Scientific Research Organisation of Samoa

ANNUAL REPORT

2016 - 2017

(Please address all correspondences to:
Hon. Minister of Agriculture & Fisheries).

Government of Samoa

OFFICE OF THE MINISTER

MINISTRY OF AGRICULTURE & FISHERIES
(and SCIENTIFIC RESEARCH ORGANISATION OF SAMOA)

Honorable Speaker of the House
Legislative Assembly
MULINU'U

In accordance with the Scientific Research Organisation of Samoa's Acts 2006 (RDIS Act 2006) and 2008 (SROS Act 2008), I am pleased to submit herein the 11th Annual Report of the Scientific Research Organisation of Samoa (SROS) for the year ended 30th June 2017.

The Report is the record of the Organisation's performance during this financial year, in accordance with its mandate and output structure, and to be laid before the Legislative Assembly of Samoa.

Ma le fa'aaloalo lava

Honourable Lopao'o Natanielu Mu'a
MINISTER
SCIENTIFIC RESEARCH ORGANISATION OF SAMOA

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1 Statement to Parliament

1.1 Introduction

For over 10 years, we have been pushing the boundaries of research and development to solve Samoa's challenges and take advantage of opportunities that become available. With this last year we have been able to achieve a range of activities due to the well-blended collaboration within the 5 divisions of SROS namely the Administration and Finance division, Environment and Renewable Energy division, Plant and Postharvest Technology division, Food Science and Technology division and Technical Services division. There are over 50 staff in the Organisation that are all based at Nafanua and are working in partnership with industry, universities and the local communities to broaden the understanding and applicability of science in Samoa. The Organisation is frequently called to participate and contribute in meetings as experts to share skills and knowledge regarding research and development. These are also opportunities for us to learn, gain networking opportunities with peers and encounter the different markets.

Samoa is at the stage that is must seize the opportunity of a rapidly changing world if it is to secure the countries future prosperity. We must be Innovative and regionally competitive so that we can achieve our vision which is "Through research and development of value adding to goods and services, a significant improvement in the national GDP and social benefits to Samoa is achieved."

We continue to have our ideas applied domestically, as a way of delivering benefit to our people and creating good economic returns. A good example of this is the growing export market of frozen crops to New Zealand and Australia.

SROS will continue to be a vibrant and integral part of Samoa's development in the field of research and development.

The research and development activities performed are geared by the Organisations objectives which are;

a) To promote the national economy of Samoa based on research and development;

b) To undertake scientific and technical research with the primary aim of adding value to local resources and services;

c) To develop functional prototypes of products and processes based on scientific and technical research for the local or overseas markets;

d) To establish partnership with the private sector and commercial interests to support the Organisation's activities;

e) To ensure effective training for researchers and professionals engaged in scientific and technical research work;

f) To conduct analysis of narcotics or precursors for the purposes of investigations and prosecution of offences; and,

g) To undertake environment impact assessments.

1.2 SROS Vision and Mission Statement

SROS Vision

"Through research and development of value adding to goods and services, a significant improvement in the national GDP and social benefits to Samoa is achieved".

SROS Mission Statement

"SROS aims to conduct scientific research and develop technologies which outcomes are of great value in the development and sustainability of value added goods and services for export and to achieve reduction on fuel imports and greenhouse gas emissions"

1.3 Objectives and Priorities

Supporting its vision and mission statement, SROS is committed to delivering on the following key objectives:

a) To promote the national economy of Samoa based on research and development;
b) To undertake scientific and technical research with the primary aim of adding value to local resources and services;
c) To develop functional prototypes of products and processes based on scientific and technical research for the local or overseas markets;
d) To establish partnership with the private sector and commercial interests to support the Organisation's activities;
e) To ensure effective training for researchers and professionals engaged in scientific and technical research work;
f) To conduct analysis of narcotics or precursors for the purposes of investigations and prosecution of offences; and,
g) To undertake environment impact assessments.

Additionally, SROS also performs various functions:

1) The Organisation also performs various functions such as:
    a) To carry out scientific research and develop technologies for any of the following purposes:
        (i) contributing to the achievement of national goals in the Strategy for the Development of Samoa and any other national plan of Samoa;
        (ii) assisting local industries, Government Ministries, corporations and agencies;

(iii) furthering the interests of the community;
(iv) any other purpose determined by the Board; and,
(v) conducting analysis of narcotics or precursors for the purposes of investigations and prosecution of offences.

b) To encourage and facilitate the application of the results of any other scientific research;
c) To act as a means of liaison between Samoa and other countries in matters related with scientific research and development;
d) To train and to assist in the training of researchers and workers in the field of science and to cooperate with tertiary education institutions, both local and overseas, in relation to education in any field of science;
e) To establish and award fellowships for students to do research, and to make grants in aid of research, for a purpose referred to in paragraph (a);
f) To collect, interpret and disseminate information relating to scientific and technical matters;
g) To publish scientific and technical reports, periodicals and papers; and,
h) To carry out environment impact assessments.

2) The Organisation may:
a) Carry out food analysis and testing required under any food legislation or other enactment; and,
b) Issue reports or certificates regarding food analysis and testing under a).

In performing its functions, the Organisation shall take into account relevant Government policies as communicated to the Organisation by the Minister or the Board of Directors.

The Organisation shall also:

i treat the functions referred to in 1) a) and b) above as its primary functions; and,
ii treat the other functions referred to in 1) c) to h) and 2) as its secondary functions.

2 Chairperson's Report

It is an honour to be entrusted as Chair of the Board to help steer the direction of SROS across so many different fields, and this year has demonstrated what a significant impact we can have on the lives of Samoans. For this year we have been talking and listening to more of our clients. We have been identifying opportunities for Samoan businesses to grow and be able to compete in the export markets.

2.1 Activities and Performance of the Entity

We are committed to investing in new science initiatives, so it is encouraging to see our science delivering on our targets. We continue to prioritise our work so that we can concentrate on the most important research activities to meet our goals.

For a small Organisation, we continue to produce quality results from our analytical laboratories that are testing samples from local and overseas samples for biological, chemical and physical properties, and also assist the Ministry of Police with suspected samples.

With our continuous focus on exports has some research on value added products from cocoa, avocado and breadfruit, the investigation of export pathways for local produce and the identification and extraction of essential oils from locally available plants.

Our support for the environment brings the investigation of biogas contents of several feedstocks and also the monitoring and evaluation of different water sources.

2.2 Capital and Dividend Information

The major capital investment made by SROS in this financial year is the procurement of Laboratory equipments to revitalize the Cocoa industry in via the TCM EIF Tier II project, building renovations and office equipment as listed in section 3.5 of the Chief Executive Officer's report.

The annual payment of dividend to Government does not apply to SROS in its legal status as a public beneficiary body under the Public Bodies (Performance and Accountability) Act 2001.

2.3 Board of Directors Information

Figure 1: Board Members

SROS Board of Directors from for the financial year 2016/2017 [Sitting (L to R) Jewell Monica Adeline Cook, Sulamanaia Nu'uetolu Montini Ott (Chairman), Tusani Iosefatu Reti, Dr. Seuseu Tauati; Standing (L to R) Tilafono David Hunter, Dr. Satupa'itea Viali, Dr. Sonny Lameta, Ulu Bismark Crawley (insert)].

• Sulamanaia Montini Ott	Chairman
• Asiata Professor Satupa'itea Viali	Director
• Manuleleua Dr. Sonny Lameta	Director
• Tusani Iosefatu Reti	Director
• Jewel Monica Adeline Cook	Director
• Fonoiava Seali'itu Sesega	Director (up to December 2017)
• Tilafono S. L. David Hunter	Director (from January 2017)
• Suluimalo Amataga Penaia	Director (up to April 2017)
• Ulu Bismarck Crawley	Director (from April 2017)
• Tilafono S.L. David Hunter	Ex-Officio/CEO (up to December 2017)
• Dr. Seuseu Tauati	Ex-Officio/CEO (from February 2017)

During this financial year, the Board of Directors performed various functions to ensure proper and efficient performance of SROS, determine policy and provide directions to the CEO relating to the overall operations of SROS. Key decisions made and approved by the Board of Directors include the following:

- review and endorsement of research and technical project proposals;

- review and approval of SROS quarterly and annual report submissions including audited financial statements to MPE and Cabinet, and research project completion reports;
- approval of key development activities such as project equipment for Cocoa, for SROS/MAF to host the Global Breadfruit summit in October 2017; and,
- providing expert advice to the CEO and Management with respect to the smooth progress of SROS's mandated functions and activities.

The Board of Directors held a total of nine (9) monthly meetings during this financial year. The Board of Directors continued to provide approval considerations via email communications with the CEO for other pressing matters that included quarterly reports, new research proposals, procurement of equipment above CEO endorsement, and staff official travel overseas for work related meetings, workshops and training. These approvals via email were then included in meeting Agendas for Board information so that they are officially recorded in the meeting minutes.

The Directors' fees to the value of SAT$88,276 were paid to the five eligible Directors (Sulamanaia Montini Ott, Jewel Monica Adeline Cook, Asiata Professor Satupa'itea Viali, Manuleleua Dr. Sonny Lameta, Tusani Iosefatu Reti), while the other two Directors who are public servants weren't remunerated. A total of SAT$3,613 was expended to support the functions and activities of the Board of Directors throughout the financial year.

2.4 CSO Obligations

We did not implement any CSO Obligations during this financial year.

2.5 Thank you to outgoing Minister and welcoming incoming Minister for SROS

Figure 2: Hon. La'auliolemalietoa Polata'ivao F. Schmidt

Hon. Lopao'o Natanielu Mu'a

I would like to Thank Hon. Laaulialemalietoa Polataivao Fosi Schmidt, Minister for SROS from March 2016 to August 2017, for his knowledge, determination and ability to guide SROS. During his time he was seen as a tireless and respected leader that was dedicated to service. His dedication and humility will continue to inspire us.

I would also like to welcome our New Minister for SROS, Hon. Lopao'o Natanielu Mu'a who brings with him a testament to hard work, discipline and passion to lead SROS into a new era. Together we will push boundaries and explore what exists beyond here and now.

2.6 Closing Remarks

This annual report is a thorough reflection of a busy and productive year with the board constantly seeking the right balance across the wide diversity of research and development performed by the organisation. I would like to thank the SROS team for their contribution and commitment over the last 12 months, and I am encouraged by the progress we have made and am looking forward to another fruitful 12 months.

Soifua & God bless!

Sulamanaia Nu'uetolu Montini Ott
Chairman
Board of Directors
Scientific Research Organisation of Samoa (SROS)

3 Chief Executive Officer's Report

I would like to reflect on the past year and see the significant strides forward we have taken to bring more of our thinking together to solve some of the many challenges as we deliver on our strategic objectives. Our Mission statement which is to "to conduct scientific research and develop technologies of great value in the sustainable development of value added goods and services for export, and to achieve reduction in fuel imports and greenhouse gas emissions," will be achievable through SROS research and development talent and commitment to achieve. Our scientists have also been active with research in the field with local farmers to foster strong and collaborative sharing of knowledge, old and new.

SROS is venturing in to commercialisation to put some of its SROS made products into the market. We have progressed with trial – commercialisation with our gluten- free breadfruit flour. Samoa has an abundant number of breadfruit tress and there have been notable losses and waste of the fruit due tolimited local market demand for the fresh fruit. With the processing of the flour from the breadfruit, this has been a remarkable way of utilising fruit that would have perished on the tree. The added benefit that this now becomes a new source of income for the farmers with breadfruits and an additional product made in Samoa.

