrity
- Equity
- Partnership
- Responsibility
- Responsiveness
- Impartiality
- Innovation
- Professionalism
- Courtesy

## The functions of the Ministry of Agriculture includes;

- To accelerate agricultural product diversification into crops and livestock products where competitive advantages have been identified;
- To facilitate private sector development;
- To promote food security; and
- To ensure sustainable development in the non-sugar sector

# TABLE OF CONTENT

CONTENT	PAGES
Minister's Foreword.....	pg 7
Permanent Secretary's Statement.....	pg 8
Organisation Structure.....	pg 10
Linkage of the Roadmap for Democracy.....	pg 10-11
2014 Year at a Glance.....	pg 11
Agriculture Key Numbers.....	pg 12
Budget Summary.....	pg 13 - 14
Achievement of Major Crop Commodities.....	pg 15
Achievement of Major Livestock Commodities.....	pg 16
Crop Extension.....	pg 17 - 24
Animal Health & Production.....	pg 25-32
Land & Water Resource Management.....	pg 33-36
Land Resource Planning and Development.....	pg 37-39
Crop Research.....	pg 40-44
Economic Planning & Statistics.....	pg 45-47
Human Resources, Finance & Information .....	pg 48-50
Financial Statement.....	pg 51-64

# LIST OF TABLES

TABLES	PAGES
Table 1: Linkage of MoA Outputs with Government Targeted Outcomes	pg 10
Table 2: Agriculture (Crop & Livestock) Contribution to GDP	pg 13
Table 3: Production Achievement of Export Promotion Programme	pg 20
Table 4: Production Achievement of Sigatoka Development Programme	pg 20
Table 5: Production Achievement of Rural & Outer Island (ROI) Programme	pg 20
Table 6: Production Achievement of Agriculture Extension Services Programme	pg 23
Table 7: Production Achievement of Rotuma Island Development Programme	pg 23
Table 8: Production Achievement of Saivou Development Programme	pg 23
Table 9: Production Achievement of Nadarivatu Development Programme	pg 23
Table 10: Production Achievement of Non- Capital Programme	pg 24
Table 11: Distribution of Food Security Program Funds for Livestock Sector by Division	pg 26
Table 12: Distribution of ROI Program Funds by Livestock Commodity	pg 27
Table 13: Performance Indicators of Beef Industry	pg 28
Table 14: Performance Indicators of Dairy Industry	pg 28
Table 15: Performance Indicators of Sheep Industry	pg 28
Table 16: Performance Indicators of Pig Industry	pg 28
Table 17: Performance Indicators of Goat Industry	pg 28
Table 18: Performance Indicators of Apiculture Industry	pg 28
Table 19: Performance Indicators of Poultry Industry	pg 28
Table 20: Achievements of Livestock Research Programme	pg 30-32
Table 21: Budgetary Allocation for Land Water & Resource Management (LWRM) Programme	pg 34
Table 22: Output of the Agriculture Development under LWRM Programme	pg 35
Table 23: Other Agriculture Sector Policies and International Relations Output of 2014	pg 46
Table 24: List of Consultants Contracted by MoA in 2014	pg 49
Table 25: MoA Achievements on Information & Technology	pg 50



## LIST OF FIGURES

FIGURES	PAGES
Figure 1: MoA Allocation of 2014 Annual Capital Budget	pg 13
Figure 2: Agriculture (Crop & Livestock) Trade Balance	pg 13
Figure 3: Agriculture (Crop & Livestock) 2014 Top 10 Export Destinations	pg 14
Figure 4: Agriculture (Crop & Livestock) 2014 Top 10 Country of Origins	pg 14
Figure 5: Crop Production Achievement by Divisions	pg 14
Figure 6: Budgetary Allocations by Crop Extension Programmes	pg 18
Figure 7: Budgetary Allocation by Livestock Commodities	pg 27
Figure 8: Dairy Budgetary Allocations by Targeted Areas	pg 27
Figure 9: Livestock ROI Budgetary Allocations by Division	pg 27

The year 2014 was very challenging for the Ministry and no doubt, the obstacles and constraints were many. However, we resolved to use these as an opportunity for improvement and to reconfirm our way ahead as we strive for change. Perhaps it is prudent for me to mention at this point that we at the Ministry of Agriculture will continue to pursue the responsibility bestowed upon us by Government in the face of those challenges by promoting and achieving policy goals directed towards quick economic recovery, food and income security, poverty alleviation and sustainable management of natural resources.

The year was highlighted by the impact of El Nino; the issue on land availability and security of tenure; the shortages of staff and equipment, just to name a few. The year also highlighted our effort to resolve those challenges and especially our tireless effort in implementing programs and activities we had set for ourselves in our 2014 Annual Corporate Plan.

We resolved to improve our performance especially the systems and processes which were hindering the delivery of our services. We resolved to equip our staff with the necessary tools and environment in order to encourage their performance. We also resolved to identify and explore opportunities that are available especially in improving our exports, reducing imports, diversifying our products, encouraging private sector development and exploring other opportunities.

We have supported our subsistence and small holder farmers. We have encouraged commercialisation and mechanisation of the agriculture sector. We advocated the need for agriculture to be science based and market driven. Overall we are rebranding the Ministry to be more responsive to the needs of all stakeholders like farmers, investors, private sectors and others.

I must acknowledge the contribution of the management and staff of the Ministry for making it possible to achieve another pleasing performance despite the difficult year.

Vinaka Vakalevu.

  
Hon. Inia Batikoto Seruiratu

## MINISTER'S FOREWORD



Minister for Agriculture, Rural &  
Maritime Development and  
National Disaster Management

## PERMANENT SECRETARY'S STATEMENT



Permanent Secretary for  
Agriculture

It is indeed my great pleasure to present to you the Ministry of Agriculture Annual Report 2014.

The year 2014 was a very challenging year for the Ministry and no doubt, we rose with those challenges and took it as an opportunity to promote and improve our performances.

From our Annual Corporate Plan 2014, the Ministry vigorously pursued agricultural development that aimed at:

- Increasing production, productivity and resilience of priority crops and livestock systems;
- Strengthening of policy, legal, regulatory and strategic framework for sustainable agriculture development;
- Improving and strengthening of our agriculture trade, market access, marketing and contribution to GDP;
- Enhancement and strengthening of our stakeholders partnership especially with the private sectors, donor agencies, academic institutions and international relations; and
- Strengthening of effective financial regulatory, compliance and enforcement.

With limited resources and other constraints, we have given all our best that enable us to attain our objectives in implementing all our programs as budgeted.

We will continue to improve our performance and in addressing issues affecting the development of the agriculture sector and at the same time identify and explore opportunities that are available by developing policies that are more responsive to the needs of all stakeholders and to achieve the targets bestowed upon us by the Government.

I must acknowledge the contribution of all staff of the Ministry for making it possible to achieve another pleasing performance despite the difficult year and a special note of thanks to the Executive Management, who had provided the leadership that enabled us to move the Ministry of Agriculture forward.

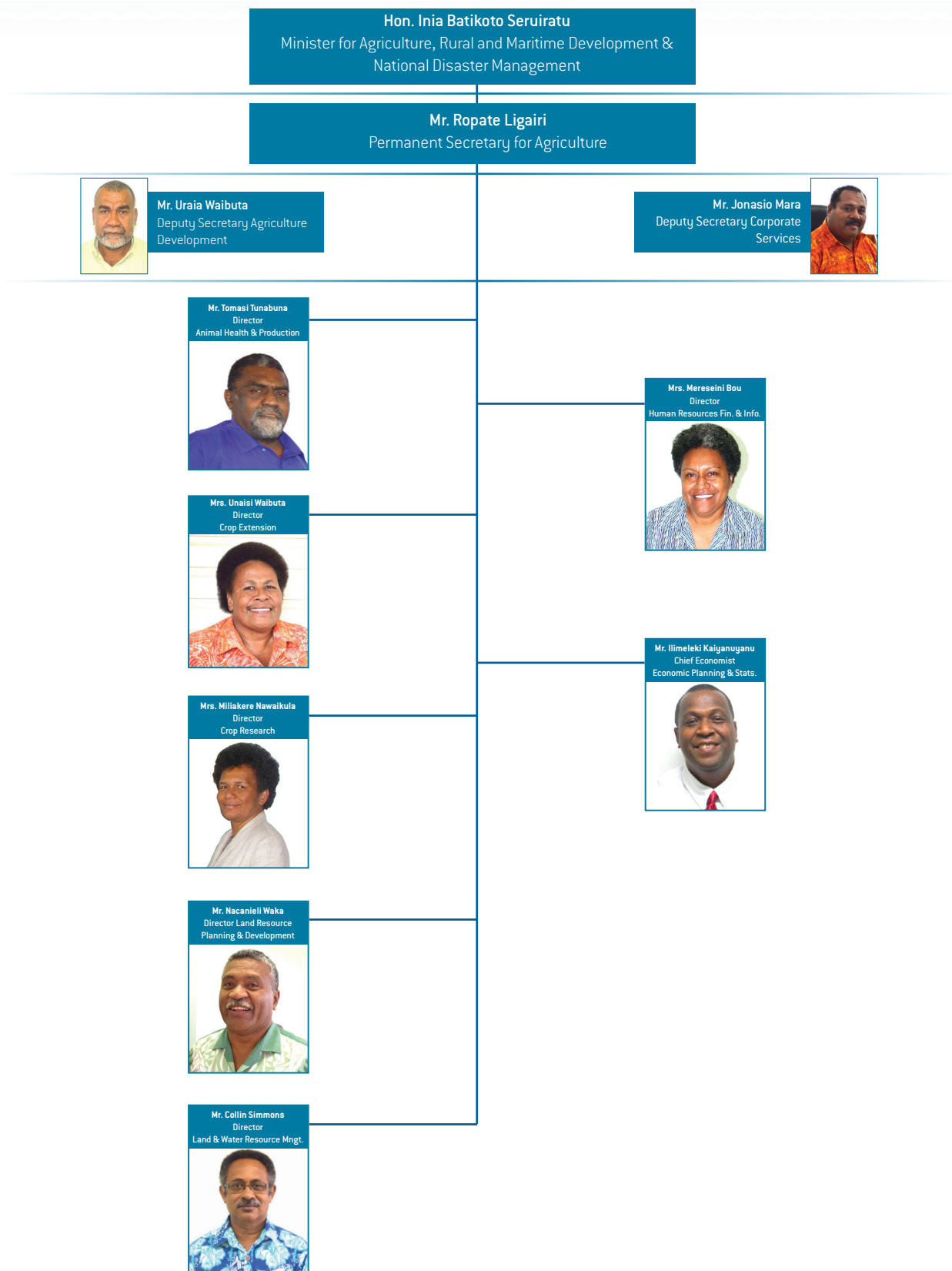
Vinaka Vakalevu.

A handwritten signature in black ink, appearing to read 'Ropate Ligaini'.

Ropate Ligaini



# ORGANISATION STRUCTURE



# LINKAGE OF MOA OUTPUTS WITH GOVERNMENT TARGETED OUTCOMES

The Ministry of Agriculture is responsible for:

- Maintaining food security through the provision of extension and research services for both livestock and crops;
- Quick Economic Recovery through the implementation of the Demand Driven Approach Programme (DDA) and other commodity Projects;
- Assisting in poverty alleviation by building capacity of farmers to increase production and
- Sustainable management of natural resources through the flood protection programmes and other sustainable management land practices.

Key Pillar(s) PCCPP	Targeted Outcome [Policy Objective]	Outcome Performance Indicators	Ministry's Output
Pillar 4 Enhancing Public Sector Efficiency, Performance Effectiveness and Service Delivery	Gender Equality & Women Empowerment  Public Sector Re-form	<ul style="list-style-type: none"> <li>• Empower women participation in Agriculture Development through assisting 34 women groups</li> <li>• Review 7 Legislations and 10 cabinet papers initiated</li> <li>• Facilitate disposal of 15 tribunal cases</li> <li>• Improve Financial Services and Public Service Delivery in Compliance to set standards from 80% to 100%</li> </ul>	<ul style="list-style-type: none"> <li>• Achievement of gender equality and empowerment of women through full participation of agriculture development</li> <li>• Portfolio Leadership, Policy Advice &amp; Secretariat Support</li> <li>• Agriculture Tribunal and Legal Judgement</li> <li>• Enhance Public Service Delivery</li> </ul>
Pillar 5 Achieving Higher Economic Growth while Ensuring Sustainability	Non-Sugar Agriculture & Livestock	<ul style="list-style-type: none"> <li>• Research on demand driven commodities increase by additional 7</li> <li>• Increase Production of non-sugar agriculture by 5%</li> <li>• Increase diversification &amp; efficiency to increase production of 200 farmers</li> <li>• Increase number of subsistence farmers progressed to semi-commercial by 1%</li> <li>• Enhance lab accreditation services by 75%</li> <li>• Provide awareness to 2 high risk communities to increase response capacity in dealing with disasters and risks</li> <li>• Revitalize 18 indigenous disaster resilience crops &amp; livestock</li> <li>• Value of key crop &amp; livestock commodities import reduced by 5% by end of 2014</li> <li>• Increase number of semi-commercial farmers progressed to commercial level by 2%</li> <li>• Develop 23 Industry Profile and Industry Plans</li> <li>• Value of non-sugar agriculture export increased by 5% by end of 2014</li> <li>• Increase number of best farm practices and technology transfer to farmers by 10%</li> <li>• Improve rate of monitoring and evaluation of capital programmes by 10%</li> </ul>	<ul style="list-style-type: none"> <li>• Maintaining Food Security through the Provision of Extension and Research services both for Livestock &amp; Crops</li> <li>• Quick Economic Recovery through the Implementation of DDA and other Commodities</li> </ul>
Pillar 6 Making more land available for productive and social purposes	Land Resource Development and Management	<ul style="list-style-type: none"> <li>• Implement 21 Projects that are compliant to SLM farming practices/concept</li> <li>• Identify 30 land sites for commodity purpose</li> </ul>	<ul style="list-style-type: none"> <li>• Sustainable Management of natural resources through the flood protection programmes and other sustainable land management practices</li> </ul>
Pillar 7 Developing an Integrated Development Structure at the Divisional Level	Rural & Outer Island Programmes	<ul style="list-style-type: none"> <li>• Improve provision of basic services to rural areas in terms of agriculture services</li> </ul>	<ul style="list-style-type: none"> <li>• ROI communities to meet their basic needs, improve living standards through agriculture development</li> </ul>
Pillar 8 Reducing Poverty to a Negligible Level by 2015	Reduce Poverty	<ul style="list-style-type: none"> <li>• Impact of capacity building for subsistence farmers increase by 80%</li> </ul>	<ul style="list-style-type: none"> <li>• Assist in Poverty Alleviation by building capacity for farmers to increase production</li> </ul>