Regarding financial performance, the organisation has been able to achieve a surplus of $105,315 for this FY2016/2017. This is due to stringent controls put in place in utilising its funds to achieve its mandated objectives and the smooth running of its day to day operations.

Driving this success is solidly maintained science, our Samoan culture and stern commitment to health and safety first. These core values will see us continue to shine as a beacon across the research community in Samoa. I would like to thank the people of Samoa for their continuous loyalty in supporting Samoa research organisation.

Figure 3: SROS Management & Staff for the financial year 2016/2017.

3.1 Highlights for the year

Highlights noted for this financial year include the following activities:

The Narcotics Laboratory continues to provide testing services to assist with court cases related to narcotics under the Narcotics Act 1967, via the provision of confirmatory analysis for Cannabis and other suspected drugs, such as methamphetamine as well as their precursors.

The Scientific Research Organisation of Samoa's (SROS) testing laboratories continue to maintain its international accreditation status awarded by the International Accreditation New Zealand (IANZ), the official accreditation body. SROS's testing laboratories both Chemical and Biological have been accredited to the NZS ISO/IEC 17025: 2005 international standard since 2011.

Trial commercialisation of SROS products. Through collaboration with Global Mana and SAME saw the establishment of a 20 ft mobile dehydrator/ dryer prototype that is presently being tested that could be able to assist with breadfruit flour production.

The production of whiskey from taro and selected fruits will be ready for possible commercial sale in the coming months with the arrival of the barrels and bottles and completion of the processing facility.

In addition is SROSs move to eventuate the commercialization of its researched products based on the following, For SROS to conduct proper commercial 'trials' on all of their developed and completed products for a period determined by the Board to ascertain whether the newly developed technologies SROS will be working in partnership with actually produce viable commercial products that can be up-taken by the private sector eventually.

Cocoa in Samoa is growing international recognition again and SROS is assisting by improving local fermentation practices to ensure the quality of cocoa beans establishing cocoa roasting profile trials and production of cocoa mass in the laboratory and Data collection of selected from cocoa plants for leaf anthocyanin content, fruit surface color, form and texture, cotyledon color and leaf dimensions

3.2 Overview of operating performance and results for the year

Collaboration amongst stakeholders including our development partners, international and regional organizations, Government agencies, and the private sector, have contributed significantly in driving the Organisation's research and development activities via financial support of various projects in renewable energy, product development, plant and food technologies, and technical services.

Figure 4: SROS informational sheet

3.2.1 Technical Services Division

The TSD is responsible for Output 5 – Commercial Technical Services – which provides the technical analyses, to support the private sector and exporters in their efforts to expand primary food production, manufacturing/processing and the service industries.

3.2.1.1 International Accreditation

The Scientific Research Organisation of Samoa's (SROS) testing laboratories continue to maintain its international accreditation status awarded by the International Accreditation New Zealand (IANZ), the official accreditation body. SROS's testing laboratories both Chemical and Biological have been accredited to the NZS ISO/IEC 17025: 2005 international standard since 2011. It is an international standard specifically for testing laboratories and SROS is the only national testing laboratories, with the University of the Pacific (USP) in the Pacific attained this prestigious status.

To maintain the accreditation status and assure that SROS testing laboratories are producing reliable results, both laboratories have to participate in any international inter-laboratory competency programmes (ILCPs). SROS laboratories participate in two ILCPs namely the Global Proficiency Testing Programme (GPTP) and Food Analysis Performance Assessment Scheme (FAPAS). The former programme validates and monitors the performances of the accredited methods for meat and dairy chemistry, food microbiology, water chemistry and microbiology as well as pathogens. The latter programme validates the reliability and performance of the accredited methods for histamine and mercury analysis in fish and fish products.

3.2.1.2 Bottled Water Monitoring Programme with MOH

SROS Internationally Accredited Biological Testing laboratories continue to assist the Ministry of Health (MOH) with microbiological analysis of bottled water samples. This is a part of the ongoing monitoring of the quality and safety of bottled water produced by various bottled water companies for human consumption, and for compliance to the Samoa National Drinking Water Standards (SNDWS).

3.2.1.3 Narcotics Analysis

The Narcotics Laboratory continues to provide testing services to assist with court cases related to narcotics under the Narcotics Act 1967, via the provision of confirmatory analysis for Cannabis and other suspected drugs, such as methamphetamine as well as their precursors.

SROS signed a contract with Ministry of Police (MOP) where the latter is to submit suspected plant materials and products for drugs, to SROS Narcotics Laboratory to test for the presence of Cannabis and Methamphetamine and its precursors.

3.2.1.4 Waterfront Project

The National Institute of Water and Atmospheric Research (NIWA) report was received in April. The report was very positive and highly commended the SROS scientists with its testing laboratories be the best in the Pacific.

In regards with the laboratory performance, the report highlighted that SROS laboratory has competent and enthusiastic staff who are well supported by their senior management. The staffs are adhering to standard laboratory protocols and procedures. And the laboratory has good documentation control.

The water quality monitoring analysis for the Waterfront Project will continue with the MNRE had already agreed and pledged to continue working with SROS on water quality testing. The continuation of the monitoring work was also recommended by NIWA's report with the support of the New Zealand government.

Currently, the MNRE is to trying to clear out outstanding invoice for payment from the last testing, upon approval from NZ. And check if the current agreement has been full filled for all the testing that was agreed to. Then look into a new monitoring schedule to continue the monitoring, probably this can be done in a new agreement.

Figure 5: Quality monitoring analysis

3.2.2 Food Science & Technology Division

The FSTD is responsible for Output 4 – Industrial Product Development Services –and undertakes research on food materials and processing into new product prototypes and agro-processing techniques, and uses of appropriate technologies to improve the commercial prospects for food products, including food preservation and packaging.

3.2.2.1 Gluten-free Breadfruit Flour

The first prototype for the hybrid container dryer from Global Mana arrived at SROS compound. There is now collaborate efforts from Global Mana, SROS and SAME to make the dryer operational and effective in drying breadfruit chips for the production of breadfruit flour.

Figure 6: Outside and Inside of the dryer now operational and ready for test trials

3.2.2.2 Avocado Oil

Since avocado oil is seasonal, the oil extracted during the season will be filtered and bottled. The percentage of oil and wax will be calculated to determine edible oil yields and the number of bottles which can be produced.

Avocado fruit is one valuable tropical produce which is highly underutilized in Samoa. It is recorded from previous researches that it has positive health claims such as lowering blood cholesterol, controlling weight and providing humans with the essential nutrients and vitamins the body needs. It has a healthy fatty acid composition which is dominated by the good fatty acids that helps lower the bad cholesterol and raise the good cholesterol.

3.2.2.3 PHAMA – funded Cocoa value adding

SROS conducted a study to compare local fermentation and drying methods compared to another researched method. The results showed that the overseas research methodologies were more preferred for chocolate makers. So another research was carried out using the preferred overseas method, but this time it was on the farmer's farm. The ultimate goal was to use an evidence based approach to improve local fermentation practices to ensure the quality of cocoa beans.

The specific aims were to:

- Trial the overseas recommended methods specifically the *Fermentation method* in combination with the *Solar Dryer* out in the field;
- Confirm the quality of beans and resultant end products;
- Collect data to establish a database for cocoa quality attributes for formulation of a National Standard for exported fermented, dried cocoa beans.

The on-farmer trial ran from the 8th to the 26th of June before 15kg of cocoa was taken to the laboratory for quality tests. All the qualitative tests have been done and 5kg of cocoa beans was sent to a chocolatier in New Zealand, Ola Pacifica for their evaluation on quality. Mulitalo Saena Penaia of Melzi Plantation was the selected farmer for the Uplou trial as the recipient of PHAMA assistance for his solar dryer.

Figure 7: Solar dryer external and internal view

Figure 8: Cocoa pods and fermentation box

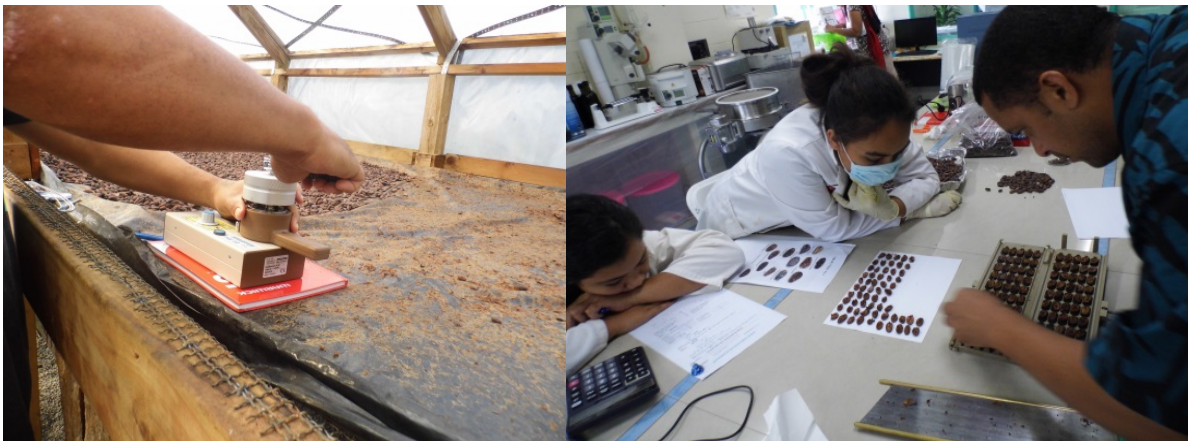

Figure 9: Field testing for moisture and laboratory quality tests

The main findings from this trial were;

- The solar dryer average daily temperature was 30.9ºC with a maximum of 52.8ºC and a minimum of 21.7ºC.
- The dried beans weighed around 32 kg after drying with a recovery rate of 37% from the 85 kg fresh weight, and 35% recovery from the 91 kg weighed after soaking in water. This is within the expected recovery rate range of 30-40%.
- This sorting process after drying is crucial to ensure quality beans are selected for export or the chocolate industry while the sub-standard beans can be used for producing Samoan cocoa. The quality of pods used greatly affects the percentage of quality beans at the end.

3.2.2.4 Trade Commerce & Manufacturing funded activities

The dried fermented cocoa beans from the above PHAMA activity was used for the continuation of the cocoa roasting profile trials and also for making cocoa mass samples in the laboratory. Table 8 below shows the roasting time and temperature used as well as the resultant bean pH and Figure 3 shows the cocoa mass samples.

Temperature (⁰C)	Roasting Time (min)	pH
100	60	5
150	30	5.19
155	30	5.15
160	30	5.1
165	25	5.17
170	20	5.15

Table 1: Roasting temperature, time and pH

Figure 10: Cocoa mass samples

The cocoa mass when produced on a larger scale will be moulded in 2kg and 5kg bars. The remaining equipment for this processing line ordered from Bifaro International is expected to be sent over next quarter at the end of October.

Two new products, cocoa spread and cocoa dip were formulated and trialed using the cocoa mass as an ingredient. The two products were taste tested as well with very good feedback from visiting students as well as SROS staff. These two products are possible uses for the cocoa mass locally apart from the local market for chocolate producer and cafes.

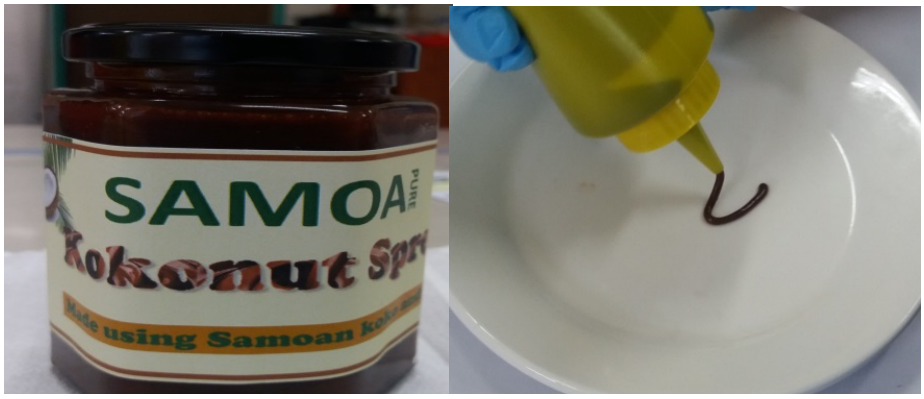

Figure 11: Cocoa spread and cocoa dip

3.2.2.5 Frozen products pathway

The frozen pathway for exporting local crops has gained momentum with many more exporters for Australia and also New Zealand now using the MAF pack house for processing frozen crops. The SROS's role now is only through the provision of

technical assistance with the temperature data to assist with the overseas quarantine requirements.

3.2.3 Plant & Postharvest Technologies Division

The PFTD is responsible for Output 3 – Plant and Food Research and Development – and undertakes research and development on plant and food resources and their derived products of commercial interest and export potential, and enhancement of food quality and security to improve prospects of the national economy.

3.2.3.1 ACIAR-funded Regional Fruit Tree Project

Preliminary trials 1 and 2 that SROS completed for this project in 2016 investigating temperature storage for the purpose of training PPTD staff identified areas that required improvement in our research approach. These areas included using a chilling injury scale that would coincide with consumer preference, carrying out fruit assessments inside cool rooms instead of removing fruits from cool rooms to assess on laboratory benches, and to that same end, monitor fruit weights every 3 days, as opposed to every day which was the practice in our preliminary trials.

SROS carried out a consumer preference survey using overseas guests who were staying at Tanoa Tusitala Hotel to determine how our target market would respond to breadfruit exhibiting different stages of chilling injury. Findings from this work were interesting. Although a high percentage of panelists (~60%) found fruits with no chilling injury acceptable, an approximate 20% noted that they might buy the fruit, while another approximate 20% noted that they will not buy it. Regardless, the highest percentage of panelists who noted not buying fruit was from breadfruit with the worst chilling injury score.

Two experimental trials were also carried out in this quarter to assess the optimal temperature for storage. Literature reports that the optimal temperature for breadfruit storage is around 12.5C, so the temperatures tested in these two trials included 12°C, 13°C, 15°C and 25°C. We found that fruits stored at 25°C became unacceptable due to ripening. Puou fruits were discarded after 5 days, while Maafala fruits were discarded after 7 days. At 12°C, 13°C and 15°C, breadfruit of both Puou and Maafala varieties became unacceptable due to chilling injury. Puou fruits held at 15°C were discarded after 13 days, while Maafala fruits were discarded after 17 days. At 13°C, Puou fruits were discarded after 10 days, while Maafala fruits were discarded after 15 days. At 12°C, Puou fruits were discarded after 11 days, while Maafala fruits were discarded after 17 days. From these findings, we noted that fruits of the Maafala had longer shelf-life compared to fruits of the Puou variety, although this may be a consequence of the

different stages of each variety's season at which they were harvested. Furthermore, we concluded that higher temperatures (17°C, 20°C) needed to be tested to determine the temperature for chilling injury onset, as chilling injury is becoming a major determining factor on the shelf-life of breadfruit.

	Puou Fruits			Maafala Fruits			
	Batch 1	Batch 2	**Average**	Batch 1	Batch 2	**Average**	Cause
25°C	7.5 days	8.2 days	**7.9**	11.1 days	9.5 days	**10.3**	Ripening
15°C	13.3 days	13.1 days	**13.2**	20.0 days	15.0 days	**17.5**	Chilling Injury
13°C	10.2 days	9.9 days	**10.1**	15.0 days	15.9 days	**15.5**	Chilling Injury
12°C	11.2 days	11.2 days	**11.2**	20.0 days	15.2 days	**17.6**	Chilling Injury

Table 3: Shelf- life of different breadfruit varieties

3.2.3.2 Medicinal Plants Project

The PPTD received bacterial isolates from the NHS Laboratory with antimicrobial resistance, so that research findings from this project can be applied to the interests of the Samoan health sector. The team collected 33 plants and in some instances from more than one location. There are 45 prepared extracts in storage that upon final procurement of all required equipment and laboratory consumables will be screened for antimicrobial and anti-enzymatic activities. Comparisons will also be carried out between extracts from different locations, to determine if location and plant environment affects the potency of any detected bioactivity.

Figure 12: Filed collection of plant species

3.2.3.3 Cocoa Identification Project

PPTD visited the four Savaii cocoa farms to collect data for cocoa identification and locating of marked genotyped cocoa trees. Data collection carried out involved leaf anthocyanin content, fruit surface color, form and texture, cotyledon color and leaf dimensions.

Figure 13: Savaii trip to cocoa farms

3.2.3.4 Export of taro and banana in the same consignment

From this assessment of mixed banana and taro consignment, we tentatively concluded that bananas were not significantly affected (physical or sensory attributes assessed) by the mixed consignment treatment, compared to bananas stored alone. However, there was still room for improvement in the postharvest handling of bananas, as there was still a high occurrence of scrapes, bruises and cuts on the bananas. An improvement was noted with banana cleanliness, with a significant reduction in the numbers of surface debris, insects and pests. Taro on the other hand exhibited a statistically significant reduction in sensory acceptability, particularly with regards to its taste/flavor, texture and aftertaste.

The PPTD team was able to carry out and complete the final trial to determine if taro and banana produce were compatible for mixed consignment shipment at 13°C. The results showed that bananas were successfully stored with taro, without bananas ripening too fast and lower percentage exhibiting fungal growth. However, the taro showed high surface rot when stored with bananas compared to individual storage and a higher fungal growth also in mixed compared to individual storage. As it is impossible to test for the presence of fungal spores on the taro before packaging and storage, it cannot be conclusively stated if fungal development was a consequence of mixed consignment storage, the higher temperature and humidity or if it was a pre-existing condition of the corms.

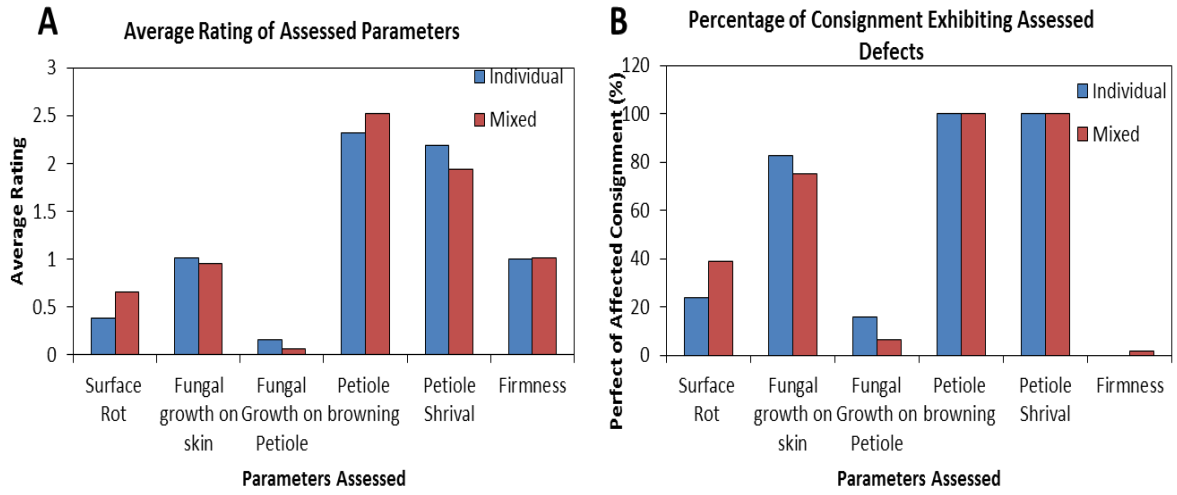

Figure 14 Comparison of individually stored bananas and mixed

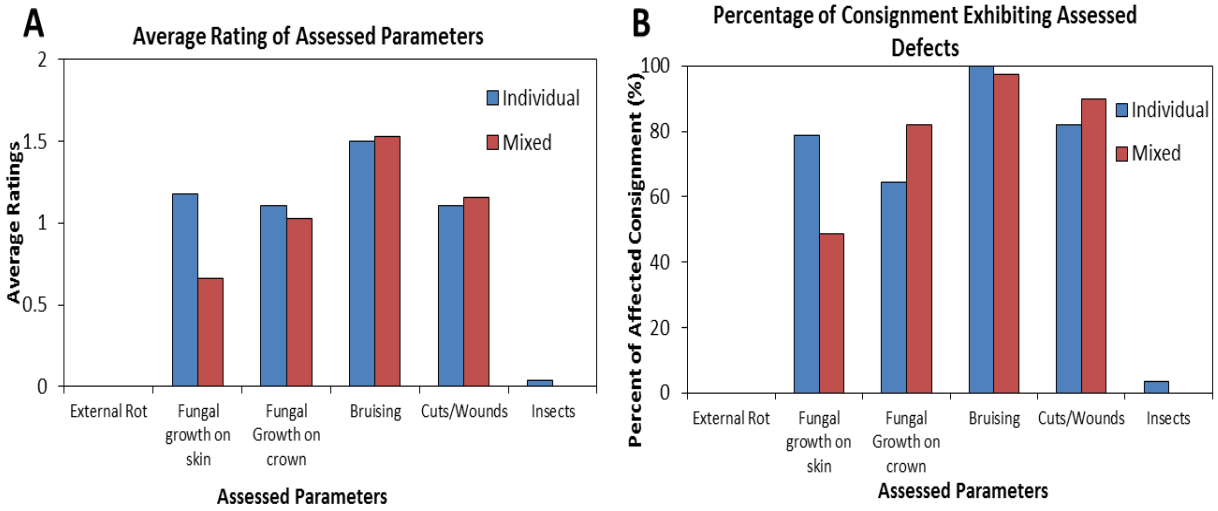

Figure 15: Comparison of individually stored taro and mixed

3.2.3.5 SPC Collaboration Project

In this collaborative effort, the PPTD team was tasked with carrying out analyses to determine the blight tolerance of Cook Island taro cultivars received last year, using the leaf disc assay. To achieve this overall objective, the PPTD team first collected and isolated Phytophthora colocasiae strains from leaf blight samples collected from a Fagalii taro plantation, and a Afiamalu taro plantation. The team then set out to optimize conditions for carrying out the leaf disc assay, but assessing blight tolerance of different taro cultivars include Samoa 2 and Talo Fusi to name a few. Upon successful optimization, SROS set out to assess the blight tolerance of Cook Is taro varieties, of which a total number of 27 clones were received with three suckers each. The assessment uses the first fully opened leaves of the taro samples, from which leaf discs are removed and inoculated with *P. colocasiae*, before being incubated on anti-senescence media at 25°C. The development of the lesion caused by *P. colocasiae* is monitored

up to four days post inoculation, and the size of the lesion is an indicator of blight tolerance. Specifically, the larger the lesion, the more susceptible a taro cultivar is to *P. colocasiae*, and the smaller the lesion, the more tolerant a taro cultivar is to *P. colocasiae*.