# 2014 YEAR AT A GLANCE

## Quarter 1



MoU signed between MoA and FCLC



Commissioning of Tissue Culture Lab at Koronivia Research Station



10 Tractors handed over to MoA by Indonesian Government



MoA Senior Management Workshop on Managing Change & Growth

## Quarter 2



Re-excavation to divert river to its normal course at Suweni village



Agricultural Staff and rice farmers of Wailevu at the Rice Field Day



PS Agriculture Ropate Ligairi (left) and Rev. Tevita Nawadra Banivanua after the signing of MoU



Ministry of Agriculture staff and Kiuvu villagers witnessing the first phase of Digger work

## Quarter 3



Agriculture Show (Central & Western Division)



30 Extension Officers attended the Rice Hybrid Training in China



Potato Day in Sigatoka



Teachers from Sigatoka and Ra area attending the Beekeeping training at Ianoa Hotel, Lautoka

## Quarter 4



Prime Minister, Rear Admiral (Ret'd) Josaia Voreqe Bainimarama launched the Agriculture 2020 Policy Agenda



Hon. Seruiratu Launched the New Fiji Farm Management Budget Manual



From left to right-Hon. Seruiratu receiving 20 Motorbikes from Asco Motors CEO Mr Jai Kumar



China Shandong International Economic and Technical Operational Group Ltd. (CSI) team with the Ministry staff



## AGRICULTURE KEY NUMBERS

TOTAL BUDGET



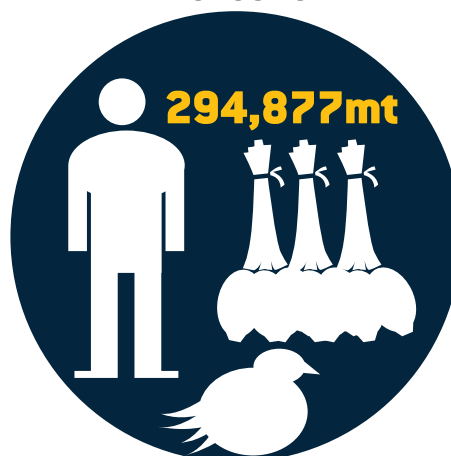
ACTUAL EXPENDITURE



AGRICULTURE (Crop & Livestock)  
GDP



AGRICULTURE (Crop & Livestock)  
PRODUCTION



AGRICULTURE (Crop & Livestock) TRADE

EXPORT  
(CROP & LIVESTOCK)



**\$180m**

IMPORT  
(CROP & LIVESTOCK)



**\$556m**

## MINISTRY OF AGRICULTURE 2014 ANNUAL BUDGET SUMMARY

In 2014 Ministry of Agriculture's Total Budget allocation totalled up to \$62.4 million of which \$34.3 million was allocated for Capital Programs while the Operating Costs totalled to \$28.1 million.

The LWRM Division was allocated the highest share of the budget mainly to fund for the land drainage and flood protection programs followed by the Crop Extension Division where a large share of the budget was allocated for the Rice Revitalization, Food Security and Export Promotion Programs.

## OVERVIEW OF MINISTRY'S PERFORMANCE

### AGRICULTURE (Crop & Livestock) GDP

The contribution of the sector to National GDP has steadily increased over the years, contributing \$473 million in 2011 to \$500 million in 2014 highlighting an average growth of 2%. The 8% contribution to National GDP this year resulted from an increasing Government commitment and investment in the Sector for the attainment of higher economic growth, alleviation of poverty, development of land, and improving provision of basic agricultural services to rural areas.

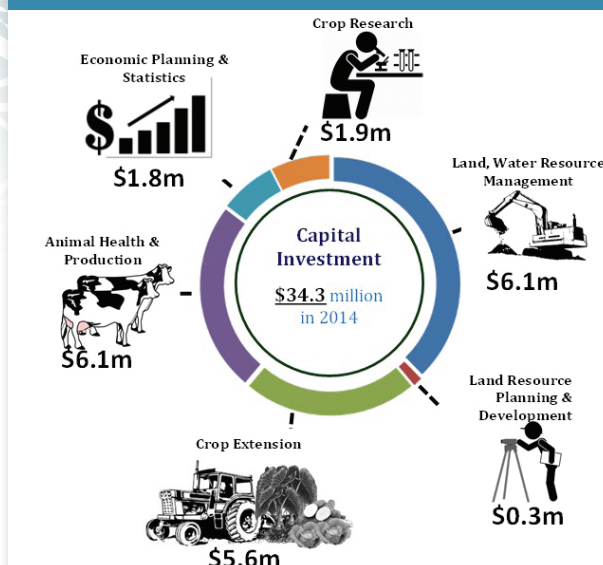
### AGRICULTURE (Crop & Livestock) TRADE

The Crop & Livestock Sub-sector continued with a trade deficit trend due to heavy reliance on imported goods for production, consumption and processing.

Fiji earned \$180 million from exports of Crop & Livestock commodities this year which is 16% of National Domestic Export. Fiji exported Crop & Livestock Commodities to 50 countries of which New Zealand and Australia remained the dominant destinations contributing 19.1% (\$34.5m) and 18.8% (\$33.9m) respectively to the total Crop & Livestock Export Income. All Crop & Livestock commodities are exported fresh/chilled, frozen and value added.

Top 5 commodities exported this year are: Taro, Cassava, Kava, Papaya & Ginger and all of these are either in fresh/chilled, frozen and value added. Taro remains the dominant fresh/chilled exported commodity contributing a total export income of \$21.8m (12%) Other export commodities in frozen and value added categories includes

Figure 1: Allocation of 2014 Annual Capital Budget by Division



Source: HRFI 2014 Annual Report, Ministry of Agriculture

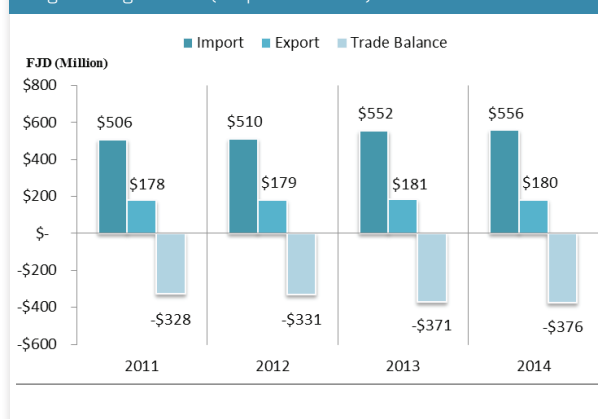
Table 2: Agriculture (Crop & Livestock) Contribution to GDP

GROSS DOMESTIC PRODUCT AT CONSTANT BASIC PRICE FJD (MILLIONS)				
	2011	2012	2013	2014(r)
NATIONAL GDP	5,739	5,820	6,095	6,437
AGRICULTURE GDP	473	465	497	500
General Government	8	8	9	10
Subsistence	153	153	154	154
Informal	38	38	38	38
Non-General Government	274	266	296	298

Source: Macro Table, Fiji Bureau of Statistics

Note: Inclusive of Growing of Sugarcane (\$50.4m)

Figure 2: Agriculture (Crop & Livestock) Trade Balance



Source: Fiji Agriculture & Rural Statistics

Note: Exclusive of Sugar and Sugar Products

Spices, Prepared Meats, Vegetables, Fruits and many more of which are exported to other Pacific Island Countries.

In 2014, Fiji imported \$556 million of Crop and Livestock Products contributing 12% to National Import Bill. The volume of imports had significantly decreased this year by 20% (339,899 mt 2013 to 270,563 mt 2014). However, the Value of Import Bill continued to increase by 1% compared to 2013 due to variations in value of exchange rates of country of origin, fluctuations in global prices and high demand for food products. Fiji continues to import most Dairy Products, Meat and other Fresh Fruits and Vegetables from Australia and New Zealand. Vietnam, China and Malaysia remain the main source of Fiji's Rice and Oil Import.

## AGRICULTURE (Crop & Livestock) PRODUCTION

The sector produced 294,877 tonnes of crops & livestock commodities this year, from 52,978 farming population of which 85% are from the rural sector. Non sugar Crops Sector produced a total of 253,878 tonnes of which Cassava contributed the highest production volume of 77,221 tonnes (31%). The Livestock Sector produced a total of 40,999mt whereby the highest production volume for (21,840mt). Total production for this year decreased by 6% as compared to 2013 due to the long dry spell in the 3rd and 4th Quarter of 2014 more particularly in the Western and Northern side of Fiji.

Cassava has remained a major agriculture produce over the years, planted mainly for food security, while Dalo is commonly produced to cater for functions and exports. Production of Ginger continues to indicate positive growth with an average growth rate of 24% in the last 5 years. This resulted from identification of new markets for Ginger exports and Government's commitment on the enhancement of the Fiji Ginger Industry through various programs implemented by the Ministry.



Figure 3: 2014 Top 10 Export Destinations - (FJD)

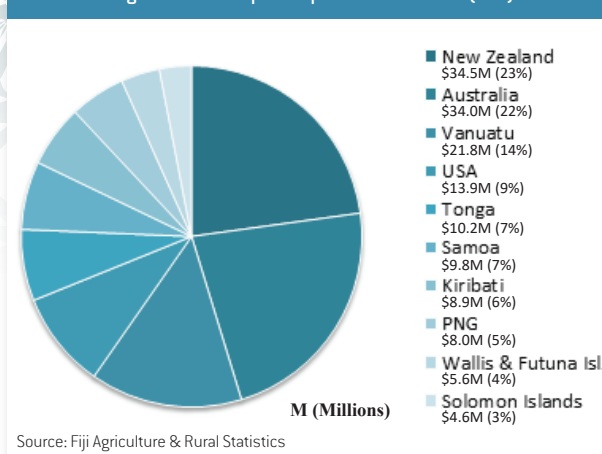


Figure 4: 2014 Top 10 Country of Origin - Import (FJD)

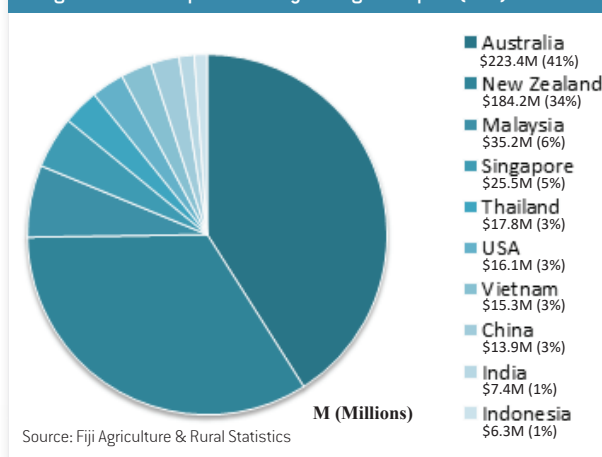
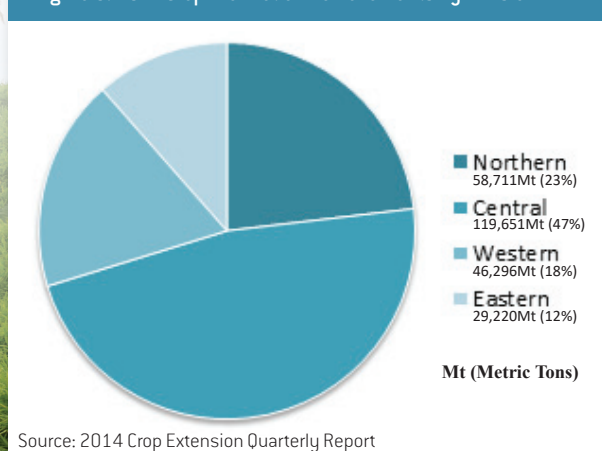


Figure 5: 2014 Crop Production Achievements by Division





## ACHIEVEMENTS OF MAJOR CROP COMMODITIES



2014 Dalo Production: 62,748 mt

Total Export:

- Volume (7,649 mt)
- Value (\$22m FJD)

Top Export Destination: New Zealand (4,554mt)



2014 Ginger Production: 5,553mt

Total Export:

- Volume (145 mt)
- Value (\$0.7m FJD)

Top Export Destination: New Zealand (77mt)



2014 Yaqona Production: 3,871 mt

Total Export:

- Volume (223 mt)
- Value (\$7.9m FJD)

Top Export Destination: Kiribati (92mt)



2014 Cassava Production: 77,721 mt

Total Export:

- Volume (1,761 mt)
- Value (\$2.7m FJD)

Top Export Destination: Australia (832mt)



2014 Pineapple Production: 6,538 mt

Total Export:

- Volume (13mt)
- Value (\$28,947 FJD)

Top Export Destination: New Zealand (11 mt)



2014 Pawpaw Production: 5,777 mt

Total Export:

- Volume (445mt)
- Value (\$1.6m FJD)

Top Export Destination: New Zealand (218mt)

## ACHIEVEMENTS OF MAJOR LIVESTOCK COMMODITIES



2014 Sheep Production: 41mt  
 Total Number of Stock: 15,327  
 Export of Sheep Meat (Lamb & Mutton-Fresh/  
 Chilled/Frozen):

- Volume (59.8 mt)
- Value (\$143,888 FJD)

Top Pacific Island Export Destination: Kiribati (50kg)



2014 Pig Production: 997mt  
 Total Number of Stock: 28,869  
 Export of Pork (Fresh/Chilled/Frozen):

- Volume (15.8 mt)
- Value (\$153,785 FJD)

Top Pacific Island Export Destination: Nauru (664 kg)



2014 Beef Production: 2,800mt  
 Total Number of Stock: 44,568  
 Export of Beef (Fresh/Chilled/Frozen)

- Volume (8.6mt)
- Value (\$102,385 FJD)

Top Pacific Island Export Destination: Tuvalu (2.4 mt)



2014 Poultry Production: 21,840mt  
 Number of Broilers Slaughtered: 11.9million  
 Export of Poultry Meat-Chicken/Duck/Turkey/  
 etc (Fresh/Chilled/Frozen):

- Volume (138 mt)
- Value (\$968,784 FJD)

Top Export Destination: Vanuatu (93 mt)



2014 Dairy Production (Milk): 14.9 million litres  
 Number of Milking Cows: 8,860  
 Export of Milk:

- Volume (3.5mt)
- Value (\$6,816 FJD)

Top Export Destination: Wallis & Futuna Isl. (2mt)



2014 Goat Production: 105mt  
 Total Number of Stock: 38,000



## CROP EXTENSION



## OVERVIEW

The Ministry has accomplished most of its targets on maintaining food security, quick economic growth, poverty alleviation, land resource development and management, gender equality and women empowerment and rural & outer island development through the provision of crop extension services this year.