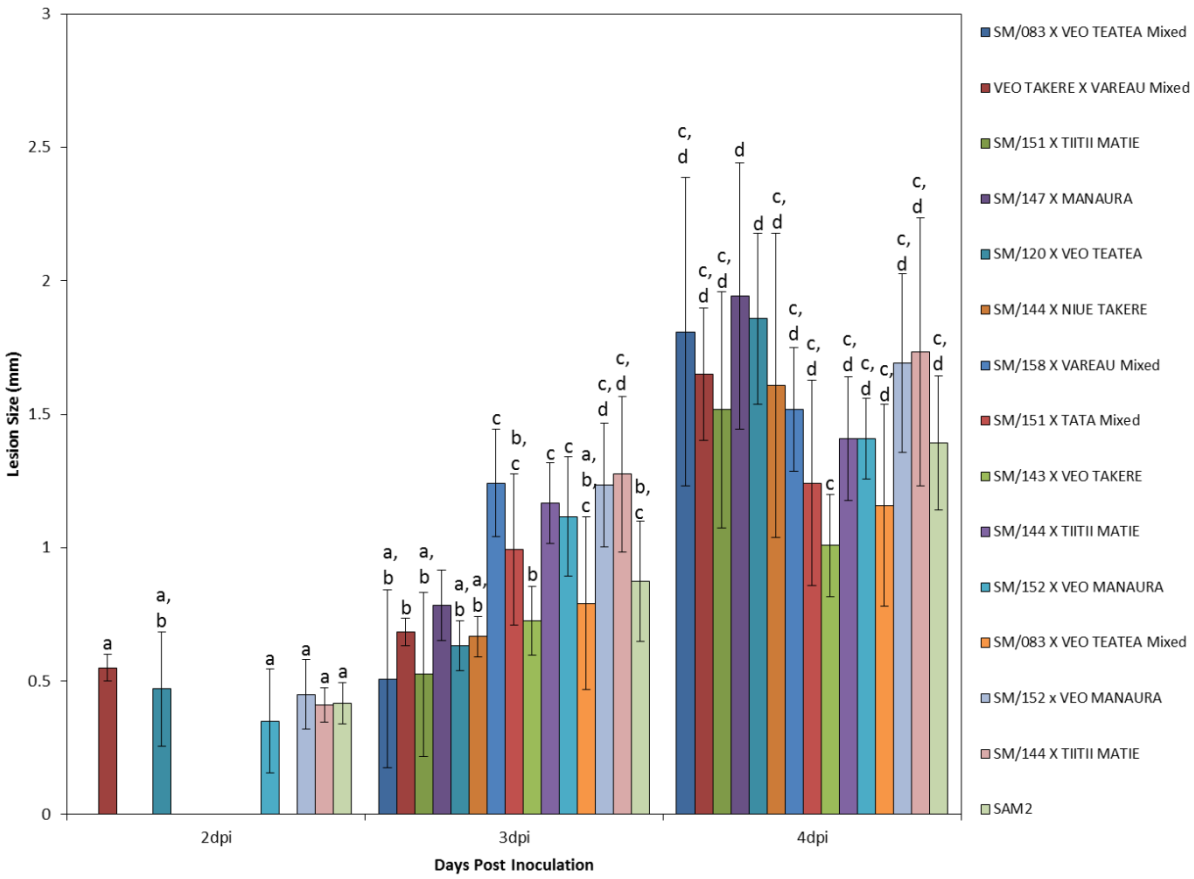

Figure 16: Average lesion diameter for 16 crosses and control (SAM2) for 2, 3 and 4 days post incoculation

Crosses labelled mixed have average lesion sizes calculated from multiple clones. Crosses not labelled mixed had results compiled from replicates of a single clone. Six replicates were tested for each cross. For crosses with single tested clones, three leaf

discs were inoculated with *P. colocasiae* from Fagalii, the other three inoculated with *P. colocasiae* from Afiamalu. Crosses labelled with same letter are not significantly different to other crosses. Crosses labelled with different letters are significantly different (p-value < 0.05).

From our findings, we concluded that all taro crosses sent from the Cook Is were susceptible to *P. colocasiae*, as they all exhibited lesions when inoculated with *P. colocasiae* isolates. We also determined that there was no significant difference in the

pathogenicity between the two *P. colocasiae* strains collected from Fagalii and Afiamalu. Furthermore, we identified that the SM/147 x Manaura taro clone 316 showed the highest susceptibility to *P. colocasiae*, with the largest lesion after four days post inoculation. Furthermore, we identified that SM/143 x Veo Takere taro clone 791 was the most tolerant Cook Is taro clone with the smallest lesion size. Other Cook Is taro clones identified as having acceptable blight tolerance include SM/144 x Tiitii Matie taro clone 546, SM/152 x Veo Manaura clone 833, SM/151 x Tata (multiple clones) and SM/083 x Veo Teatea (multiple clones)

3.2.4 Environment & Renewable Energy Division

The ERED is responsible for Output 2 – Sustainable Management of Renewable Energy Resources and Environment – and undertakes research on the scientific development and sustainable management of renewable energy resources, and the evaluation of the environmental stability of agricultural practices and other related activities.

3.2.4.1 Sustainable growth of Fragrant plants for Poverty Reduction – essential oil extraction

ERED is continuing the production of essential oils at the semi commercial scale using lemon grass (moegalo) and ylang ylang (Mosooi) flowers. At the same time ERED is dealing with requests from local cosmetic companies and interest buyers of SROS essential oils to buy from SROS small quantities of essential oils. A GGP project request has been established and submitted by ERED to the Japanese Embassy to further the production of essential oils from semi commercial scale to a commercial scale fitted for Samoa.

Figure 17: Essential oil samples

3.2.4.2 Orchid Propagation Project

For orchid propagation the team conducted a site visit and collected orchids from Savaii. The collection focused on the Matavanu crater due to the fact that Matavanu crater known to hold more than 50 different species of orchids and most are either indigenous or endemic.

Figure 18: Orchids- Dendrobium catillare and Phaius tankervilleae

Up to 17 different orchid species were collected and are now being cared for in the green house at SROS, with the intention of cross-pollinating them with imported orchids to create new crosses of orchids.

Figure 19: Local orchids in the SROS greenhouse

Figure 20: SROS introduced orchids

With the increase interest in orchid growing and beautification, SROS has spread its work to the community level. On the 12 September 2017 SROS signed an LOA with nine local orchid growers as part of SROS effort to establish and work in collaboration with small local business to uptake work done at SROS. SROS visited these small nurseries and invited them to be a part of this collaboration program. Within this LOA SROS will give out various orchid species to these growers and will work together to exchange information on growth development, market access and do basic trainings on

orchid manual cross propagation and many more when needed. Outcomes of this effort will be use to develop another phase of this orchid beautification collaboration work with many more local growers in the near future.

Figure 21 :SROS collaboration with local businesses

3.2.4.3 International Union for Conservation of Nature – Funded Bioenergy Project

The initial phase of IUCN Funded bioenergy project has been completed and SROS through ERED has submitted its research findings in a final report to the MNRE Renewable Energy Division, the IUCN focal point. IUCN regional coordinator has visited SROS to discuss further developments in Biofuels research and as SROS role as research agency for biofuels development in Samoa and Pacific.

3.2.4.4 Fruit Spirits

The proposed building renovations and setup is to upgrade the existing building to house the production and continue the research on fruit spirits and whiskies. With SROS moving into commercialization efforts the production of fruit spirits is being looked into as one of the possible candidates to initial these commercialization efforts together with other products developed by other divisions. A distillery section is being established and renovated to set 10 distillers and sixty 110L oak barrels for aging is set to arrive in Apia on the 25th October 2017.

Figure 22: SROS fruit spirits

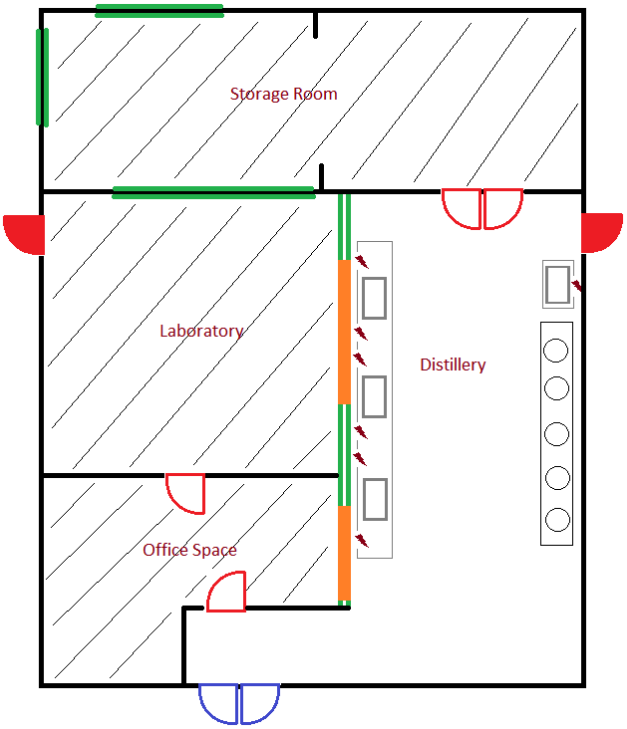

Figure 23: Layout for new office and laboratory for commercial production

3.2.4.5 Water Sector Support

As part of the Water Sector, SROS was provided with SAT$90,000.00 to fund activities on water testing activities in both the laboratory and out on the field. Through these funds SROS has procured a portable water testing meter from New Zealand to tests for outdoor parameters; chlorine and other. SROS ERED is now working together with water resource division from MNRE to conduct water testing's from various coastal springs for monitoring and evaluation purposes.

Figure 24: Vaipu water sampling

3.2.4.6 Biomass Project

SROS is in working collaboration with MNRE, MOF, STEC and other relevant agencies in a biomass project funded under the European Union Gesellschaft für Internationale Zusammenarbeit (EUGIZ). SROS's role in this project serves as an implementing agency for several key requirements for this project, which are as follows:

1. Analyze energy content and moisture contents of invasive species found in STEC plantation at Mulifanua
2. Assist with forest plotting
3. Assist or conduct the initial environment assessment for the site

The ERE Division within SROS is a member of the working task force, that guides and implements this project.

After completion of analysis research conducted on various plant species found in STEC land, SROS is now being tasked by the Energy Coordination Unit to conduct an IEE or Initial Environment Assessment of the proposed Biomass production site. ERED has visited the site to determine a strategy for analysis. ERED has also carried out soil sampling and environmental assessments of the STEC land at Mulifanua.

Figure 25: STEC boundary and sampled sites

Figure 26: Sampling and environment assessment (Biodiversity)

3.2.4.7 Biogas Evaluation Project

Through SROS renewable energy division a continuous research is being conducted under the guidance and direction from Energy Sector Steering Committee for SROS to further look into evaluation of available materials that can produce methane gas for biogas house hold and community level scales. Under funding from MNRE Water Sector and MNRE Renewable Energy Division SROS team has completed this evaluation and the technical report is being submitted for reviews from the Water Sector or funding sector before handling it to the Energy Sector. The total cost of this consultancy is SAT $20,000.00.

Figure 27: Biogas project

As a result from this study it shows that vao povi, lasovao and lau manioka produces very high methane concentrations after less than 2 weeks of bio-digestion. It also recommends not using fue saina and mucuna as feedstocks for biogas product as they produce mainly CO2 and only traces of methane.