Participatory Agricultural Extension (PAE) was the approach adopted through Crop Extension work for the successful implementation of the core functions of crop extension services. Farmers were empowered to make decisions that will improve their livelihoods in a sustainable manner. Activities such as farmer field school and participatory technology development contributed a lot in the successful implementation of Ministry's crop development projects this year.

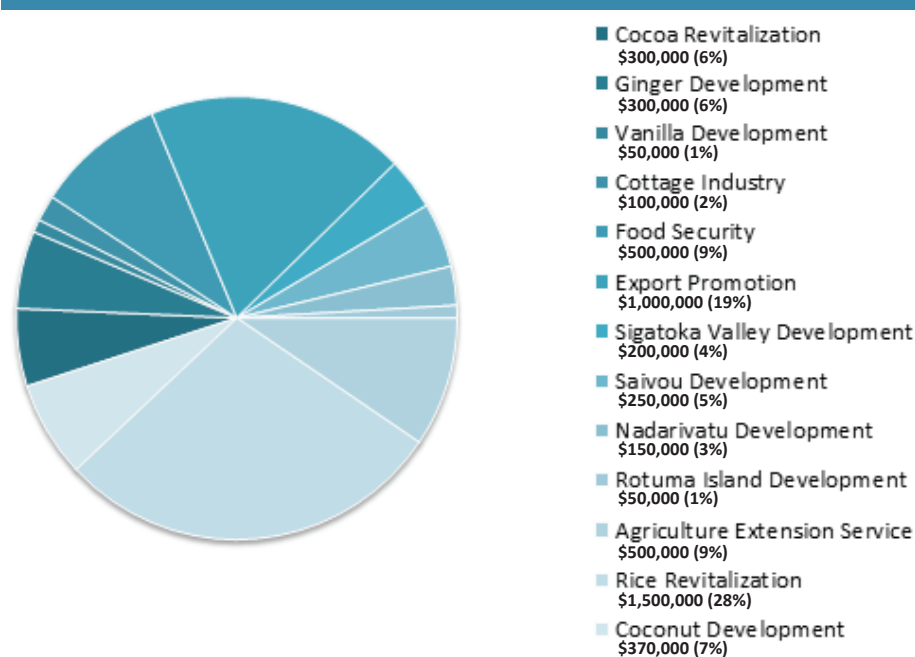
'Modernising Agriculture' through 'climate smart' strategies was also the main focus of production efforts. Eventhough there were challenges during the year, the continous commitment of Extension Officers in the field has contributed to the achievement of the objective this year.

### BUDGET

In 2014, the budgetary allocation for Crop Extension Services was increased to \$5.3million with a new funding for Potato and Flat Land Development. The increase in budget was mainly for investment in tools, training and development of human resource capabilities, improvement of conditions of our people in the field and most importantly for quality service delivery to the farmers.

Extension services demands good planning and timely implementation of all programs that resulted in the achievement of more than 60% utilization at the end of June.

Figure 6: 2014 Budgetary Allocations by Extension Programmes



Source: 2014 Crop Extension Annual Report



## ACHIEVEMENTS OF FUNDED CROP PROGRAMS

### FOOD SECURITY PROGRAM (FSP)



The Ministry is committed to the development of identified commodities that will substitute imported commodities. The main emphasis is to boost local production through various programs in order to reduce current import bills.

**Targeted Commodity:** Vegetables

**Total Budget Issued:** \$683,228

#### Budget Utilization

The allocated FSP budget was able to fund 5 projects in the Western Division and the Division was able to utilize 100% mainly for the procurement of 10 Wheeler Trucks, drilling and installation of borehole, construction of a green house and establishment of vegetable and pineapple farms.

**Achievement:** The Food Security Program was able to produce 772.3 mt of Assorted Vegetables this year. The prolonged dry spell in the middle of 2014 had its implication on planting as well as production.

### POTATO DEVELOPMENT & RESEARCH



The focus is to embark on research and development. At Sigatoka Research Station (SRS), the research component looks at four core activities which is aimed at improving current package of practice of growing potato, develop potato seed, storage techniques and introduction of promising varieties for Fiji.

#### Budget Utilization

Crop Extension on the other hand is assisting in putting the infrastructure in place, for example cooler storage facilities as well as organizing farmers for field planting.

**Achievement:** The Program was able to assist 32 farmers, planted 4.26ha, produced 45 tonnes, and earned \$12,524.45.

### EXPORT PROMOTION PROGRAM



The Ministry is committed to the enhancement of export opportunities by promoting and ensuring the cultivation of identified crops entirely to cater for exports.

**Targeted Commodities:** Dalo, Cassava, Vegetables, Pawpaw and Ginger.

**Total Budget Issued:** \$906,639

**Budget Utilization:** The EPP allocation was able to fund the following activities; contracts of 6 BQA staff, Installation of 3 Phase Power (Maqere Export), establishment of Vegetable, Pawpaw, Cassava, Dalo & Yaqona farm, installation of boreholes, installation of irrigation system and procurement of 2 tractors. All funds allocated for EPP this year were fully utilised on the 24 projects.

**Achievement:** A total production of 5517mt was produced from newly planted and also existing plants (Yaqona, Pawpaw, Dalo) this year (see Table 3, page 20).



## SIGATOKA VALLEY DEVELOPMENT PROGRAM



Funding for this program was used to procure assorted vegetables planting materials for BQA commodities, agro inputs, infra-

structure development and farm implements.

**Targeted Commodities:** Papaya, eggplants, chillies, maize and tomatoes

**Total Budget Issued:** \$200,000

**Budget Utilization:** Procured assorted vegetables planting materials, agro inputs, infrastructure development and farm implements.

**Achievement:** The Program has produced 1,523mt from the targeted commodities this year (see Table 4).

## RURAL AND OUTER ISLAND PROGRAM (ROI)



There were twenty (20) projects assisted under the program during the year with agro-inputs and were solely for income gener-

ating crops for farmers within the maritime islands and rural areas.

**Targeted Commodities:** Assorted Vegetables, Banana, Cassava, Dalo, Ginger, Pineapple, Rice, Vanilla

**Total Budget Issued:** \$ 338,605.69

**Budget Utilization:** A total of 20 Projects were funded under this Program for the following activities; Establishment of Integrated Farming Project, Procurement of Tractors, Establishment of VCO farming and Construction of farm roads. For the 20 projects funded 1 for Central Division, 11 for Eastern Division, 3 for Western Division and 5 for Northern Division.

**Achievement:** A total of 2,301mt of targeted commodities were produced from both existing and new plants (see Table 5).

Table 3: Production Achievement of Export Promotion Programme

Commodities	Area Harvested (Ha)	Production (Tons)
Assorted Vegetables	130	912
Cassava	37	510
Chillies	9	38
Dalo	325	2682
Pawpaw	46	229
Yaqona	12	59
Eggplant	38	917
Okra	12	106
Long Bean	4	24
Pulses- Cowpea	9	39

Source: 2014 Crop Extension Annual Report

Table 4: Production Achievement of Sigatoka Development Programme

Commodities	Area Harvested (Ha)	Production (Tons)
Chillies	6	38
Maize	119	791
Pawpaw	29	242
Tomato	22	123
Eggplant	14	329

Source: 2014 Crop Extension Annual Report

Table 5: Production Achievement of ROI Programme

Commodities	Area Harvested (Ha)	Production (Tons)
Assorted Vegetables	28.8	228
Banana	0.4	4
Cassava	61.4	736
Dalo	96.2	929
Ginger Immature	20.9	333
Pineapple	0.8	18
Rice	0.8	1
Yaqona	15.2	32
Ginger Mature	2.0	20

Source: 2014 Crop Extension Annual Report

## RICE REVITALIZATION PROGRAM



ducing 1,782mt of Rice.

Funds allocated under the program were used to procure small rice machines, rice seeds and agro inputs

**Total Budget Issued: \$1,019,704**

**Budget Utilization:** A total allocation was used to procure machines such as: medium combine harvester, mini combine harvester, portable rice mills, rice trans-planter, power tiller, rice reaper and rice thresher.

**Achievement:** The total area harvested under this program was 5436ha pro-

## COCONUT DEVELOPMENT PROGRAM



South Korea which was an achievement of the Ministry. This year, the Ministry was able to harvest 2,943mt of coconuts from the existing trees. The production has surpassed the targeted volume due to effective advisory services by the Extension Officers and high market demand of the product.

Funds allocated under the program were used for the construction of copra sheds and driers for the people of Koro, Gau, Narai, and Batiki

**Total Budget Issued: \$370,000**

**Budget Utilization:** Funds were mainly utilized for the construction of copra sheds and driers, VCO equipment, coconut nurseries and cartage cost of seed nuts for the four (4) Divisions.

**Achievement:** A breakthrough on the export market for VCO was linked with

## COCOA REVITALIZATION PROGRAM



replanting of old and senile trees.

This program mainly focuses on the rehabilitation of existing cocoa farms that have been neglected for years

2013 Targeted Areas: Namau, Naibalabala & Naduruloulou Research Station

**Total Budget Issued: \$258,540**

**Budget Utilization:** The funds allocated were used to purchase farm equipment that will assist in the rehabilitation program. This includes; chainsaws, brush cutters, secateurs, tree loppers, pruners, drying and fermentation equipment. Funds allocated to Research were used for raising seedlings for

### Achievement

A total of 9 metric tons of cocoa was harvested this year from existing cocoa Growers in Namau, Tailevu and Nabalabala in Ra.

## GINGER DEVELOPMENT PROGRAM



Ginger is one of the commodities targeted for the export market. Over the years, processed and fresh ginger was exported to the US, Netherlands, Germany, New Zealand and Australian markets. For Immature Ginger, Projects approved under the program were from the Central Division and mostly Naitasiri and Tailevu Provinces.

**Targeted Areas:** Naitasiri & Tailevu

**Total Budget Issued: \$283,125**



**Budget Utilization:** The fund allocated was used to procure planting materials, agro inputs, land preparation, construction of wash bays and establishment of nurseries.

**Achievement:** A total of 9 hectares of immature ginger were cultivated in Central Division under this program. From this area, a total of 206 metric tons of immature ginger was produced.

#### VANILLA DEVELOPMENT PROGRAM



The main focus of this new program is to rehabilitate the existing Vanilla farms that have been neglected over years mainly in Central and Northern Divisions.

**Total Budget Issued:** \$50,000

**Budget Utilization:** The funds allocated were used to purchase farm equipment that assist in the program which includes; chainsaws, brush cutters and curing equipment.

**Achievement:** Planting and production achievements were derived from the new and existing projects. There were 0.15ha harvested with 0.16mt production. A total of approximately 100 families benefited from vanilla sales during the year. Demonstration plots were also established (shade house). There are 200 vanilla growers in Fiji and the main buyers are Koko Siga Limited and Spices Fiji Limited. The Division successfully rehabilitated 25,000 vines under this Program.

#### AGRICULTURE EXTENSION SERVICES PROGRAM



Agriculture Extension Services Program mainly targets vulnerable farmers in all the geographical divisions.

**Targeted Commodities:** Yams, Kawai, Tivoli, Kumala, Dalo mix, Vudi, Banana and Dalo ni tana

**Total Budget Issued:** \$500,000

**Budget Utilization:** The fund was used to provide technical services including demonstration plots, farmer trainings, field days, office equipment and tool kits while 12%(\$24,000) of total funding was for monitoring and support services.

**Achievement:** From the cultivated area, a total of 1,656 metric tons of 10 targeted commodities were harvested (see Table 6 page 23).

#### ROTUMA ISLAND DEVELOPMENT PROGRAM



**Targeted Commodities:** Dalo, Cassava, Kumala, Vegetables, Coconut, Yaqona and Pawpaw

**Total Budget Issued:** \$50,000

**Budget Utilization:** Fund was allocated to procure planting materials for the following commodities; dalo, cassava, kumala, vegetables, coconut, yaqona and pawpaw. In addition, livestock fattening farm was established and breeding stock purchased.

**Achievement:** This year the Program has achieved a total production of 356mt from targeted commodities (see Table 7 page 23).

## SAIVOU DEVELOPMENT PROGRAM



The total budget for this Program was mainly for the procurement of one tractor with implements, combine rice harvester and

culvert crossing among other activities.

**Target Commodities:** Rice, fruits, root crops and assorted vegetables

**Total Budget Issued:** \$250,000

**Achievements:** Total of 179.8mt of targeted commodities produced this year (see Table 8 below)

## NADARIVATU DEVELOPMENT PROGRAM



The Nadarivatu Development Program focuses on the production of imported goods that could be grown locally.

**Targeted Commodities:** Capsicum, rockmelon, tomato, carrot, lettuce, zucchini and celery.

**Total Budget Issued:** \$150,000

**Budget Utilization:** A total of \$150,000 was used to buy assorted vegetable seeds that thrive during off-season. Apart from that, assistance was extended towards infrastructure improvement, procurement of agro inputs and other farming equipment.

**Achievement:** Total of 212 metric tons of targeted commodities were produced in 2014 (see Table 9 below)

## COTTAGE INDUSTRY PROGRAM



This program targets commodities such as floriculture, Masi and Voivoi as a source of livelihood for women in rural areas.

**Table 6:** Production Achievement of Agriculture Extension Services Program

Commodities	Area Harvested (Ha)	Production (Tons)
Assorted Vegetables	11	94
Banana	11	200
Dalo	67	667
Dalo ni tana	24	238
Kawai	3	25
Kumala	17	166
Tivoli	11	110
Via	4	19
Vudi	8	100
Yams	4	36

Source: 2014 Crop Extension Annual Report

**Table 7:** Production Achievement of Rotuma Island Development Program

Commodities	Area Harvested (Ha)	Production (Tons)
Assorted Vegetables	8	80
Cassava	10	100
Dalo	10	100
Kumala	6	75
Yaqona	0.2	0.5

Source: 2014 Crop Extension Annual Report

**Table 8:** Production Achievement of Saivou Development Program

Commodities	Area Harvested (Ha)	Production (Tons)
Assrt Vege	7.4	46.8
Cassava	13.3	133
Pawpaw	1.3	9

Source: 2014 Crop Extension Annual Report

**Table 9:** Production Achievement of Nadarivatu Development Program

Commodities	Area Harvested (Ha)	Production (Tons)
Capsicum	4.9	32
Rockmelon	7.4	59
Tomato	13.8	89
Carrot	1.5	5
Lettuce	1.5	9
Zucchini	2.0	12
Celery	0.5	5

Source: 2014 Crop Extension Annual Report





**Targeted Commodities:** Masi, Voivoi, VCO, Floriculture

**Total Budget Issued::** \$100,000

**Budget Utilization:** The allocated fund was used to procure three greenhouse materials for floriculture nurseries in Nadroga and Ba, construction of a masi and voivoi drying shelter in Lakeba, Lau, improvement of VCO shed and equipment in Cicia, establishment of demonstration plots in Tailevu and Serua. It also included monitoring & support services, farmers training, field days targeting women's group and individual women's project.

**Achievement:** Two metric tons of assorted vegetables was produced from this program this year

#### NON CAPITAL PROGRAMS

The Crop Extension Division continues to promote the importance of producing local crops, fruits and vegetables to address the need of Food Security in Fiji.

**Targeted crops:** Vegetables, Dalo, Cassava, Dalo Ni tana, Via, Kumala, Breadfruit, Yams, Rice, Duruka, Banana, Vudi, Vanilla, Voivoi and Floriculture

**Achievements:** In 2014, the total production of 236,095mt of targeted commodities was achieved from subsistence farmers (Non-Capital Program). The table below summarised the production achievement by Crop Grouping (see table 10 below).

**Table 10:** Production Achievement of Non-Capital Program

Crop Grouping	Area Harvested(Ha)	Production (Tons)
Fruits	2,341	22,299
Vegetables	2,703	21,979
Other Crops	3,306	14,319
Root Crops	14,982	153,735
Spices	169	4,995
Tree Crops	2,057	18,769

Source: 2014 Crop Extension Annual Report  
Agriculture Annual Report 2014



# ANIMAL HEALTH & PRODUCTION





## OVERVIEW

In 2014, the Ministry achieved the following output from the services carried out by the Animal Health & Production Division.

A total of \$4.23m was released from Ministry of Finance (MOF) to Ministry of Agriculture (MOA) for the Animal Health & Production Capital Program. The Ministry was able to utilize 98% of funds allocated for Animal Health & Production Programs.

- Implementation of Demand Driven Approach Program worth \$1.24 million for 90 Livestock Projects.
- A total of \$0.1 million was released for the development and operation of the Apiculture Industry while \$1.0 million was for the Dairy Development Program under the Fiji Co-operative Dairy Company Limited (FCDCL).
- Facilitated the successful shipment of sheep export to Samoa and local sales in Viti Levu, Vanua Levu and the Maritime Zones.
- \$1.1 million was used for the improvement of the premises and other important activities such as Tuberculosis & Brucellosis Eradication Programme
- A total of \$1.85 million was allocated for renovation of research stations infrastructure and breeding programmes.
- A total of 20 motorbikes, 20 laptops, clinical uniforms and safety gears were purchased this year through Agriculture Extension Services to improve service delivery.

## ACHIEVEMENTS OF FUNDED LIVESTOCK PROGRAMS

### FOOD SECURITY PROGRAMME (FSP)

This programme targets the food security component of 2014 budgetary allocation for the agriculture sector, and indirectly targeted the three components of the national agricultural development priorities or the road map- quick economic recovery, food and income security and poverty alleviation.

**Targeted Commodities:** Beef, Sheep, Goat, Pigs, Bees and Poultry

**Total Budget:** \$425,097.60

**Actual Expenditure:** \$418,256.20

**Achievement:** A total number of 30 projects were under FSP. Most of these projects were successfully implemented. A total of 54% of the funding was for Beef, 17% for Pig, 13% Sheep, 10% Poultry and 3% for Goat and Bees (see figure 7 page 27)

**Table 11:** Distribution of Funds by Geographical Division

Division	Allocation
Western	\$206,278.03
Central	\$145,957.06
Eastern	\$45,052.52

Source: 2014 AH&P Annual Report

### DAIRY INDUSTRY SUPPORT (DIS)

Dairy Industry Programme was a priority to the Animal Health & Production Division during the year with an objective to meet the needs of the local market, create rural employment and to pursue the avenues of value adding for export.

**Targeted Area:** Ba, Tavua, Nadi, Naitasiri, Sigatoka, Ra & Lautoka

**Total Budget:** \$674,497.00

**Actual Expenditure:** \$646,172.52

**Budget Utilization:** Expansion of the dairy industry to the Western Division has conceived to take advantage of the existing milking cows and infrastructure in cane belt areas. As for the Western Division, the program focused on priority activities such as infrastructure development and nutrition (see figure 8).

### Achievement

During the year, a total of 54 projects were approved under this programme, of which 52 for on farm development such as dairy sheds & stockyard improvement, water reticulation, drainage, pasture renovation and paddock subdivision. In addition, one project was for the purchase of milking equipment such as milking cans (177), buckets (200) and milking machines.

### RURAL AND OUTER ISLAND PROGRAMME (ROI)

The main objective of the ROI programme was to increase agricultural production especially in the rural and maritime zones. Through this assistance and prioritized measures, the current production should increase.

**Total Budget:** \$143,680.16

**Actual Expenditure:** \$143,680.16

**Budget Utilization:** A total of eight projects were approved under the Rural and Outer Island (ROI) programme (see figure 9)

**Table 12:** Distribution of Funds & Projects under ROI Program by Commodity

Commodity	Percentage (%)	Number of Projects
Beef	38	3
Poultry	37	3
Dairy	13	1
Apiculture	12	1

## LIVESTOCK PRODUCTION

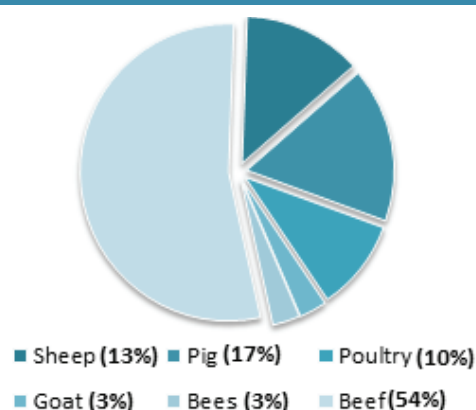
### Beef

Beef Commodity recorded a total of 17,373 cows (breeders) with a total stock of 44,568. Beef production through the formal market increased to 2,800ton with a total of 7229 animals slaughtered (see Table 13 pg. 28).

### Dairy

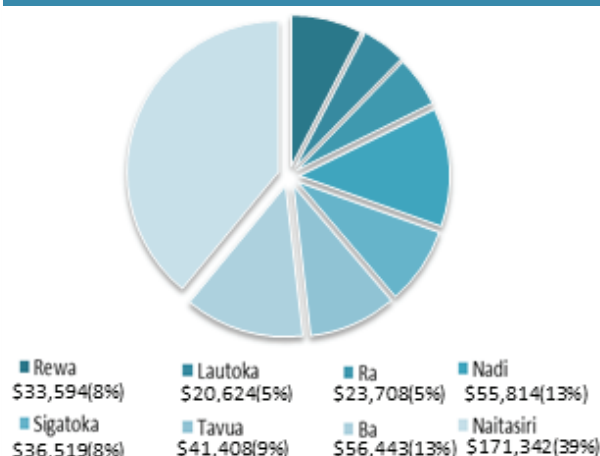
Dairy Commodity recorded a total of 15,411 milking cows; 350 Chilling Centre Suppliers, 19 Bulk Suppliers, 39 Town Suppliers and 159 farmers who are supplying

**Figure 7: 2014 Budgetary Allocations by Livestock Commodity**



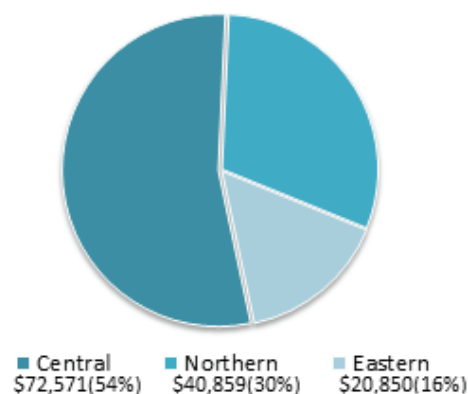
Source: 2014 Animal Health & Production Annual Report

**Figure 8: 2014 Dairy Budgetary Allocations by Targeted Area**



Source: 2014 Animal Health & Production Annual Report

**Figure 9: 2014 ROI Budgetary Allocations by Division**



Source: 2014 Animal Health & Production Annual Report

Ghee. A total of 10.2 million litres of milk was supplied to the Fiji Dairy Limited (FDL) by the Fiji Cooperative Dairy Company Limited (FCDCL). However, the total production for the formal and informal market was 14.9 million litres (see Table 14 pg. 28).

### Sheep

The Sheep Industry is geared towards reducing mutton imports especially the high quality sheep cuts. This year, Sheep Commodity recorded a total of 17,858 stocks from 495 supervised farms. Majority of sheep farmers are located in the Western Division. Locally, a total of 41 tons of boneless meat was produced from 28.75 tons carcass (see Table 15). This year, a total of 130 Fiji Fantastic Sheep were exported to Samoa.

### Pig

Pig Commodity recorded a total of 5,610 breeding sows and a total stock of 28,869 from 2,085 supervised farms. Majority of these farms were from the Central Eastern Division which accounted for 65% of the total number of stock. A total of 997.5 tonnes of pork was produced from 17,033 pigs slaughtered (see Table 16).

### Goat

Goat Commodity recorded a total of 16740 does and a total stock of 38000 from 935 farms. Majority of goat farms and total stock were from the Northern Division followed by Western and Central/Eastern Division. A total of 105 tons of goat meat was produced from 258 goats slaughtered in the registered abattoir (see Table 17).

### Apiculture

The Apiculture Section recorded a total 13,817 hives from 1543 farms. A total of 50712 hives, 1471 nucleus box and 1662 queen bee were produced during the year. The Section also inspected a total of 1681 hives with a total of 12 infected. A total of 339.66 tons of honey was produced during the year (see Table 18).

### Poultry

Poultry Commodity comprises of broiler production, edible egg production and day old chicks production. Locally, a total number of 11,990,252 broilers were slaughtered through the registered slaughterhouse producing 12,839.3 tons of poultry meat from 321 farms. Edible egg production recorded a total of 9,914,132 dozens of eggs from 486 farms. Day Old Chicks production recorded a total of 10,002,738 broiler day old chick during the year (see Table 19).

## COMMERCIAL UNDERTAKINGS

The Commercial Undertaking (CUT) recorded a total of \$1,272,445.28 as gross income for 2014 and this is 27.34% more than the 2013 achievement (\$999,240.66). A total of \$1,166,249.61 was committed as expenses resulting to a profit of \$106,195.67.

**Table 13: Indicators of Beef Industry**

Beef Indicators	2013	2014
Beef Production (Mt)	2,272	2,800
Total Number of Breeders	13,922	17,373
Total Number of Stock	38,117	44,568
Number of Head Slaughtered	6,295	7229
Beef Import(mt)	3,160	2,619

Source: 2014 AH&P Annual Report

**Table 14: Indicators of Dairy Industry**

Dairy Indicators	2013	2014
Milk Production (Million Litres)	12,050,000	14,875,649
Total Number of Dairy Herd	12,950	15,411

Source: 2014 AH&P Annual Report

**Table 15: Indicators of Sheep Industry**

Sheep Indicators	2013	2014
Sheep Production (mt)	199	41
Total Number of Stock	16,332	17,858
Import (mt)	4,555	4,486

Source: 2014 AH&P Annual Report

**Table 16: Indicators of Pig Industry**

Pig Indicators	2013	2014
Pig Production (mt)	949	997
Total Number of Stock	31,365	28,869
Total Number of Breeding Sows	6,198	5,610
Number of Pigs Slaughtered	15,826	17,033
Import (mt)	189	204

Source: 2014 AH&P Annual Report

**Table 17: Indicators of Goat Industry**

Goat Indicators	2013	2014
Goat Production (mt)	154	105
Total Number of Stock	37,931	38,000
Import (mt)	112	118

Source: 2014 AH&P Annual Report

**Table 18: Indicators of Apiculture Industry**

Honey Indicators	2013	2014
Honey Production (mt)	215	340
Total Number of Hives	10,634	13,817

Source: 2014 AH&P Annual Report

**Table 19: Indicators of Poultry Industry**

Commodity	Indicators	2013	2014
Poultry	Number of Broilers Slaughtered	15,410,585	11,990,252
	Production of Poultry Meat (mt)	26,354	21,840
Eggs	Production (doz)	6,736,100	9,914,132

Source: 2014 AH&P Annual Report

# HEALTH AND DISEASE ERADICATION

## VETERINARY AND REGULATORY SERVICE

There were continuous Brucellosis Tuberculosis Eradication Campaign (BTEC) surveillance carried out for year 2014 focusing on the registered dairy farms, beef farms, villages and settlements within infected zones in the Central Division.