3.3 Progress in achieving the Corporate Plan (CP) for the year

Details for the activities are described in the divisional operating performance

Priority Objectives	Activity
1. To promote the national economy of Samoa based on research and development.	• Gluten free breadfruit flour • Avocado and coconut margarine • FAO funded consultancy on scientific research for food safety risk and post-harvest analysis of fresh produce in Samoa

		• MAF (SACEP) collaboration project • SPC collaboration project • ACIAR- funded regional fruit tree project • IUCN funded bioenergy project
2.	To undertake scientific and technical research with the primary aim of adding value to local resources and services.	• PHAMA and TCM/EIF -funded cocoa value adding • Frozen products pathway • Fruit spirits
3.	To develop functional prototypes of products and processes based on scientific and technical research for the local or overseas markets.	• Sustainable growth of fragrant plants for poverty reduction – orchid propagation component • Bio medicinal screening • Cocoa identification project • Water sector funded project (Photosynthetic bacteria evaluation) • Biomass EUGIZ funded project • Biogas Evaluation project
4.	To establish partnership with the private sector and commercial interests to support the Organization's activities.	• SROS maintains IANZ Accreditation to maintain its international assurance of quality tests • Bottled water monitoring program with MOH • Narcotics analysis • MNRE funded waterfront project • Official and promotional visits to SROS
5.	To ensure effective training for researchers and technical research.	• Staff development activities undertaken during this quarter comprised of courses, seminars and meetings attended by SROS staff
6.	To augment and effectively manage financial and human resources of the organization.	• Facilities and asset register are maintained, and necessary repairs completed according to set schedules. • Financial position updated for monthly review by the Management. • Performance feedback to individual staff formally provided once a year via the staff performance appraisal process.

3.4 Overview of financial performance and financial results for the year

3.4.1 Financial – Key Performance Measures

The figures shown in table 3 below are the different revenue streams SROS has generated during this financial year in order to achieve its targeted Cost Recoveries of $151,294. It is also noted below that SROS has exceeded its overall collection for this financial year against its target by $43,854 or 29%, which is an decrease of 34% in collections when compared to the previous financial year. It is also noted that TSD has achieved only 88% when compared to its target recoveries for the year.

The collection shown below does not include SROS's ability to secure additional funding through research donor funding assistance.

Revenue Streamline	FY2016/2017		FY2015/2016	
	Amount	Cost Recoveries Target	Amount	Cost Recoveries Target
Technical Services	133,837	151,294	166,769	137,540
Biodiesel Sales	-	-	124	11,448
Sale of Breadfruit Flour	-	-	268	-
Consultancy Fees	27,500	-	-	-
Other Income	33,812	-	127,786	-
Total	**$195,148**	**$151,294**	**$294,947**	**$148,988**

Table 3: Revenue generated in this financial year compared to the last financial year

3.4.2 Total Revenue

Total revenue received for the year was $4,096,006 of which $3,317,148 (81%) consists of Government Grant, Technical Services $133,837 (3%) and remaining $645,021 (16%) from the different avenues listed below under Donor Project and Other Income and its comparison to the previous year as highlighted in table 4:

Donor Project Income

- $3,981 SPC/PARDI Fund
- $550 Avocado Margarine Fund
- $932 PHAMA Cocoa Project
- $9,949 FAO Consultancy Fund
- $309,548 TCM EIF Tier II Project Fund
- $3,039 Photosynthesis Bacteria Research Fund
- $21,859 ACIAR Project Fund
- $145,877 Fruit Wine Project – Republic of Korea
- $38,682 Water Supply & Sanitation Project – MNRE
- $10,943 Biodiesel Project - IUCN
- $1,200 Sales Breadfruit Flour – Gluten Free Project

- $12,725 Biomedical Research Project – US Embassy
- $320 Cocoa Phylogenetics Project

$559,605 Total Donor Project Income

Other Income

- $24,104 Amortisation Income
- $27,500 Consultancy Fees
- $33,812 Other Income

$85,416 Total Donor Project Income

	2017 SAT$	2016 SAT$
DONOR PROJECT INCOME		
Secretariat of the Pacific Community / PARDI fund	3,981	5,934
Coconut oil refinement fund	-	9,161
Avocado margarine fund	550	10,648
PHAMA Frozen Taro Project fund	-	17,868
PHAMA Cocoa Fermentation Project fund	-	6,464
PHAMA Cocoa Project	932	-
FAO Consultancy fund	9,949	24,019
TCM EIF Tier II Project fund	309,548	63,205
Photosynthetic Bacteria Research fund	3,039	8,590
ACIAR Project Fund	21,859	105,931
Republic of Korea funds - Fruit Wine fund	145,877	-
MNRE - Water Supply & Sanitation Project	38,682	-
IUCN Biodiesel fund	10,943	-
Sales Biodiesel fund	-	124
Sales Breadfruit Flour - Gluten Free fund	1,200	268
Biomedical Research Funds - US Embassy	12,725	-
Cocoa Phylogenetics Project	320	-
	559,605	**252,212**
OTHER INCOME		
Amortisation Income	24,104	24,104
Consultancy fees	27,500	-
Other income	33,812	127,786
	85,416	**151,890**

Table 4: Details of Donor Project Income and Other Income for this financial year compared to the last financial year

Highlighted below are the total grant funds remaining which are classified as "Deferred Income" under current liability in the Balance Sheet (note 11) and also projects held by Ministry of Finance stated under Note 24 in the Notes to the Financial Statement, until such time these funds are fully utilized for research project purposes. These include:

- $125,197 SPC & PARDI Projects
- $270,769 Coconut Oil Refinement Project
- $193,633 Avocado Margarine Project

- $5,963 PHAMA - Frozen Taro Project
- $3,214 PHAMA -Cocoa Fermentation Project
- $62,241 FAO Consultancy Project
- $398,279 TCM EIF Tier II Project
- $4,961 Photosynthesis Bacteria Research Project
- $24,318 Water Supply & Sanitation Project – MNRE
- $6,568 PHAMA Cocoa
- $11,823 Cocoa Phylogenetics
- $70,303 SIDS Assets donated to SROS
- **$1,173,289** **Total Deferred Income**

- $51,829 Turkey Grant – Ethanol Project
- $23,283 IUCN Biodiesel Project – MNRE
- $5,567 Turkey Grant – Breadfruit Project
- $224,783 Republic of Korea – Fruit Wine Project
- $27,361 Japanese Embassy Orchid Propagation & Essential Oil Extraction
- 25,876 ACIAR funded Regional Fruit Tree Project
- **$358,698** **Total Project Grants held by MOF**

As a public beneficiary body reliant on Government grant and funding from external donor agencies, SROS continues to strive to effectively manage its financial resources and strengthen its earning capacity. We would also like to note the additional donor funds secured in this Financial Year 2016/2017 of $19,643 for the PHAMA Cocoa and Cocoa Phylogenetics Project.

3.4.3 Total Expenditure

The overall expenditure of $3,990,692 was incurred during this financial year which is below the budgeted forecast of $3,757,448 as summarized in table 5.

We note a positive variance which is an increase compared to the variance recorded in the previous financial year. This is due to controlled spending under Personnel and Occupancy costs for the year. We note the high spending items under Administrative and Depreciation costs, mainly from travel expenses and increase in Assets recorded.

Expenditure Particulars	FY2016/2017				FY2015/2016		
	Actual	Budget	Variance	%	Actual	Budget	Variance
Audit fees	19,300	17,000	(2,300)	-14%	19,300	8,004	(11,296)
Audit fees - FY14/15 under-accrued	3,174	-	(3,174)		4,279	-	(4,279)
Depreciation	326,097	279,807	(46,290)	-17%	266,483	230,000	(36,483)
Personnel costs	1,792,620	2,114,096	321,476	15%	1,753,181	2,232,061	478,880
Occupancy costs	206,662	415,677	209,015	50%	308,199	300,030	(8,169)
Administrative costs	621,454	436,002	(185,452)	-43%	405,427	439,864	34,437
Directors fees & board expenses	91,889	89,940	(1,949)	-2%	66,476	48,000	(18,476)
Donor Project costs	543,983	559,605	15,622	0%	253,828	252,212	(1,616)
Other costs	385,513	404,926	19,413	5%	500,417	167,278	(333,139)
	3,990,692	**4,317,053**	**326,361**	**8%**	**3,577,590**	**3,677,449**	**99,859**

Table 5: Total Expenditure for this financial year compared to the last financial year

The above table also shows an overall increase in total actual expenditure by $413,102 (or 12%) in this financial year compared to the last financial year, and this is due to the increases noted mainly under Administrative Costs ($216,027) and Donor Project Costs ($290,155).

3.4.4 Statement of Financial Position and Income and Expenditure Summary

Table 6 below provides a snap shot of SROS's Financial Position/Balance Sheet and its Statement of Income and Expenditure/Profit and Loss with detailed notes outlined in the audited financial statements section of this report.

It is noted in table 6 the surplus of $105,315 for this financial year which is a decrease compared to the previous financial year's surplus of $327,775.

The table also portrays that SROS has achieved its current ratio of 2:2 (current assets vs current liabilities) at the end of this financial year, which increased from 2.1:1 in the previous financial year's ratio. This is due to the increase in Current Assets by 3% over the increase noted in the Current Liabilities. Even though this positive ratio ensures SROS will meet its short term obligations/liabilities, we are still determined to continue to find alternative revenue streams to assist the Organisation's funds for its on-going activities.

	FY2016/2017		FY2015/2016	
PARTICULARS	**ACTUAL**	**BUDGET**	**ACTUAL**	**BUDGET**
Revenue	3,317,148	3,233,512	3,334,494	3,334,495
Other Income	778,858	619,994	570,871	280,698
Total Income	**4,096,006**	**3,853,506**	**3,905,365**	**3,615,193**
Expenditure	3,990,692	2,815,835	3,577,590	3,677,449
Net Profit	**105,315**	**1,037,671**	**327,775**	**(62,256)**
Current Assets				
Cash and cash equivalent	2,728,373	2,029,241	2,254,712	1,336,552
Debtors	116,539	103,656	152,435	69,642
Prepayments	30,073	35,884	37,773	6,427
Stock on hand	179,770	150,833	137,121	157,703
Total Current Assets	**3,054,755**	**2,319,614**	**2,582,041**	**1,570,324**
Non Current Assets	2,173,165	2,891,970	2,354,819	2,347,258
Total Assets	**5,227,920**	**5,211,584**	**4,936,860**	**3,917,582**
Current Liabilities				
Trade Payables	78,126	133,907	116,441	7,892
Accruals	62,935	113,918	108,493	64,456
Allowance for staff benefits	76,783	61,897	58,950	63,693
Deferred income	1,173,289	1,048,357	921,505	699,752
Total Current Liabilities	**1,391,134**	**1,358,079**	**1,205,389**	**835,793**
Working capital	1,663,621	961,535	1,376,652	734,531
Current Ratio	2.2:1	1.7:1	2.1:1	1.9:1
No of employees	**52**		**52**	

Table 6: Statement of Financial Position and Statement of Income and Expenditure for this financial year compared to the last financial year

3.5 Capital Expenditure and Projects for the Financial Year

Overall we note a decrease of about 52% in Capital investment for the Organisation in this financial year when compared to the previous financial year (table 7).

The major capital investment made in this financial year is under Laboratory Equipment ($85,887) for the procurement of the new dehydrating oven, oil press (seed grinder), testing equipment to name a few. Office and Other Equipment of $23,398, these were mainly for maintenance equipment including chainsaws, tear drop signs, and two laptops for new Scientific Research Leader PPTD and for project purposes (fruit wine).

The total investment under Building and Roads amount to $21,758, this includes the renovation of two bathrooms in the Administration Office, installation of flex windows for FSTD Lab and initial cost for renovation of common room and maintenance room. Motor Vehicle investment ($10,000) is for the installation of the roofing of SROS 05 for sampling purposes, while for Furniture and Fittings of $3,400 includes ERED drawers, Office sign and AFD book shelf.