The national prevalence for Brucellosis dropped dramatically ever since the inception of the proper program in 2012. This happened when the Ministry took over the disease control campaign from the Biosecurity Authority of Fiji (BAF). Brucellosis prevalence has now reduced to 0.04% and most of the previously infected farms are on recovery process whereby the no. of infected farms was reduced from 14 (2013) to 9 farms (2014).

BTEC operations for 2014 mostly concentrated in the Central Division and the team also conducted testing in Koro Island for TB Trace back. The team conducted testing in Yaqara, Laucala Island, Yalavou, Sigatoka Research Station and Nawaicoba Quarantine Station for BTEC activities.

A total of 35,094 bovine tested this year on which 554 farms reacted to the test conducted.

## VETERINARY PATHOLOGY LABORATORY

It has been a highly progressive and challenging year for the Fiji Veterinary Pathology Laboratory despite the fact that the laboratory managed to achieve all the targets for the year and also conducted other planned activities.

The Laboratory continued to provide service through its core disciplines like Microbiology, Parasitology, Histology, Serology and Necropsy. The Laboratory also facilitated and carried out monitoring and surveillance of the disease status prevalent in Fiji and other exotic diseases to declare Fiji disease free and report to OIE (World Organisation for Animal Health).

These were some milestone achievements of the Ministry through Livestock Research in 2014:

- The successful rating of the Livestock Research Laboratory by the Delegation from OIE after a thorough investigation and analysis. The Laboratory was awarded with four (4) rating which is second highest compared to the 2 in 2007.
- The Fiji Veterinary Pathology Laboratory received a total budget of \$100,000.00 which was utilised for the Laboratory Accreditation activities and procurement of the Haematology Analyser Machine and Bio-Rad ELISA plate reader.
- A total number of 29,071 specimen were received which showed a decrease by 75% compared to 2013 (51,098).
- A total of 136 milk samples received with 199 tests done.
- A total of 284 samples were received and 97 tests were carried out on Tuberculosis.
- For processed products, a total of 102 samples with 545 tests were carried out. These include honey sample, virgin coconut oil, and tin fish and tin tuna which was submitted by the Chemistry Lab.
- A total of 108 samples were received and routine bacterial culture, biochemical test, gram staining and sensitivity tests were carried out on different organs of different species.
- A total of 1,556 samples were analyzed for Parasitological tests during the year.

## REGULATORY SERVICES

### Registration and Inspection

- This year, 12 slaughter houses and 1 cannery, 25 meat carrying vehicles and 580 personnel's were inspected, certified and underwent medical certification around the country.
- A total of 243 swab samples carried out in the 12 slaughterhouses, cannery plant, milk processing factory and butchers around the country.



- A total of 55 pounds were recorded as one new pound was constructed at Dawasamu and two pounds repaired in Naqesa and Vunidawa
- A total of 84 animals (16 horses, 60 cattle and 8 others) were impounded during the year generating revenue of \$ 4,307.00.
- During the year, a total of 657 brands were registered with total revenue of \$1,759.07. Most brand registration was recorded from the Western Division which accounted for 63% of the total achievement
- A total of 5,360 animals were slaughtered, meat inspection was recorded from two (2) divisional abattoirs, rural slaughterhouses, with total revenue of \$12,528.17 and this accounted for a decrease by 72.5% compared to 2013.
- 36 dog trapping campaigns were done this year, 36 in the Central Division, a total of 360 dogs were trapped whereby all dogs were euthanized
- During the year, a total of 190 baits were laid at Nawaicoba Quarantine Station of which 61 baits were taken with the balance recovered. In the process, a total of 14 dead dogs were recovered and buried.
- A total of three meat surveillance were carried out in the Central Division, thus confiscating a total of 25 kg of meat which has been in the retail market for sale that has originated from illegal outlet and not by a registered slaughterhouse.
- A total of 64 meat carrying vehicle and 25 cattle trucks were inspected and registered for Western, Northern, Central, Laucala and Wakaya Island in 2014 to cart livestock under the chapter 237 with the provision of stock movement advice.
- A total of 324 dairy farms were inspected and were registered in 2014 to Fiji Dairy Limited.
- The total clinical cases achieved for the year was 5, 429 with total revenue \$75,529.25 achieved from the three (3) divisions; Central/Eastern, Northern and Western Divisions.
- A total of 21,201 drug sales were done during the year with total revenue of \$493,317.16. The highest revenue was collected from the Western Division (55%).
- A total of 767 castrations were recorded from the three (3) Divisions during the year.
- The total sale for the New Zealand stock for 2014 was 80 heads with total revenue of \$77,000.00.

## LIVESTOCK RESEARCH

The funding for livestock research was \$850,000 through the Small Holder Sheep (\$170,000); Pig Research and Development (\$150,000); Feed Technology (\$100,000); Beef Research (\$150,000); Goat Research and Development (\$180,000), and Poultry (\$100,000).

**Table 20:** Achievements under Livestock Research Programs

Output	Objective	Budget	Achievements
DAIRY RESEARCH	To improve and upgrade research station production capabilities in supplying quality breeding replacement stock to farmers and making a positive impact on the declining milk production in the livestock sector.	Only normal operating funds (\$20,000)	<ul style="list-style-type: none"> <li>• Sold 76 heads of breeding animals to the farmers</li> <li>• 16 Wooden individual feeding stalls constructed</li> <li>• 80 heads sold to farmers (four calves, 49 Breeder bulls, 27 dry cows)</li> <li>• 7.934km of fencing achieved on all 3 research stations</li> <li>• Purchased all necessary drugs for the dairy station needs from CUT</li> <li>• 7.93ha of pasture was fertilized through utilization of the balance of fertilizer purchased in 2013</li> </ul>

BEEF RESEARCH AND DEVELOPMENT	To improve breeding plans and strategies, station infrastructure, nutrition for the breeding stock and artificially inseminate cows with chosen imported pure breeds' semen.	\$150,000	<ul style="list-style-type: none"> <li>• 24 galvanized individual feeding stalls constructed</li> <li>• 52 cows inseminated</li> <li>• 134 breeding stock sold</li> <li>• One Stockyard upgraded</li> <li>• 6ha pasture fully renovated</li> <li>• Sold a total of 134 breeding animals</li> <li>• A total of 47 cows conceived from the 52 inseminated; which is a 90% conception rate</li> </ul>
SMALL HOLDER SHEEP DEVELOPMENT	To upgrade infrastructure; improve nutrition; feeding trial, controlled breeding to maintain bloodline quality and proper weaning management	\$170,000.00	<ul style="list-style-type: none"> <li>• One Feeding Trial Completed</li> <li>• Ewes increased by 309</li> <li>• 727 Breeding Stock supplied from three stations</li> <li>• 3.5km road repaired</li> <li>• Installed two kilometres of piping system at NQS and Batiri</li> <li>• Installed one Borehole</li> <li>• One Nutritional conducted at NQS</li> </ul>
PIG RESEARCH AND DEVELOPMENT	To conduct research and rear desirable quality and quantity of breeding animals for research and distribution through the purchase of superior quality breeding stock to selected farms	\$150,000	<ul style="list-style-type: none"> <li>• One Feed and Feeding Trial completed using 22 pig growers of Large White x Duroc Cross</li> <li>• 395 sows inseminated &amp; 8 Purchased</li> <li>• Eight dry stalls upgraded with security boundary fence</li> <li>• New Water Pump installed</li> <li>• 411 weaners sold</li> <li>• Three trainings conducted</li> <li>• One Publication</li> <li>• A total of 436 piglets were born from 32 sows of which 47 (11 percent) died while 411 (91 percent) were sold to selected farmers</li> </ul>
GOAT RESEARCH AND DEVELOPMENT	Formulate breeding plan and conduct stringent breeding program to ensure that quality breeds are raised, maintained and supplied to approved Multiplication Centres in the country	\$180,000	<ul style="list-style-type: none"> <li>• One Feed and Feeding Trial completed using 28 female and male growing Anglo Nubian cross and Boer Goat cross</li> <li>• 64 breeding stock sold</li> <li>• Three types of veterinary drugs purchased</li> <li>• Ten feeding stall renovated</li> <li>• Three Goat Shed renovated</li> <li>• One barn renovated</li> <li>• One Quarter Renovated</li> <li>• Five kilometre fence renovated</li> <li>• 14.5 ha of pasture renovated</li> <li>• Ten tonnes feed purchased</li> <li>• One field day and one publication</li> </ul>
POULTRY RESEARCH AND DEVELOPMENT	To produce and supply day old chicks to local farmers and also introduced local breeds for breeding of resilient breeds of chicken	\$100,000	<ul style="list-style-type: none"> <li>• 8,638 day old chicks produced</li> <li>• 7,634 day old chicks supplied</li> <li>• Two batch breeder day old chicks imported</li> <li>• Two batch vaccine imported</li> <li>• 1,559 bags of feed purchased</li> <li>• Four trainings conducted</li> <li>• Two Poultry farm equipment purchased</li> <li>• Two staff recruited</li> </ul>

## LIVESTOCK FEED TECHNOLOGY

To improve livestock nutrition for increased levels of meat and milk production. Strengthening, screening and evaluation of pasture species program to produce species that are better adapted and high yielding both in terms of quantity and quality of feed produced under different climatic and soil conditions and different livestock production systems

\$100,000

- 1 Research trial has been completed after 4 years of data collection
- 4 Verification studies of pasture established
- 2 Museum plot at KRS and SRS maintained
- 1 ton of pasture seeds imported
- 124 bags of vegetative planting materials supplied from research stations to farms
- 200 Potted legumes supplied from research stations to farms
- 701 Legume seeds collected and potted
- 1 Research Trial Completed
- Dairy, Pig, Sheep, Beef and Goat calculated ration formulation finalised
- 1 project staff was employed as Feed Mill Operator





# LAND & WATER RESOURCE MANAGEMENT





## OVERVIEW

The objective of the Land and Water Resource Management Division is to support the Ministry of Agriculture's strategic and corporate goals in facilitating sustainable land and water resource management for agricultural development.

Some major highlights of the Ministry through the Land & Water Resource Management Division included;

- Dredging of the Ba, Rewa and Labasa rivers and bank protection works in Nasali and Ba rivers;
- Completion of the Environment Impact Assessment Study of Penang River dredging and dam construction works in the Nadi Watershed;
- Six (6) irrigation schemes maintained in the Northern Division and one (1) in the Central Division; Drainage improvements were also undertaken in rice rainfed areas in Macuata, Nasarawaqa and Namau in Bua;
- The Drainage Subsidy Grant funds the operation and maintenance for all drainage schemes under the jurisdiction of the three (3) Drainage Boards. The Central Division Drainage Board undertook works in thirty nine (39) schemes, the Labasa Drainage Board twelve (12) schemes and the Western Division Drainage Board twenty one (21) schemes;
- Technical assistance support was provided to Matainoco Village & Koroboya School Drainage funded by the Prime Ministers Office, Small Grant Scheme, Bau Island seawall and Suweni Village bank protection construction works for the Ministry of Regional Development; and
- The Programmes annual capital budgetary allocation was \$9.2million. The total funds released was 97% of the annual provision, total expenditure was 95%.

### BUDGET

A total fund of \$9,234,356 was released from the Ministry of Finance this year for all Capital Programmes and \$8,794,421 has been utilised for the implementation of the four programmes.

Table 21: Budgetary allocation for LWRM Programme

Program	Released	Expenditure	Utilization
Flood Protection	\$5,971,920	\$5,843,360	98%
Irrigation Services	\$1,262,436	\$1,019,858	81%
Watershed	\$1,000,000	\$ 931,203	93%
Drainage Subsidy	\$ 1,000,000	\$1,000,000	100%
Total	\$9,234,356	\$8,794,421.00	95%

The Drainage Subsidy is a Grant provided to the three (3) drainage boards for its operations and maintenance works for developed drainage schemes. In the Western and Northern Division the schemes support the sugar industry, while in the Central Division the schemes were developed for non-sugar crops.

- Labasa River Dredging  
√ Total volume dredged was 143,445 cubic meters
- Rewa River Dredging  
√ Total volume dredged was 29,324 cubic meters
- √ Completed Environment Impact Assessment Study
- Nasali River- Transport Landing Bank Protection
- Construction small scale check dams (retention weirs) to regulate the flow of flood waters to minimize the impact of flooding in the developed lower river basin in Nadi



- The Environment Impact Assessment for the Namosi No 3 dam completed by SCOPE Environment Consultant

## ACHIEVEMENTS OF ACTIVITIES UNDER IRRIGATION SERVICES

- A total of eight (8) irrigation schemes maintained under which 1,700 hectares of land developed was used for rice and vegetable crops cultivation.
- In the Central Division the works were undertaken in the Navua irrigation scheme. In the Northern Division the works were undertaken in six (6) schemes; Korokadi, Vunivau, Dreketi, Nasarawaqa, Droca and Votua.
- Rice rainfed area improvement at Nasarawaqa was completed
- Drainage improvement works were also undertaken at Namau in Bua and at Bulileka and Basekalave in Macuata to support crop production and food security.

## DRAINAGE SUBSIDY

A total of \$1 million was allocated for Drainage Subsidy this year of which 38% was for Central Division, 40% for Western Division and 22% for Labasa Drainage Board.

- o Central Division Drainage Board: undertook works in 39 schemes
- o Northern Division Drainage Board: 12 sugar drainage schemes with some 3,700 hectares developed in the Macuata Province. Under its jurisdiction, the Labasa Drainage Board maintains 163 km of drains, 34 km of seawalls, 36 outfall floodgate and flap gate structures and 282 associated drainage structures.
- o Western Division Drainage Board: completed drainage works for desilting and chemical weeding in eighteen (18) drainage schemes due to the drought conditions as the drains and weed growth had dried up; the infrastructure rehabilitation works were completed

## REGIONAL PROJECTS

To meet the challenges of climate change, sea level rise and the flooding problems, the Division has through assistance from regional agencies obtained funding from the Global Environment facility (GEF) to undertake the following projects.