PARTICULARS	FY2016/2017	FY2015/2016	
	ACTUAL	ACTUAL	VARIANCE
Building & Roads	21,758	69,052	(47,294)
Furniture and Fittings	3,400	4,157	(757)
Laboratory Equipment	85,887	32,023	53,864
Office & Other Equipment	23,398	88,651	(65,253)
Motor Vehicles	10,000	105,000	(95,000)
Total Capital Expenditure	**144,443**	**298,883**	**(154,440)**

Table 7: Capital Expenditure during this financial year compared to the last financial year

3.6 Human Resource Development

Staff development activities undertaken in the financial year comprised of overseas and local workshops, courses and seminars attended by SROS staff. They include the following:

25th – 28th July 2016: Telesia Ah Sam (Senior Administration Officer, AFD) was elected to attend the "Organisational Review, Recruitment & Selection Training" at the PSC Office. The workshop was mainly re-visiting HR information related to recruitment and selection.

15th – 17th August 2016: Lilo Samani Tupufia (Scientific Research Leader, ERED) attended a 2-day workshop held in Nadi Fiji on Soil Health. This workshop was coordinated by SPC Fiji in collaboration with CSIRO Australia. It was information collection and sharing of knowledge on current status and information available on soils in the Pacific.

27th – 31st August 2016: SROS Board Chairman Sulamanaia Montini Ott and SROS CEO Tilafono David Hunter participated with the Minister of MAF and SROS Hon. La'aulialemalietoa Asiata Leuatea P.F. von Schmidt and MAF CEO Fonoiava Seali'itu Sesega, the Global Breadfruit Summit held in Laie, Hawaii. SROS had a display booth at the summit to showcase its developed prototypes namely breadfruit flour, refined coconut oil, essential oils and avocado oil, and fruit spirits. SROS CEO also gave a presentation on breadfruit related research undertaken by SROS and the Hon Minister gave the keynote remarks at the closing ceremony of the summit.

2nd – 3rd September 2016: SROS CEO Tilafono David Hunter travelled with the Minister of MAF and SROS Hon. La'aulialemalietoa Asiata Leuatea P.F. von Schmidt and MAF CEO Fonoiava Seali'itu Sesega to Auckland New Zealand, for a meeting with

Direct Fresh (importer of fresh and value added agricultural products from the Pacific) to discuss the export of fresh and processed products from Samoa (taro, Tahitian lime, etc.) which are in high demand in New Zealand.

1st – 10th September 2016: Fonoti Samani Carel Tupufia (Scientific Research Leader, ERED) was chosen through a global competitive selection process to be part of the Cornell Junior Communication Taskforce for the 2016 IUCN World Conservation Congress in Hawaii. This Congress brings together several thousand leaders and decision-makers form government, civil society, indigenous peoples, business and academia with the global focus of conserving the environment and harnessing the solutions nature offers to global challenges.

5th – 6th September 2016: SROS CEO Tilafono David Hunter travelled with the Minister of MAF and SROS Hon. La'aulialemalietoa Asiata Leuatea P.F. von Schmidt and MAF CEO Fonoiava Seali'itu Sesega to Sydney Australia, to assist Su'a Tanielu Su'a of Samoan Traditional Farmers and Growers with the launching and promotion of his first 20' container of frozen taro product exported to Australia.

15th – 16th September 2016: Kuinimeri Finau (Research Leader, FSTD) attended the Pacific Breadfruit Roundtable discussions held in Tongatapu, Tonga. This was an initiative organsied by the Pacific Island Farmers Organisation Network (PIFON) and its main objective was to promote the planting of breadfruit trees as well as value adding activities for the fruits.

19th – 22nd September 2016: Pousui Dr Fiame Leo (Technical Manager, TSD) attended the 14th Session of the Coordinating Committee For North America And The South-West Pacific held in Port Villa, Vanuatu. It was a joint FAO/WHO Food Standards Programme for FAO/WHO Coordinating Committee for North America and South West Pacific. SROS as a member of the Samoa National Codex Committee was one the three representatives from Samoa, including MOH and MCIL. The meeting was very crucial to the region as this was one of the main forums in which food control systems, food safety, food standards as well as scientific analysis, testing and verification of food products are discussed. There were two food standards from the Pacific discussed and on the agenda of the meeting, namely Noni Juice and Kava standards. These are the two main common commodities in the Pacific region and its people are relying on them for source of income. The approval and the entering of these standards into the Codex System are very important so that the Pacific can export these commodities. At this meeting, SROS was appointed as one of the members for the e-working group for Noni Juice standard to provide analytical testing and scientific advice for some of the parameters of the juice.

25th September – 7th October 2016: Seeseei Molimau-Samasoni (Scientific Research Leader, PPTD) attended a postharvest training tailored for SROS at the University of Newcastle and the Department of Primary Industries New South Wales, at the Central Coast, Australia.

25th – 27th October 2016: Seeseei Molimau-Samasoni (SRL, PPTD) attended meetings held at Plant & Food Research New Zealand (PFR-NZ) at Mt. Albert Auckland to discuss SROS collaborations with their postharvest and market access team under the ACIAR Fruit Tree project. This collaboration, aimed towards the evaluation of quarantine treatments of breadfruit that will not compromise postharvest shelf-life of breadfruit for NZ markets, has been re-evaluated and is being targeted towards an FAO Letter of Agreement funding. Meetings were also initiated to discuss fresh taro export to Australia from Samoa, and this work is anticipated to be funded either by ACIAR or PHAMA.

9th November 2016: Seeseei Molimau-Samasoni and Semi Seruvakula (SRS, PPTD) attended the Antimicrobial Resistance Symposium held at Tanoa. The symposium was organized by NHS, MOH, WHO, SROS and MAF. Seeseei Molimau-Samasoni presented on SROS's efforts in drug discovery, particularly in investigating Samoan medicinal plants for new antimicrobial drugs.

11th November 2016: SROS staff attended The National Health Week 2016. This was organised by the Ministry of Health in collaboration with all Government ministries and Public Bodies to promote healthy living. A half sports day was organised by the committee which comprised representative from each sectors and was held on Friday, 11 November. Most of the Government employees participated in this half day to enjoy various sports competition as well as signifying the importance of Healthy Living.

24th - 25th November 2016: HACCP Workshop through SAME was attended by Aitaua Okesene and Maserota Ofoia which was held at Insel Fehmarn. The trainers were organised under our partnership with SAME. This training will assist our research scientists to understand more about principles to prevent and improve food safety.

16th November 2016: Seeseei Molimau-Samasoni attended a meeting hosted by MAF as part of the new ACIAR Cocoa project. The project is led by Mr. Yan Diczbalis from the Queensland Department of Agriculture, Fisheries and Forestry (DAFF). The country coordinator is Mr. Tevita Kete of SPC, with Mr. Misa Konelio (ACEO, MAF) as the Country Coordinator. SROS has nominated project activities it may be involved in.

30th January – 17th February 2017: Auomanu Uili, Technical Research Scientist of the Technical Services Division was nominated to attend the International training

Programme for Developing countries on Standardization and Quality Assurance, Management Systems and Laboratory Quality Systems which was held in India. The training provides a guide for laboratories with different aspects to understand how to become accredited under any Accredited Bodies. The accreditation of Laboratories allows organizations/people to make an informed decision when selecting a laboratory, as it demonstrates competence, impartiality and capabilities.

7th – 9th February 2017: Veronica Vaaiva (Assistant Research Scientist PPTD) visited the Aleisa, Savaia and Lepa community for discussions and gender-segregated surveys on postharvest losses with Dr. Lila Singh-Peterson from the University of Queensland

14th February 2017: Veronica Vaaiva (ARS, PPTD) visited the Sataua community in Savaii for discussions and gender-segregated surveys on postharvest losses with Dr. Lila Singh-Peterson from UQ.

15th – 16th March 2017: Semua Militini Tagoai (RS, PPTD) and Veronica Vaaiva (ARS, PPTD) visited the Sataua and Lata community for workshop training in food safety, food act and postharvest handling techniques to reduce postharvest losses and increase awareness around food safety, with Professor Steven Underhill from UQ.

20th March 2017: Dr. Seeseei Molimau-Samasoni (PPTD Team Leader), Semua Militini Tagoai (RS, PPTD) and Veronica Vaaiva (ARS, PPTD) delivered a week-long 1 hour-workshops at the Afega Market and the Fugalei Market to market-vendors on food safety, food act and postharvest handling techniques to reduce postharvest losses and increase food safety awareness, with Professor Steven Underhill from UQ.

22nd - 29th April 2017: Environment & Renewable Energy Division Scientific Research Leader, Fonoti Samani C. Tupufia was nominated to travel on behalf of SROS to view appropriate whiskey distillers, barrels and other equipment in Melbourne, Australia for the Fruit Spirits Project.

9th -14th May 2017: Ms Annie Saofaiga Toailoa, Principal Research Scientist – Environment & Renewable Energy Division was nominated to attend the International Forum in China – South Pacific Island Countries Science Technology Cooperation and Technology Transfer in Empark Grand Hotel, Kunming, Yunan Province and was hosted by the Department of International Cooperation, Ministry of Science & Technology of China. Annie's trip served the purpose of attending two events

(1) The first one was a one day forum with the purpose to unveil the opening of the China-South Pacific Island Countries Technology Center (CSPTTC) and have the stakeholders meet and present.

(2) The second event was a three day workshop called the "International Workshop on New and Renewable Energy Technology". This workshop is meant to be one of the first and significant events of the construction of the CSPTTC, and where the delivery of renewable energy technology was able to begin.

22nd - 26th May 2017: Mrs Moon Chan, Principal Research Scientist, Environment & Renewable Energy Division was nominated to attend the World Intellectual Property Organisation (WIPO), Seed Project 2017: International Program on Ideas, Invention in Seoul, Korea. This workshop was deferred from 13th - 17th March 2017 (January – March Quarterly report) This Program is a capacity building program designed to emphasise the importance of intellectual property rights as well as engage young students to become inventors.

22nd May – 18th June 2017: Mr Notise Faumuina, Principal Research Scientist, Food Science & Technology Division was nominated to attend the "Course on Grain, Oil & Food Processing for Factory Directors & Managers from Developing Countries" It was total twenty eight days training on the improvement of grain, oil and food science processing, food processing technology, food business designs, management and to guarantee the national food supply and safety. The training and organisers designed a series number of visits and activities and it was a great opportunity to explore technologies for food processing and manufacturers to witness the process from first stage to end product(s).

12th - 16th June 2017: Mrs Janet Scanlan, Administration Officer attended the PSC workshop on "Training for HR Trainers" The aim of the training is to inspire action rather than fill with knowledge, support the achievement of the organization's goals by increasing the necessary Knowledge, Attitudes and Skills of the employees. We analyse, design, develop, implement and evaluate the strengths, the weaknesses and she also learnt new style of learning through visual, auditory and kinaesthetic.

14th June -13th July 2017: Randy Fanolua, Research Scientist from Technical Services Division and Linatupu Punimata, Assistant Research Scientist from the Environment & Renewable Energy Division were both nominated to attend the "Training course on Clean Combustion Technology in Modern Rural Areas" held in China.

17th June – 2nd July 2017: Dr. Seeseei Molimau-Samasoni (PPTD Team Leader) attended a two-week Postharvest Technology Training Course at the University of California-Davis, in Sacramento USA. The course comprised a one-week lecture-based training and a one-week field-based training touring farms, pack-houses and distributors across the state of California.