### Integrated Water Resource Management (IWRM)

The objective of the project is to develop an awareness of the flooding problem and water resource issues in the Nadi Catchment and to develop an integrated flood risk management plan that addresses sustainable development. The project commenced in 2009 and was completed in June, 2014.

**Table 22: Output of the Agriculture Development**

Division	Achievement
Crop Extension	<ul style="list-style-type: none"> <li>• Muanaira and Kiuvu flat land drainage plans</li> <li>• Mamilava, Tailevu 1.2km cocoa road upgrade</li> <li>• Matalava, Tailevu 1.3km cocoa road upgrade</li> <li>• Nataivera, Naitasiri 0.8km cocoa road upgrade</li> <li>• Saolo, Nagadoa and Nasaudro farm road works in Bua</li> <li>• Matasawalevu cocoa farm road scoping works</li> <li>• Naveicovatu village youth farm scoping works</li> <li>• Waivaka Village farm drainage scoping works</li> <li>• Waidalica, Tailevu farm access road scoping works</li> <li>• Kavanagasau and Yalasa road upgrading scoping works</li> <li>• Waibalavu, Soso and Uluisuvuda cocoa farm road scoping works</li> <li>• Farm irrigation system for two farmers in Sabeto and Tavua</li> <li>• Korowaqa and Matuku quarters maintenance scoping works</li> <li>• Nayavu, Vunidawa and Babavoce quarters maintenance scoping</li> <li>• Sigavou drainage works supervision</li> <li>• Lomaivuna station boundary definition</li> </ul>
Livestock	<ul style="list-style-type: none"> <li>• Natua Office design</li> <li>• Dakuinuku dairy farm drainage improvement</li> </ul>
Crop Research	<ul style="list-style-type: none"> <li>• Legalega mushroom shed floor defects work supervision</li> <li>• KRS HFTA building construction work certification</li> </ul>
Office of Prime Minister (\$212,000)	<ul style="list-style-type: none"> <li>• Koroboya Primary School drainage improvement</li> <li>• Matainoco Village drainage improvement</li> <li>• Biausevu village flooding investigation</li> <li>• Namatakula flooding investigation</li> <li>• Nawairuku village erosion investigation</li> <li>• Vuniniudrovu bank protection investigation</li> </ul>
Stakeholders & Investors	<ul style="list-style-type: none"> <li>• Kelton Enterprise – drainage improvements in Calia, Navua</li> <li>• Crest Chicken – drainage culvert-crossing upgrade advice</li> <li>• Grace Farm Road Company – irrigation water supply</li> <li>• Lami Town Council – Lami River flooding investigation</li> <li>• District Officer Suva – Veisari River flooding investigation</li> </ul>
Town and Country Subdivision Applications	<ul style="list-style-type: none"> <li>• 43 applications addressed in the Central Division</li> </ul>

Source: LRPD 2014 Annual Report



### **Pacific Adaptation to Climate Change Project (PACC)**

The objective of the project was to build resilience of communities to the impacts of climate variability on food security and to demonstrate through improved drainage networks and research on crop adaptability. The project commenced in 2009 and was completed in December, 2014.

#### **The major highlights during the year were the following activities:**

- Two(2) demonstration farms established at Nakelo and Ravodrau to research three (3) varieties of dalo, kumala and cassava for water logging resilience
- Socio economic survey of households
- Construction of new floodgate structure at Waikete

### **Japanese Technical Assistance – Nadi Flood Control Study**

The Japanese Government in response to the Fiji Government is currently implementing a Technical Assistance Project for the Planning of the Nadi River Flood Control Structures in Fiji. The Ministry of Agriculture is the Focal Agency for the study with the Director LWRM providing assistance to the JICA Study Team. The project has completed its Inception Report and is currently working on the detailed study phases of the work plan.



# LAND RESOURCE PLANNING & DEVELOPMENT



## OVERVIEW

In 2014, the Ministry was allocated with \$300,000 for the implementation of the two (2) Land Resource Planning and Management Programs;

1. **Sustainable Land Management** : \$200,000
2. **Farm Management** : \$100,000

### ACHIEVEMENTS OF THE SUSTAINABLE LAND USE PLANNING PROGRAM

#### Capacity Building on Sustainable Land Management in Fiji

- Five Trainings conducted this year on the following topics; Sustainable Land Management, Soil Conservation measures, Bad & Good Land Use Practices, Agroforestry, Food Security, Climate Change Adaptation and Mitigation and Disaster Risk Management.

#### Establishment of Commodity protocols with existing & new markets

- Ginger Industry Plan Completed

#### Designed Maps prioritizing commodity, gross margins & whole farm budget

- Nine Commodity maps completed and provided for Industrial Plan Compilation (Dalo, Rice, Dairy, Ginger, Beef, BQA Commodities, Eggplant, Chillie, Okra, Sheep, Coconut)

#### Transferring SLM Technology to Communities

- 24 SLM Training conducted (9 West, 7 Central/Eastern, 4 North)
- 23 SLM Methods implemented
- Established 12 SLM Demo Plots (3 West, 6 Central/Eastern, 3 North)
- One seed bank established
- Established five Nursery with Management and diversified short term cash crops skills training

#### Tikina Based Baseline Biophysical Information

- Nine Bio- physical data conducted (7 West, 1 Central/ Eastern, 1 North)
- 119 LUC maps produced

#### Participation of Women on economic activities

- Four Womens Training on Cottage & SLM Conducted this year (Nananu Village, Naitutu, Yavu, Batiki & Dagai Village)

### OTHER ACHIEVEMENTS

The Division represented the Ministry this year as member of the following National Steering Committee.

1. National Biodiversity Strategy & Action Plan Committee
2. National Village Relocation Taskforce
3. National REDD+ Steering Committee
4. National Environmental Council
5. United Nation Convention to Combat Land Desertification

### FARM MANAGEMENT

This Program is responsible for capacity building in the Farm Management Discipline in the Agriculture Sector. Around 60% of the 2014 total budget of \$100,000 focused on Capacity Building of staff and farmers, 17% for Farm Business Advisory Service whilst 23% on Farm Management Information and Manual





The major targeted activities for 2014 were increasing farmer awareness to the changing nature of Agriculture in Fiji and changing mindset and approach of stakeholders in order to stay resilient, competitive and operate sustainably. This year was challenging and also a memorable one as the Ministry with their hardworking officers more particularly from Land Resources Planning & Development Division published a Fiji Farm Budget Manual after 11 years.

## ACHIEVEMENTS OF FARM MANAGEMENT PROGRAMME

### Capacity Building at Community Level for Commercial Agriculture

- 11 Community Trainings on Farm Management Conducted (Two Nadarivatu, two Kadavu, two Tailevu, two Macuata, one Gau and two Ra)

### Coordinate Partnership between farmers and lending institutions

- Four Loan Proposals Submitted to Fiji Development Bank (FDB)

### Updated Farm Management Manual

- 56 Gross Margins updated and Published in the Fiji Farm Management Manual

### Strengthened Cottage Industry through Capacity Building on SLM & FM

- Three Groups of Women in Tailevu North assisted this year

### Documented Farming Systems of Gau & Kadavu



# CROP RESEARCH



## OVERVIEW

The year 2014 marked another achievement for the Research Division of the Ministry of Agriculture with an increase in budgetary allocation for capital projects. A total of \$1.977m was allocated to fund research activities in 2014 which was a 62% increase from the 2013 allocation. The funding targeted to develop affordable agricultural technologies and dissemination of research findings to stakeholders. Important commodities like rice, dalo, cassava, yams, papaya, pineapple, tomatoes, chilies, capsicum, pulses, maize, coconuts & cocoa and some minor commodities were the focus of research activities during the year. This was supported by research activities on pest management and chemistry laboratory accreditation that conducted research on aspects of pest and disease management and analytical services and post-harvest losses, respectively.

A number of collaborative researches were carried out during the year including the ACIAR funded projects: Soil Health Project, Integrated Crop Management; Developing Cleaner Export Pathway for Pacific Agriculture Commodities. The ground work for the JUNCAO Mushroom Technology commenced at Legalega Research Station which was funded by the Chinese Government. The Pacific Adaptation to Climate Change (PACC) conducted research on low land areas on two pilot sites in Fiji focusing on climate change adaptation and food security.

Two issues of the Fiji Agricultural Journal Volume 54 were published in June and December. Dr. Apaitia Macanawai the Principal Research Officer – Plant Protection was the Chief Editor of the Fiji Agricultural Journal. The Fiji Institute of Agricultural Science (FIAS) continued during the year with its first symposium which brought together Agriculturalists from various agriculture stakeholders in Fiji.

## PROGRAMS FOR CROP RESEARCH

The following are the summaries of research projects undertaken during the year:

### HORTICULTURE RESEARCH

#### Vegetable

- Nine tomato varieties and 12 capsicum varieties were evaluated in a collaborative activity with AVRDC under the Integrated Crop Management ACIAR project.
- Breeding program for okra and eggplant was carried out after collecting and establishing seeds sourced from farmer's field.
- Foundation seeds for eggplant, tomato and sweet corn were also produced under the crop improvement programme.
- Nine rourou and four bele varieties were established in field germplasm while 75 assorted varieties were conserved in cool storage.
- Conducted five trainings on vegetable production for farmers

#### Potato

- Kocide fungicide was found to be the most effective control of early blight on potato. Further evaluation needed to be carried out on the different rates for the fungicide.
- Four varieties were introduced from Australia but only one variety, Red Pontiac was able to withstand the dry weather that was experienced at Sigatoka Research Station (SRS).
- 1,365 kg of potato was produced and transferred to the diffuse house for storage and will be planted during the offseason at Naga, Nadarivatu and at SRS.

#### Pulses

- Multi-location Strip Test trial was conducted on three Pigeon peas, three Peanut, three Mung bean, and five Wheat.
- 101 kg of pulse seeds [11kg Urd –Kiran, 24 kg Cowpea-Tara, 10 kg, Mung –Aakarshan, 35 kg Pigeon Pea-Kamica, 21 kg Peanut –Volasiga] were produced.



- Under the Conservation and Maintenance of Plant Genetic Resources Program, 150 varieties of pigeon pea were planted and seeds kept in cool storage.
- 855 kg of assorted pulse seeds were produced and sold to farmers.
- Legalega station produced 1000kg pulse seeds for the IKSA project.

### Fruits

- An experiment was conducted on year round pineapple production at Seaqaqa to investigate the effect of the three Growth Regulators (Ethephon, EPGR 108 and Floraset) on flower initiation.
- Experiments to revise the package of practice for pineapple and papaya were also established at Seaqaqa and Sigatoka, respectively.
- Conservation and maintenance of Plant Genetic Resources (PGR) for fruit crop varieties i.e. 25 citrus varieties, three released varieties of FHIA banana (FHIA 1, 17 and 18), one Mangosteen, 18 breadfruit, 69 mango varieties, five pineapple and 22 varieties of assorted exotic and indigenous varieties. A new germplasm of ten local papaya accessions collected from around Viti Levu, Vanua Levu and Taveuni was established in Seaqaqa.
- A total of 2,750 citrus seedlings of which 750 were supplied to farmers as grafted plants, 3,300 assorted fruit seedlings, 362,000 pineapple plantlets were produced with more than 50,000 supplied to farmers and 12kg of papaya seed with 90,000 pawpaw seedlings produced.

### Root Crop Research

- Priorities for research activities on root crops were focused on taro breeding for resistance to taro leaf blight (TLB).
- Review of package of practice was conducted for ginger cultivation on flatland and sloping land.
- Evaluation of potential taro varieties for commercial traits was conducted.
- Evaluation of drought tolerant varieties of kumala on dry zone was also conducted.
- Conservation, management and utilization of root crop plant genetic resources (PGRs) at various locations.

### Tree Crop Research

- Produced 17,200 cocoa seedlings.
- 180,640 coconut seed nuts and 4,138 seedlings distributed to the Extension Division.
- A new cocoa nursery was established at Naduruloulou Research Station for seedling production.
- A total of 1,938 seedlings of Malayan Red Dwarf variety planted in block 4 at Taveuni Coconut Centre.

### Rice Research

- A total of 840, 3,350 and 2,190kg of rice seeds were distributed to farmers in Central, Western and Northern divisions, respectively.

### Plant Tissue Culture

- The Hon. Minister for Agriculture Inia Seruiratu commissioned the new Tissue Culture laboratory.
- A consignment of 42 potato varieties in vitro from CIP Peru was received and maintained in the laboratory.
- Altogether the crops maintained and conserved in vitro are: banana (5vars.), breadfruit (9), cassava (12), kava (1), pandanus (4), pineapple (1), potato (53), swamp taro (3), sweet potato (30), taro (33), yam (6), xanthosoma (1).

### Plant Protection Research

- 23 new fungus inoculated ground traps for Coconut Rhinoceros Beetle (CRB) management were set up i.e. Viti Levu (9), Vanua Levu (5), Kadavu (4), Kaibu (2), Koro (3).
- 70 new pheromone (ethyl-4-methyl octanoate) traps for CRB control were installed (Viti Levu 30; Kadavu 4; Leleuvia 3; Kaibu 1; Koro 10; Vanua Levu 22 and 18 bucket traps were serviced at different sites around the country.
- 24 awareness trainings were conducted for farmers, extension officers and stakeholders.
- 11,379 parasitoids for coconut stick insects were released at various infested sites in Taveuni, Vanua Levu, Lomaiviti Group and Viti Levu.
- A survey was carried out to confirm the presence of taro beetle in Buca, Cakaudrove. However, no taro beetle was found during the survey. 16 awareness sessions on taro beetle management was conducted in Kadavu, Naitasiri, Lomaivuna, Ra, Vanua Levu, Suva, Sigatoka and Koro.
- There were new hosts for fruit fly determined from 105 fruits sampled. This meant that *Bactrocera passiflorae* still had 48 host fruits, eight hosts for *B. xanthodes* and only one host fruit for *B. distincta*.
- Training of Trainers workshop on Farmer Field Schools were conducted for Extension Officers of the Central and

#### Western Divisions.

- Two of the known *Colletotrichum* species that are associated with the Chilli Anthracnose Disease of chilli were identified. The two *Colletotrichum* species were *Colletotrichum truncate* and *C. simmonds* (previously *acutatum*).
- Soil seed bank of *Wedelia* (*Sphagneticola trilobata*) study indicated that top soil (0-15cm) had greater number of viable seeds than the bottom soil (15-30cm).
- The *Wedelia* vegetative potential study revealed that it can be controlled if the stem sections are buried at depths more than 30cm.
- Herbicide efficacy trial result on African tulip tree (*S. campanulata*), *Merremia peltata* and Rain tree (*Samanea saman*) showed that Glyphosate 360 effectively eradicated the African tulip tree and Rain tree while Weed master, Supremo was effective in controlling *Merremia*.
- The soil seed bank study of *Spermacoce latifolia* revealed that *S. latifolia* was the most predominant weed species especially in the top soil of *S. latifolia* infested area.
- The study on survival rate of different sizes of stem sections of *Commelina diffusa* indicated that burying the *C. diffusa* stem section deeper or slashing stem sections into piles and burning them can be an effective control apart from the use of herbicides.
- The *Mucuna pruriens* seed longevity trial showed that *M. pruriens* seeds remained viable in soil for 28 days in both climatic conditions, dry and wet zone.
- Thirty seven pesticide applications were approved. Awareness was conducted to pesticide retailers and distributors in North, West, Central & Ovalau on the safe handling, use and storage of pesticides.

#### Fiji Agricultural Chemistry Laboratory

- The laboratory received 3,153 samples comprised of soil, plant, water, food and animal feed samples and out of which, soil samples were the most with 51%.
- The post-harvest losses project employed a Food Technologist from Indonesia for a period of three months from November 2013 to January 2014.
- 58 food products from local agricultural commodities were developed.
- Food processing equipment were purchased such as milling machine, chips slicer, bottle cap sealer, foot sealer, vacuum fryer, noodle maker and spinner.
- Three drying electric ovens were donated by the Indonesian Government.
- Twelve trainings and several displays on product development were conducted around the country.

#### Infrastructure improvement of Research Stations

- Commencement of the construction of a new bore hole in Dobuilevu Research Station which used to draw water from the Wainibuka River.
- Construction of a new Mushroom shed at Legalega Research Station.
- Construction of a new insect museum and the refurbishment of old Museum for staffroom at Koronivia Research Station.
- Construction of a new Seaqaqa Research Station meeting bure and construction of proper boundary fence for security purpose at Legalega.
- Upgrading of drainage and farm access road to prevent heavy siltation and water logging and easier transportation of machine and farm produce at Sigatoka, Naduruloulou, Koronivia, Legalega and Dobuilevu.
- Four new tractors were purchased for Seaqaqa, Legalega, Sigatoka and Dobuilevu.



## Publications

- 1) Deesh, A.D., Lal, S. S., Turagakacivi, W and Macanawai, A.R. (2014). Survival rate of different nodal stem section of *Commelina diffusa*. *Fiji Agricultural Journal* 54 (2). 58-62.
- 2) Jikowale, W. (2014). Status of soil acidity in the Province of Naitasiri, Fiji. *Fiji Agricultural Journal* 54 (1), 63-68.
- 3) Macanawai, A.R. (2014). Crops & its management in Lomaivuna Viti Levu Fiji. Paper presented at the International Horticultural Congress, Brisbane, Australia. Abstract. <http://www.ediblearoids.org/portals/0/Newsletters/2014/August/Latest%20News/IHCBrisbane.pdf>.
- 4) Macanawai, A.R. Kapoor, G., Motu, M., Mohan, P. and Lal, S. (2014). Assessment of *Mucuna pruriens* (L.) DC. growth and its potential as a valuable green manure cover crop in Fiji. Paper presented at the International Horticultural Congress, Brisbane, Australia. Abstract.
- 5) Macanawai, A.R. (2014). Abundance of non-native plant species in taro (*Colocasia esculenta*) farms on selected sites in Taveuni Island, Fiji. *Fiji Agricultural Journal* 54 (1), 69-80.
- 6) Macanawai, A.R. and Orapa, W. (2014). Efficacy of different rates of Glyphosate treatments for the control of Jerusalem thorn (*Acacia concinna*) in Fiji. *Fiji Agricultural Journal* 54 (1), 88-92.
- 7) Vaqalo, M., Deesh, A. D., Wede, J., Janif, Mohammed., Cavuiliati, A., Nand, Nitesh., Feroz, Khan and Gunua, B. K (2014). The comparative efficacies of male aggregation pheromone on coconut rhinoceros beetle (*Oryctes rhinoceros* L.) in Viti Levu, Fiji. *Fiji Agricultural Journal* 54 (1). 81-87.



# ECONOMIC PLANNING & STATISTICS





# OVERVIEW

In 2014, a number of Memorandum of Understanding, Memorandum of Agreement, Surveys, Budget Consultations, Policy formulations and Markets Scopings were planned and implemented well through the work of Economists, Analysts and Statisticians employed in the Ministry. At the end of the year, the Ministry was able to achieve the following outputs in the area of Planning, Policy Formulation, Surveys, Market Scoping, Budget Formulations and Monitoring.

## POLICY ANALYSIS AND INTERNATIONAL RELATIONS

One of the milestone achievements this year was the Launching of Agriculture 2020 Policy Agenda facilitated and coordinated by the Policy Section of the Division in the Ministry.

## BUDGET & PROJECT

In 2014, the Ministry was able to secure \$34,303,061million for 65 Capital Programmes as facilitated by the Project & Budget Section of the Division.

### Other Achievements:

- A total of 75 RIEs were approved this year which included five major Demand Driven programs; Sigatoka Valley Improvement Program, Import Substitution Program, Export Promotion Program, Rural and Outer Island Program and Dairy Industry Support Program totaling \$3.0Million.
- Monitored all Projects in the Central & Western Division
- Conducted Monitoring Workshop (Central, Western & Northern Division)

## AGRICULTURE & RURAL STATISTICS

Fiji Agricultural and Rural Statistics (FARS) Unit played a vital role in enhancing data compilation through census, surveys and quarterly divisional reports, to ensure timely dissemination of improved quality and reliable statistics.

This year, the Ministry facilitated the second Stakeholders Meeting on Global Strategy for Agriculture & Rural Statistics coordinated by the Food & Agriculture Organisation. Moreover, few reports were formulated by the unit this year on the performance of the Sector. These were;

- Four Quarterly Production Reports (Crop & livestock)
- Three Quarterly Trade Reports (Crop & Livestock Sub-sector)
- One Import Substitution Commodity Report

There were also a number of ad hoc surveys conducted by the Ministry through Fiji Agriculture & Rural Statistics such as Horticultural Producer, Trader, and PACC & Tilapia Survey. The GIS unit produced 11 Commodity and Locality Maps this year and also undertook Baseline Survey Trainings throughout the three Geographical Divisions.

**Table 23:** Other Policies and International Relation Outputs of 2014

STRATEGY	ACHIEVEMENT
Disaster Risk Reduction & Disaster Risk Management	<ul style="list-style-type: none"> <li>• Two DCU Meetings were Coordinated</li> <li>• Four Food Security &amp; Livelihood Cluster Meetings were Coordinated</li> <li>• UNFAO Crop Insurance Workshop facilitated by two Consultants (SPC)</li> </ul>
Portfolio Leadership, Policy Advice and Secretariat Support	<ul style="list-style-type: none"> <li>• Four MOU's reviewed [BAF, Tutu Training, AMA, Dairy Development]</li> <li>• Three MOU's signed [Navuso Agriculture School, Fertilizer Subsidy, HFC]</li> <li>• Five Bilateral MOUs developed [Sri Lanka, Indonesia, India, Thailand, Chile]</li> <li>• Four Bilateral MOA's Developed [Lapita, Onyx, Chetty, Nasau]</li> <li>• Two Policy on draft [Food Security, Seed Policy]</li> <li>• Launched of the 2020 Policy Agenda</li> <li>• Two Cabinet Papers developed [FNU, FMIB]</li> </ul>
International Relations	<ul style="list-style-type: none"> <li>• Monitored eight FAO Projects</li> <li>• Bilateral Trade Agreement Data on Australia, NZ, China &amp; US</li> <li>• Attended Climate Change Meeting in Geneva</li> <li>• Formulated Aid Donor Fund Projects</li> </ul>

Source: EP&S Annual Report 2014

Agriculture Annual Report 2014



### FIJI AGTRADE

The core function of the section is to facilitate and improve trade of agriculture products both locally and abroad. Three major areas of focus includes: Market survey, Market information and Trade facilitation.

- Market Survey – a total of 48 weekly market surveys were carried out and reports prepared.
- Market Information – The section compiled quarterly bulletins and commodity plans during the year.
- Trade Facilitation – Facilitated attendance of Market Scoping team and other trade meetings.

### MONITORING & EVALUATION

The M&E (Monitoring and Evaluation) Unit was established in August 2014 under the EP&S Division reporting directly to the Chief Economist. It has the core role of routinely monitoring, reviewing, evaluating and reporting on the progress and impact of all Capital and Non-Capital Programmes of the Ministry and coordinating better M&E practices.

This is part of the Ministry's answer to the increasing call for transparency and accountability in the way it allocates and utilizes its resources. The Ministry has drafted a M&E Framework to guide its work and to create common knowledge at all levels on M&E.

The major outputs of the year were the formulation of the M&E Framework, SDP 2015-20 and Risk Management Policy. An Introductory Training on Monitoring & Evaluation throughout the Geographical Divisions was conducted, facilitated by the Monitoring and Evaluation Unit of the Ministry.



# HUMAN RESOURCES FINANCE & INFORMATION DIVISION





## OVERVIEW

The Human Resource, Finance & Information Team is required to accomplish the Public Services Commission Deliverables and the Ministry of Finance Deliverables as laid out by these two Central Agencies for all Government Ministries & Departments. These Deliverables also form the basis for the Permanent Secretary's Key Performance Indicators and the Division is to ensure that the deliverables are submitted as required.

The Ministry through the Human Resource, Finance & Management Division has adopted the existing Public Service Policies, Rules & Regulations and it is in the process in developing & reviewing all HRM&D related policies which will be adopted later in the year. Strict compliance and monitoring of these policies will be a high priority for the Division.

### PERSONNEL MATTERS

This is an activity of Human Resource Management on the administration of personnel matters including ensuring timely assessment, effective and efficient facilitation of all acting and temporary appointments, movement of staff, leave administration and updating the Person to Post lists. This year, ten resignation letters were received and eight staff retired from the service.

### POST PROCESSED

The Ministry was able to contract a total of 191 Established positions this year and six Consultancy agreements were issued with three months engagement. Altogether, a total of 110 Project Staff and 18 Casuals were recruited this year.

The six Consultants are listed on table 23 below.

### ETHICS AND DISCIPLINE

This year, the Ministry had seven cases on abuse of office, one on abuse of government resources and 15 on misconduct. Out of the 26 Cases, 19 were solved during the year.

### INFORMATION TECHNOLOGY & COMMUNICATION

The Ministry was able to provide easy access to accurate, timely and useful information to stakeholders through value-for-money e-solutions with the coordination of the Information Technology and Communication Team.

**Table 24:** Names of Consultants Contracted in 2014

NAME	COUNTRY	POSITION	DIVISION
Mr Eduardo Backolod	New York	Trade and Investment Advisor	Economic Planning & Statistics Division
Dr Senarath Leelananda Ranamukhaarachchi	Sri Lanka	Integrated Farming System Agronomist	Research Division
Mr Carlos Carpio	Philippines	Coconut Research & Develop- ment Specialist	Research Division
Dr Lydia S, Manguiat	Philippines	Product Development Specialist	Research Division
Mr Savenaca Tabilai	Local	Human Resource Change Man- agement Specialist	Human Resource Division
Mr Josefa Veramu	Local	Policy Analyst	Economic Planning & Statistics Division

Source: HRFI Annual Report 2014



#### OTHER MAJOR ACHIEVEMENTS OF THE MINISTRY WERE AS FOLLOWS:

- DVD Documentaries – Drafting of television scripts eg. Suweni Project
- Updated Ministry's Website [www.agriculture.gov.fj](http://www.agriculture.gov.fj)

#### TRAINING

This year, the Ministry was able to send 38 officers abroad and 24 locally for capacity building. Out of all the seven Divisions, Economic Planning & Statistics Division had the most number of overseas training this year.

#### ASSET & MANAGEMENT

A total of 14 Quarters were renovated this year, 47 vehicles were boarded and approved for written-off and 21 Serviceable Vehicles on the ground (8 Leased, 13 State Owned). Altogether there were 169 Vehicles under the Ministry of Agriculture this year (19 at Headquarters, 88 in the Western Division, 56 in the Northern Division, six in the Eastern Division).