19th – 23rd June 2017: Ms Merita Pouafe, Principal Finance Officer – Administration & Finance Division attended the PSC workshop "SICTP monitoring & Evaluation Workshop". The workshop was mainly about accountability and learning. It was a practice that holds executive and senior managers accountable to their actions (or lack of actions), and equally important, to learn from project failure and success. If the evaluation is lack it simply means there is shortage of valuable data or information to support good decision-making. Therefore, it is vital that we as senior officers make an effort to produce such information on a timely-basis which will then give agencies direction and add value to decision making. This process involves a lot of effort from relevant people, timeliness of data and effort when it comes to monitoring and evaluating of projects for accountability and learning purposes.

3.7 Staff Movements during this Financial Year

3.7.1 Departures

27th August 2016: Ilo Fa'avaoga was terminated from his services as a Groundsman in SROS. He joined SROS on 3rd August 2015

7th September 2016: Fiaigoa Malolo, Assistant Research Scientist of the TSD ceased duties to further his studies in China. He joined SROS on 6th January 2015 and we wish him well with his studies.

21st December 2016: Loia Uini Siaosi was a Laboratory Assistant for Food Science & Technology Division. SROS terminated his service due to poor attendance and not a dedicated person to work.

23rd December 2016: Faataga Jnr Faataga, an Assistant Technical Research Scientist ceased duties to take up an AUSAID scholarship offer to study in Melbourne through Government of Samoa. Faataga joined SROS on September 2012. We wish him well and he is hoping to join SROS after completing his studies.

30th December 2016: SROS Chief Executive Officer, Tilafono David Hunter resigned from his duties after serving almost six years at SROS to lead the Ministry of Agriculture & Fisheries as their new Chief Executive Officer. He has implemented a lot and contributed a lot of his skills and expertise in the direction of ongoing research

projects as well as its testing abilities and ultimately achieving SROS goals and objectives during his tenure with SROS.

7th March 2017: Vineta Poli was hired in December 2016 was terminated due to unsatisfactory performance.

3rd March 2017: Cynthia Ah Loo, tea lady/cleaner resigned due to new job offer from SPREP Office. Cynthia has been working for SROS for two years and SROS wishes her well with her future endeavours.

3.7.2 Appointments

25th October 2016: Vaimosana Letiu, was appointed to the Technical Services Division as the new Laboratory Assistant. SROS is her first employer, a young and bright young lady who wants to pursue a science career here at SROS.

28th November 2016: Vineta Poli, was appointed to the Administration & Finance Division as the new Groundsman – Casual worker who replaced Ilo Faavaoga who was terminated in August 2016.

23rd January 2017: Meafua Sharlene Mulitalo was recruited as an Assistant Technical Research Scientist in the Technical Services Division. SROS is her first employer, a former USP student and graduated with a Bachelor of Science in Environmental Science in 2016.

30th January 2017: Tualupetu Togafau is the new Research Scientist for the Food Science & Technology Division. She graduated with a Bachelor of Agriculture in December 2015 and she's got two more units to complete for her Post Graduate Diploma.

31st January 2017: Merita Suke Pouafe was recruited as Principal Finance Officer in the Administration & Finance Division. She's an Accountant/Auditor by profession, graduated from Auckland University of Technology with a Bachelor of Business in Accounting and Commercial Law, in 2012.

6th February 2017: Viliamu Ah Sam was recruited as a Technical Research Scientist in the Technical Services Division. A 2016 graduate with a Degree in Science, major in Chemistry and Biology.

6th February 2017: Siope Pele was appointed as the Principal Research Scientist in the Food Science and Technology Division. He was working as a Senior Research Scientist for the Plant & Postharvest Division for almost six years and he will continue to share his expertise with his new division.

13th March 2017: Angelika Maria Imakulata Tugaga was appointed as the new Principal Research Scientist in the Plant & Postharvest Technologies Division. She has a Master's Degree in Agriculture Plant Pathology from Zhejiang University in 2011 and a Bachelor of Agriculture from USP in 2005. Angelika was the senior research officer at the Crops Division of MAF.

1st May 2017: Amy Maslen-Miller was appointed as the new Senior Research Scientist in the Plant & Postharvest Technologies Division. She has a Master's Degree from Auckland University. Amy moved to Samoa from Auckland New Zealand to take up her new research role.

3.8 Official & Promotional Visits to SROS

12th August 2016: SROS held its 2nd Awareness Day since its establishment in 2006 to showcase its product development and technical services activities, celebrate its 10th Anniversary and launch its Corporate Plan 2017-2020. The Awareness Day event was officially opened by the Prime Minister Hon. Auelua Fatialofa Tuilaepa Dr. Sailele Malielegaoi, with the Minister responsible for SROS Hon. La'aulialemalietoa Asiata Leuatea P.F. von Schmidt blowing the 10th Anniversary cake and launching the corporate plan. The Awareness Day was attended by Ministers, Associate Ministers, Members of Parliament and Diplomatic Corps, college students and the public.

18th – 19th October 2016: Seeseei Molimau-Samasoni (Scientific Research Leader, PPTD) and Semua Militini Tagoai (Research Scientist, PPTD) together with Professor Steven Underhill held a capacity building workshop at Aleisa for smallholder farmers, to promote methods and technologies for improvement of postharvest handling and food safety awareness.

20th – 21st October 2016: Seeseei Molimau-Samasoni (Scientific Research Leader, PPTD) and Semua Militini Tagoai (Research Scientist, PPTD) together with Professor Steven Underhill held a capacity building workshop at Savaia for smallholder farmers, to promote methods and technologies for improvement of postharvest handling and food safety awareness.

21st October 2016: Seeseei Molimau-Samasoni (Scientific Research Leader, PPTD) and Semua Militini Tagoai (Research Scientist, PPTD) together with Professor Steven Underhill held a capacity building workshop at Ah Liki for commercial farmers, to promote methods and technologies for improvement of postharvest handling and food safety awareness.

24th October 2016: Seeseei Molimau-Samasoni (Scientific Research Leader, PPTD) and Semua Militini Tagoai (Research Scientist, PPTD) together with Professor Steven

Underhill held a capacity building workshop at Lepa for smallholder farmers, to promote methods and technologies for improvement of postharvest handling and food safety awareness.

5th October 2016: Pousui Fiame Leo (TSD Manager) and Fauono Sina Mualia (BDS, SROS) visited the Taumeasina Island Resort Samoa and met with General Manager Nathan Bucknall regarding a possible MOA for Water sampling and analysis testing to comply with MNRE Development Consent requirements.

17th October 2016: CEO, Tuimaseve Kuinimeri Finau (FSTD Team Leader) and Fauono Sina Mualia attended the NZ Samoa Trade & Investment Mission Conference at the Tanoa Hotel, whereby the CEO gave a brief presentation on SROS's work and products being developed. The purpose of the presentation aimed to promote SROS products and services and seek possible partnerships with NZ based companies that were present during the Trade and Investment Mission.

3rd November 2016: 3rd Annual Environment Sector Review: TATTE Convention Centre; Fonoti Samani Tupufia was involved. This was to review High Level Development Outcomes Key Achievements and Challenges on some of the key thematic areas which are; Mainstreaming Climate Change and Disaster Risk Management and Environmental Governance and Natural Capital and Built Environment.

1st Nov – 4th Nov 2016 National Environment Week: the Environment and Renewable Energy Division set up a display on its renewable energy work and environmental related research work at the TATTE building. This displaying biogas research, biofuels research and environment bioactive compound research.

24th November 2016: MNRE Water and Sanitation Sector 9th Annual Review. This review Ms Moon and Ms Linatupu from ERED presented on findings from biogas funded research on gas composition from different feedstocks and feedstock compositions.

29th November 2016: MNRE – SMSMCL Projects National Reducing Emisions from Deforestation and forest degradation (REDD+) Awareness meeting, held at Taumeasina Island. The objective of the National REDD+ Awareness Meeting is to build cross sectoral capacity in general REDD+ concepts and discussing the challenges and opportunities for advancing REDD+ in Samoa to support the national objectives which include Sustainable Land Management, conservation and Enhancement of Forest carbon stocks. Ms Moon Chan and Fonoti Samani Tupufia attended this for SROS.

29th – 30th November 2016: MNRE – SMSMCL Project's Payment for Ecosystems Services (PES) & REDD+ Technical Capacity Building Workshop, This was held at Taumeasina Island Resort, Moataa. Ms Moon Chan and Fonoti Samani Tupufia attended this for SROS. The PES Technical Capacity Building Workshop is specifically designed for selected Technical Staff from your respective Ministries/Agencies/Organisations focusing on developing a PES Project Development Resource building PES & REDD+ Capacity in communities, specifically focusing on Payment for Environment services in particular the Watershed Services in the Vaisigano Catchment.

14th December 2016: Tuimaseve Kuinimeri Finau and Fauono Sina Mualia attended the SAME and PHAMA co-hosted HACCP Accreditation Ceremony at Taumeasina Island Resort as part of their on-going roles in collaboration with the private sector.

15th December 2016: Tuimaseve Kuinimeri Finau attended the Samoa Agritourism Workshop and delivered on behalf of SROS a presentation entitled 'SROS value added products for the Tourism Industry'. SROS provided funds to co-host the end of workshop cocktail together with STA at the end of the same week.

15th -16th December 2016: MAF Agriculture Show in Savaii was attended by the CEO Tilafono David Hunter and our staff who set up a promotional booth for awareness and feedback on promotional prototypes.

3rd March 2017: There were 25 science students and 2 Lecturers from the University of Samoa visiting our Science facilities. This is a norm every year to observe the various instrumental and analytical procedures as part of their Internal Assessment. SROS as usual performed at their best to show the visitors what SROS has to offer.

16th March 2017: American Samoa Community College Science students visited SROS. This is also an annual event for new students together with their lecturers to tour our laboratories as well as to be familiar with the SROS mission and objectives.

21st March 2017: Dr. Allan Woolf and Ms. Barbara Waddel from Plant & Food Research (PFR) New Zealand visited SROS to discuss future project collaborations.

24th March 2017: Professor Steven Underhill visited SROS and assisted Dr. Seeseei Molimau-Samasoni (PPTD Team Leader) regarding the progress of FAO Consultancy Project and planned work for the next 3 months.

28th March 2017: SROS Management Team officially held its first meeting with Ministry of Agriculture and Fisheries Management Team, to see how it can work together to

progress its activities for the benefit of the Country as a whole. This will be a quarterly meeting to keep both MAF and SROS updated on any cross cutting issues.

12th April 2017: Annie Toiloa (Principle Research Scientist) from Environment and Renewable Energy Division presented on water quality testing and research conducted at SROS during the World Water and Foresty Day at NUS

3rd May 2017 2 Representatives from the New Zealand Chamber of Commerce from Pacific Trade & Investment visited SROS to learn more about its current projects and SROS functions.

10th May 2017: JICA's New Representative – Mr Kikawa and Mr Tanaka visited SROS to learn about its current projects and SROS functions.

18th May 2017: The New Ambassador Mr Aoki and the former Ambassador Mr Shibuta of Japan made an introduction visit to strengthen SROS's partnership with the Embassy of Japan.

3.9 Outlook for next year

SROS continues to be the beacon of knowledge for Samoa regarding Science. All the organizations activities provide information and analytical interpretations that assist with the on-going works in the country.

Although SROS has successfully completed research for some its products and produce business plans, the organizations has experienced difficulty in finding partners from the private sector to establish private public partnerships. This is the reason the organization has started a board approved commercial trials. The trials at SROS are to establish the network from farmer to buyer. During this trial period, which in essence is the organizations way of showcasing the products potential in the market, potential partners will be invited to participate and learn with the hope to eventually uptake the product.

SROS foresees a great increase in requests for its services, and therefore is anticipating and preparing accordingly. But with the challenge of limited work and office space presently available, changes will have to be made to optimize the working environment based on the limited number of buildings. When SROS is able to improve the work and office space, the Organisation will be in a better position to cater for the requests.