**Table 25:** Achievements of Information & Technology

Achievements	
Provide GOVNET access to staff in Lakena, Luvuluvu, Kadavu	
Revamp PABX at HQ, Vatuwaqa and at Koronivia and Nacocolevu	
Databases for Training and Practical Attachment are designed and are used by Personnel Section, HR Division	
16 new Computers were purchased for rural stations in order to assist staff in preparing urgent divisional reports for the Ministry.	
110 press releases for 2014	33 press features
Radio Programs	
820 Issues Covered	468 Programmes
Five Direct Radio Talk Show	Two TV Talk Show
Media Publications	
Four Market Watch	Four Farmers Leaflets
Two Techinal Bulletins	Six Newsletters

Source: HRFI Annual Report 2014  
Agriculture Annual Report 2014





## FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2014



MINISTRY OF AGRICULTURE

FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 DECEMBER 2014

TABLE OF CONTENTS

INDEPENDENT AUDITOR'S REPORT .....	3
MANAGEMENT CERTIFICATE .....	5
STATEMENT OF RECEIPTS AND EXPENDITURE.....	6
APPROPRIATION STATEMENT.....	8
CONSOLIDATED TMA - MANUFACTURING ACCOUNT.....	9
CONSOLIDATED TMA - TRADING ACCOUNT.....	10
CONSOLIDATED TMA - PROFIT AND LOSS STATEMENT.....	11
CONSOLIDATED TMA - BALANCE SHEET.....	12
TRUST ACCOUNT STATEMENT OF RECEIPTS AND PAYMENTS .....	13
STATEMENT OF LOSSES.....	14
NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS .....	15

# OFFICE OF THE AUDITOR GENERAL

*Excellence in Public Sector Auditing*



6-8<sup>TH</sup> Floor, Ratu Sukuna House  
2-10 McArthur St  
P.O.Box 2214, Government Buildings  
Suva, Fiji



Telephone: (679) 330 9032  
Fax: (679) 330 3812  
Email: [info@auditorgeneral.gov.fj](mailto:info@auditorgeneral.gov.fj)  
Website: <http://www.oag.gov.fj>



## INDEPENDENT AUDITOR'S REPORT MINISTRY OF AGRICULTURE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2014

### Scope

I have audited the special purpose financial statements which have been prepared under the cash basis of accounting and Notes 1 to 4 thereon of the Ministry of Agriculture for the year ended 31 December 2014. The financial statements comprise the following:

- (i) Statement of Receipts and Expenditure;
- (ii) Appropriation Statement;
- (iii) Consolidated TMA - Manufacturing Account;
- (iv) Consolidated TMA - Trading Account;
- (v) Consolidated TMA - Profit and Loss Statement;
- (vi) Consolidated TMA - Balance Sheet;
- (vii) Trust Account Statement of Receipts and Payments; and
- (viii) Statement of Losses

The management of the Ministry of Agriculture is responsible for the preparation and presentation of the special purpose financial statements and the information contained therein.

My responsibility is to express an opinion on these special purpose financial statements based on my audit.

My audit was conducted in accordance with the International Standards on Auditing to provide reasonable assurance as to whether the special purpose financial statements are free of material misstatements. My audit procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the special purpose financial statements and evaluation of accounting policies. These procedures have been undertaken to form an opinion as to whether, in all material respects, the special purpose financial statements are fairly stated and in accordance with government policies in Note 2 and the Audit Act and the Financial Management Act 2004, so as to present a view which is consistent with my understanding of the financial performance of the Ministry of Agriculture for the year ended 31 December 2014.

The audit opinion expressed in this report has been formed on the above basis.

### Basis for Qualified Opinion

#### Trading and Manufacturing Account

1. There is an un-reconciled difference amounting to \$238,582 between the General Ledger (FMIS) and TMA bank reconciliation statement for Cash at Bank. Accordingly, I am unable to ascertain the accuracy and completeness of the TMA Cash at bank of \$1,031,806 as shown in the TMA Balance Sheet as at 31 December 2014.



2. Included in the TMA Trading Account is Closing Stock of Finished Goods of \$1,014,577. I do not express an opinion on the accuracy and completeness of Closing Stock of Finished Goods as the Ministry did not carry out an independent stock take for the year ended 31 December 2014.
3. Included in the Trading and Manufacturing Account (TMA) Balance Sheet is TMA Surplus Capital Retained of \$2,263,536 and TMA Surplus transferred to Consolidated Fund of \$220,629. I was not able to verify the amounts as the Ministry was not able to provide appropriate audit evidence to support the balances.

As a result, I was not able to ascertain the accuracy and completeness of the Trading and Manufacturing Account as at 31 December 2014.

#### Trust Account Statement

4. The Ministry was not able to provide appropriate audit evidence to reconcile and ascertain the accuracy and completeness of the Trust Fund Cash at bank – Retention Fund (LWRM) balance of \$877,651 and Trust Fund – Retention Fund balance of \$269,813 as shown in the General Ledger (FMIS) with the Trust Fund balance \$390,248 reflected in the Trust Account Statement as at 31 December 2014.

As a result, I was not able to ascertain the accuracy and completeness of the Trust Account Statement of Receipts and Payments (LWRM) for the year ended 31 December 2014.

#### Statement of Losses

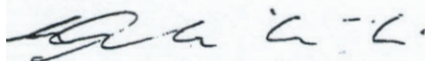
5. The Ministry did not carry out a Board of Survey for 2014. In the absence of a Board of Survey Report, the losses of fixed assets, if any, that occurred during the year could not be substantiated.

As a result, I was not able to ascertain the accuracy and completeness of the Statement of Losses for the year ended 31 December 2014.

#### Qualified Audit Opinion

In my opinion, except for the matters referred to in the Basis for Qualified Opinion paragraphs,

- (a) the financial statements present fairly, in accordance with the accounting policies stated in Note 2, the financial performance of the Ministry of Agriculture for the year ended 31 December 2014.
- (b) the financial statements give the information required by the Financial Management Act 2004 in the manner so required.



Atunaisa Nadakuitavuki  
for AUDITOR GENERAL



Suva, Fiji  
21 July 2015

MINISTRY OF AGRICULTURE

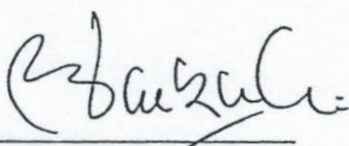
MANAGEMENT CERTIFICATE


FOR THE YEAR ENDED 31 DECEMBER 2014

---

We certify that these financial statements:

- (a) fairly reflect the financial operations and performance of the Ministry of Agriculture and its financial position for the year ended 31 December 2014; and
- (b) have been prepared in accordance with the requirements of the Financial Management Act 2004 and the Finance Instructions 2010.

  
\_\_\_\_\_  
Uraia Waibuta  
Acting Permanent Secretary

  
\_\_\_\_\_  
Mereseini Bou  
Director Finance

Date: 17/7/15

Date: 17/7/15



# MINISTRY OF AGRICULTURE

## STATEMENT OF RECEIPTS AND EXPENDITURE FOR THE YEAR ENDED 31 DECEMBER 2014

	Notes	2014 \$	2013 \$
<b>RECEIPTS</b>			
Agricultural produce & inspection fees		2,345	1,695
Registration		4,845	3,260
License		60,427	60,558
Water charges		4,380	9,789
Rental		80,495	62,494
Revenue from rest house		6,736	8,682
Commission		13,790	7,342
Meat inspection		20,484	20,256
Veterinary & Animal Quarantine		32,470	20,525
Sale of produce		97,665	74,557
Miscellaneous revenue		266,154	185,043
Overpayment Recoveries		26,773	93,019
Rural electrification		844	1,034
<b>Total Receipts</b>		<b>617,408</b>	<b>548,254</b>

# MINISTRY OF AGRICULTURE

## STATEMENT OF RECEIPTS AND EXPENDITURE (continued) FOR THE YEAR ENDED 31 DECEMBER 2014

	Notes	2014 \$	2013 \$
<b>EXPENDITURE</b>			
Established Staff	3(a)	13,143,921	10,352,996
Government Wage Earners		6,001,018	5,218,794
Travel & Communication		813,229	984,850
Maintenance & Operations		2,291,822	2,170,291
Purchase of Goods & Services		1,078,682	738,443
Operating Grants & Transfers	3(b)	3,680,398	1,736,027
Special Expenditure		1,252,880	1,402,921
<b>Total Operating Expenditure</b>		<b>28,261,950</b>	<b>22,604,322</b>
 Capital construction	3(c)	 17,707,996	 15,748,599
Capital purchases		325,847	473,113
Capital grants and transfers	3(d)	7,295,128	3,007,303
<b>Total Capital Expenditure</b>		<b>25,328,971</b>	<b>19,229,015</b>
Value Added Tax		3,480,184	3,150,275
<b>TOTAL EXPENDITURE</b>		<b>57,071,105</b>	<b>44,983,612</b>



# MINISTRY OF AGRICULTURE

## APPROPRIATION STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2014

SEG	Item	Budget Estimate	Appropriation Changes (Note 4)	Revised Estimate	Actual Expenditure	Carry -over	Lapsed Appropriation
		\$	\$	\$	\$	\$	\$
1	Established Staff	13,875,839	(527,860)	13,347,979	13,143,921	-	204,058
2	Government Wage Earners	6,294,078	5,000	6,299,078	6,001,018	-	298,060
3	Travel & Communication	813,502	72,100	885,602	813,229	-	72,373
4	Maintenance & Operations	2,128,141	200,100	2,328,241	2,291,822	-	36,419
5	Purchase of Goods & Services	1,199,300	250,660	1,449,960	1,078,682	-	371,278
6	Operating Grants & Transfers	3,906,000	-	3,906,000	3,680,398	-	225,602
7	Special Expenditure	1,676,561	-	1,676,561	1,252,880	-	423,681
	<b>Total Operating Costs</b>	<b>29,893,421</b>	<b>-</b>	<b>29,893,421</b>	<b>28,261,950</b>	<b>-</b>	<b>1,631,471</b>
	<b>Capital Expenditure</b>						
8	Construction	20,317,000	-	20,317,000	17,707,996	-	2,609,004
9	Purchases	400,000	-	400,000	325,847	-	74,153
10	Grants & Transfers	7,814,500	-	7,814,500	7,295,128	-	519,372
	<b>Total Capital Expenditure</b>	<b>28,531,500</b>	<b>-</b>	<b>28,531,500</b>	<b>25,328,971</b>	<b>-</b>	<b>3,202,529</b>
13	Value Added Tax	3,943,405	-	3,943,405	3,480,184	-	463,221
	<b>TOTAL EXPENDITURE</b>	<b>62,368,326</b>		<b>62,368,326</b>	<b>57,071,105</b>	<b>-</b>	<b>5,297,221</b>

MINISTRY OF AGRICULTURE

CONSOLIDATED TMA - MANUFACTURING ACCOUNT  
FOR THE YEAR ENDED 31 DECEMBER 2014

	2014 \$	2013 \$
Opening Raw Material	-	-
Add: Purchases	1,122,045	843,816
	<u>1,122,045</u>	<u>843,816</u>
Less: Closing Raw Material	-	-
Raw Material Used	<u>1,122,045</u>	<u>843,816</u>
Add: Direct labour	15,071	15,120
Cost of Manufacturing Goods transferred to Trading Account	<u>1,137,116</u>	<u>858,936</u>



MINISTRY OF AGRICULTURE

CONSOLIDATED TMA - TRADING ACCOUNT  
FOR THE YEAR ENDED 31 DECEMBER 2014

	Note	2014 \$	2013 \$
Sales	3(e)	1,295,692	1,122,508
Opening stock of finished goods		1,058,578	1,128,750
Add: Cost of manufactured goods		1,137,116	858,936
		<u>2,195,694</u>	<u>1,987,686</u>
Less: Closing stock of finished goods		1,014,577	1,058,578
Cost of finished goods sold		<u>1,181,117</u>	<u>929,108</u>
Gross profit		<u>114,575</u>	<u>193,400</u>

# MINISTRY OF AGRICULTURE

## CONSOLIDATED TMA - TRADING ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 2014

	Note	2014 \$	2013 \$
Sales	3(e)	1,295,692	1,122,508
Opening stock of finished goods		1,058,578	1,128,750
Add: Cost of manufactured goods		1,137,116	858,936
		<u>2,195,694</u>	<u>1,987,686</u>
Less: Closing stock of finished goods		1,014,577	1,058,578
Cost of finished goods sold		<u>1,181,117</u>	<u>929,108</u>
Gross profit		<u>114,575</u>	<u>193,400</u>



MINISTRY OF AGRICULTURE

CONSOLIDATED TMA - PROFIT AND LOSS STATEMENT  
FOR THE YEAR ENDED 31 DECEMBER 2014

	2014 \$	2013 \$
<b>INCOME</b>		
Gross profit/(loss) transferred from trading account	114,575	193,400
<b>Total income</b>	<u>114,575</u>	<u>193,400</u>
<b>EXPENSES</b>		
Travelling & communication expenses	39,495	14,284
Maintenance & operation	339,284	179,911
Other expenses	153,846	865
<b>Total expenses</b> 3(f)	<u>532,625</u>	<u>195,060</u>
<b>Net Loss</b>	<u>(418,050)</u>	<u>(1,660)</u>

# MINISTRY OF AGRICULTURE

## CONSOLIDATED TMA - BALANCE SHEET

AS AT 31 DECEMBER 2014

	2014 \$	2013 \$
<b>Current Assets</b>		
Cash	1,031,806	782,487
Accounts receivable	18,797	-
Finished goods	1,014,577	1,058,578
	<u>2,065,180</u>	<u>1,841,065</u>
<b>Current liability</b>		
Payable	-	-
	<u>-</u>	<u>-</u>
<b>NET ASSETS</b>	<u>2,065,180</u>	<u>1,841,065</u>
<b>Equity</b>		
TMA Surplus Capital Retained	2,263,536	2,263,536
Net Loss for the year	(418,985)	-
TMA Surplus transferred to Consolidated Fund	220,629	-
TMA Accumulated Surplus/(Deficit)		(422,471)
<b>TOTAL EQUITY</b>	<u>2,065,180</u>	<u>1,841,065</u>



MINISTRY OF AGRICULTURE

LAND WATER RESOURCE MANAGEMENT AND LAND RESETTLEMENT PLANNING  
AND DEVELOPMENT  
TRUST ACCOUNT STATEMENT OF RECEIPTS AND PAYMENTS  
FOR THE YEAR ENDED 31 DECEMBER 2014

	2014 \$	2013 \$
<b>RECEIPTS</b>		
Retention money	656,559	-
<b>Total receipts</b>	<u>656,559</u>	<u>-</u>
<b>PAYMENTS</b>		
Retention money	589,809	6,445
<b>Total payments</b>	<u>589,809</u>	<u>6,445</u>
Surplus/(Deficit)	66,750	(6,445)
Opening balance as at 1 January	323,498	329,943
<b>Closing balance as at 31 December</b>	<u>390,248</u>	<u>323,498</u>







For more information contact us at:



(+679) 338 4233



Ministry of Agriculture Fiji



Fiji Agriculture



[agrihelp@govnet.gov.fj](mailto:agrihelp@govnet.gov.fj)



[www.agriculture.gov.fj](http://www.agriculture.gov.fj)