3.10 Future risks and uncertainties

One of the ongoing risks is staff turnover. Although it is slow at this time, the staff are very eager for further education and seeking greener pastures. This is very good for their personal gain and experience but would mean that there is a continuous need to train in-coming recruits.

Also, there has been a drastic increase of requests for scientific research that is outside of the organizations ability. Although the staff have the knowledge to do the scientific research there is a need to purchase more equipment for each request, and this is neither logical nor feasible given the limited funds.

With the increase in demand for SROS services and the commencement of the trial-commercialization, there has been an increase with staff workloads. Although staff at the present are committed and are always ready for a challenge, difficulty will eventuate with staff turnover especially with experienced staff. To prepare for this, there needs to be an ample number of staff that have the capacity to operate within the many SROS objectives.

3.11 CSO implementation (where applicable)

Not applicable to SROS in this financial year.

Ma le fa'aaloalo lava

Dr. Seuseu Tauati
Chief Executive Officer
Scientific Research Organisation of Samoa

4 Auditor's Opinion

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Please address all correspondences to the Controller and Auditor General

P.O Box 13
Apia, Samoa

AUDIT OFFICE

REPORT OF THE AUDIT OFFICE

TO THE GOVERNING BODY IN CHARGE OF GOVERNANCE – SCIENTIFIC RESEARCH ORGANISATION OF SAMOA

Audit Opinion

We have audited the accompanying Financial Statements of the Scientific Research Organisation of Samoa which comprise the Statement of Financial Position as at 30 June 2017, the Statements of Financial Performance, Changes in Equity and Cash Flows for the year then ended, a Summary of Significant Accounting Policies and Other Explanatory Notes. The Accounting Firm of BDO, Chartered Accountants, assisted in the audit. The Engagement Partner on the audit resulting in this Independent Auditor's Report is Hanalei Betham.

In our opinion, the financial statements give a true and fair view of the financial position of the Scientific Research Organisation of Samoa as at 30 June 2017, and of its financial performance, changes in equity and cash flows for the year then ended, in accordance with International Financial Reporting Standards (IFRSs).

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of Financial Statements* section of our report. We are independent of the Scientific Research Organisation of Samoa in accordance with the ethical requirements that are relevant to our audit of financial statements in Samoa, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

Responsibilities of Those Charged with Governance for the Financial Statements

Directors and Management are responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards, and for such internal control as directors and management determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Organisation's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Scientific Research Organisation of Samoa or to cease operations, or have no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Organisation's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with International Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with these International Standards on Auditing, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a

Auditor's Opinion (Cont'd)

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FA'AVAEI LE ATUA SAMOA

AUDIT OFFICE

material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Organisation's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the directors and management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Organisation's ability to continue as a going concern. If we conclude that material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Organisation to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the Directors and Management regarding, among other matters, the significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Our audit was completed on the 31st October 2017 and our opinion is expressed as at that date.

Apia, Samoa
31 October 2017

Fa'amatuainu Dennis Margraff
ACTING CONTROLLER AND AUDITOR GENERAL

5 Audited Financial Statements 2016 – 2017 Financial Year

DIRECTOR'S REPORT

THE SCIENTIFIC RESEARCH ORGANISATION OF SAMOA
DIRECTOR'S REPORT
FOR THE YEAR ENDED 30 JUNE 2017

The Directors present their report together with the financial statements of the Scientific Research Organisation of Samoa for the year ended 30 June 2017 as set out on the accompanying pages and the auditors' report thereon in accordance with the Public Finance Management Act 2001 and the Public Bodies and Accountability Act 2001.

Directors

The directors of the Organisation at any time during the financial year were:

• Sulamanaia Nuuetolu Montini Ott	Chairman	
• Dr. Satupaitea Viali	Director	
• Manuleleua Dr. Sonny Lameta	Director	
• Jewel Monica Adeline Cook	Director	
• Tusani Iosefatu Reti	Director	
• Suluimalo Amataga Penaia	Director	(up to April 2017)
• Ulu Bismarck Crawley	Director	(from April 2017)
• Fonoiava Sealiitu Sesega	Director	(up to 31 December 2016)
• Tilafono David Hunter	Director	(from 1 January 2017)
• Tilafono David Hunter	Ex-Officio/CEO	(up to 31 December 2016)
• Dr. Seuseu Tauati	Ex-Officio/CEO	(from 20 February 2017

The new Board Directors' appointments were formalised on the 8 June 2017 for a term of three (3) years as per F.K.(16)22.

Principal Activity

The principal activity of the Scientific Research Organisation of Samoa is to conduct scientific research and develop technologies which outcomes are of great value in the development and sustainability of value added goods and services for export and to achieve reduction on fuel imports and greenhouse gas emissions. There has been no significant change in the principal activity of the Organisation during the year or any of the classes of business that it operates in.

State of Affairs

In the Opinion of the Directors:

(i) the accompanying Statement of Financial Performance, Statement of Changes in Equity and Statement of Cash Flows are drawn up so as to give a true and fair view of the operations and results of the Organisation for the year ended 30 June 2017.

(ii) the accompanying Statement of Financial Position is drawn up so as to give a true and fair view of the state of affairs of the Organisation as at 30 June 2017.

Operating Results

The net surplus for the year is **$ 105,315** (2016: Net Surplus **$ 327,775**)

Dated at _____ this _____ day of _____ , 2017.

Signature
Sulamanaia Nu'uetolu Montini Ott
Chairman

Apia, Samoa

31-Oct / 2017

Signature
Dr. Satupa'itea Viali
Director

Apia, Samoa

31-Oct / 2017

MANAGEMENT'S REPORT

THE SCIENTIFIC RESEARCH ORGANISATION OF SAMOA
MANAGEMENT'S REPORT
FOR THE YEAR ENDED 30 JUNE 2017

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

The accompanying financial statements are the responsibility of Management. The financial statements have been prepared according to International Financial Reporting Standards and include amounts based on management's best estimates and judgments.

Management has established and maintains accounting and internal control systems that include written policies and procedures. These systems are designed to provide reasonable assurance that our financial records are reliable and form a proper basis for the timely and accurate preparation of financial statements, and that our assets are properly safeguarded.

The Board of Directors oversees Management's responsibilities for financial reporting. The financial statements have been reviewed and approved by the Board of Directors on recommendation from Management.

Our independent auditors (BDO), having been re-appointed by the Government Controller and Chief Auditor, have audited our financial statements. The accompanying auditors' report outlines the scope of their examination and their opinion.

Signature
Dr. Seuseu Tauati
Chief Executive Officer

Apia, Samoa

Dated: 31-Oct , 2017.

Signature
Mamea Samuel Ieremia
Manager Administration & Finance

Apia, Samoa

Dated: 31-Oct , 2017.

STATEMENT OF FINANCIAL POSITION

THE SCIENTIFIC RESEARCH ORGANISATION OF SAMOA
STATEMENT OF FINANCIAL POSITION
AS AT 30 JUNE 2017

		2017	2016
ACCUMULATED FUNDS	**Notes**	**SAT$**	**SAT$**
Opening balance		3,731,471	3,403,696
Add: Surplus		105,315	327,775
Closing balance		**3,836,786**	**3,731,471**
Represented by:			
Current assets			
Cash and cash equivalent	**3**	2,728,373	2,254,712
Trade & Other Receivables	**4**	116,539	152,435
Prepayments	**5**	30,073	37,773
Stock on hand	**6**	179,770	137,121
Total current assets		3,054,755	2,582,041
Current liabilities			
Trade Payables	**7**	78,126	116,441
Accruals	**8**	62,935	108,493
Allowance for staff benefits	**9**	76,783	58,950
Deferred income	**11**	1,173,289	921,505
Total current liabilities		1,391,134	1,205,389
Working capital		1,663,621	1,376,652
Non Current assets			
Property, plant and equipment	**12**	2,173,165	2,354,819
Net assets		**3,836,786**	**3,731,471**

The accompanying notes form an integral part of the above financial statement.

STATEMENT OF INCOME AND EXPENDITURE

THE SCIENTIFIC RESEARCH ORGANISATION OF SAMOA
STATEMENT OF INCOME AND EXPENDITURE
FOR THE YEAR ENDED 30 JUNE 2017

		2017	2016
INCOME	**Notes**	**SAT$**	**SAT$**
Grants from Government of Samoa	**10**	3,317,148	3,334,494
Technical Services income	**14**	133,837	166,769
Donor Project income	**15**	559,605	252,212
Other income	**16**	85,416	151,890
Total income		**4,096,006**	**3,905,365**
EXPENDITURES			
Audit fees - current		19,300	19,300
Audit fees - FY14/15 under-accrued		3,174	4,279
Depreciation	**12**	326,097	266,483
Personnel costs	**17**	1,792,620	1,753,181
Occupancy costs	**18**	206,662	308,199
Administrative costs	**19**	621,454	405,427
Directors fees & board expenses	**20**	91,889	66,476
Donor Project costs	**21**	543,983	253,828
Other costs	**22**	385,513	500,417
Total expenditures		**3,990,692**	**3,577,590**
Net Surplus		**105,315**	**327,775**

The accompanying notes form an integral part of the above financial statement.

STATEMENT OF CHANGES IN EQUITY

THE SCIENTIFIC RESEARCH ORGANISATION OF SAMOA
STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED 30 JUNE 2017

	Accumulated Fund SAT$	Total SAT$
2016		
Balance as at 1 July 2015	3,403,696	3,403,696
Add: Surplus	327,775	327,775
Balance as at 30 June 2016	**3,731,471**	**3,731,471**
2017		
Balance as at 1 July 2016	3,731,471	3,731,471
Add: Surplus	105,315	105,315
Balance as at 30 June 2017	**3,836,786**	**3,836,786**

The accompanying notes form an integral part of the above financial statement.

STATEMENT OF CASH FLOW

THE SCIENTIFIC RESEARCH ORGANISATION OF SAMOA
STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED 30 JUNE 2017

		Notes	2017 SAT$	2016 SAT$
Cash flows from/(to) operating activities				
Cash received from Government of Samoa			3,317,148	3,334,494
Cash Received from Republic of Korea (Fruit Wine)			145,877	-
Cash received from	- Secretariat of the Pacific Community		3,981	5,934
	- Coconut oil refinement fund		-	9,161
	- Technical services		133,837	166,847
	- Biodiesel sales		-	124
	- Sales Breadfruit Flour - Gluten Free fund		1,200	268
	- PHAMA		-	24,333
	- Consultancy services		27,500	-
	- ACIAR Project Funds		21,449	105,931
	- FAO Consultancy		9,949	91,336
	- Photosynthetic Bacteria Research Fund		-	16,590
	- Biomedical Research Fund-US Embassy		12,725	12,725
	- TCM Project Funds		635,971	135,062
	- Cocoa Phylogenetics		320	-
	- Avocado Margarine		550	-
	- PHAMA Cocoa Project		7,500	-
	- Water Supply & Sanitation Funds - Income		38,682	-
	- Other income		34,090	139,002
Cash paid for expenses			(3,772,675)	(2,871,769)
Net cash flow by operating activities			**618,104**	**1,170,038**
Cash flows from/(to) investing activities				
Purchase of property, plant and equipment		**12**	(144,443)	(298,883)
Net cash used by investing activities			**(144,443)**	**(298,883)**
Net increase/(decrease) in cash			473,661	871,155
Cash and cash equivalent at the beginning			2,254,712	1,383,557
Cash and cash equivalent at the end		**3**	**2,728,373**	**2,254,712**

The accompanying notes form an integral part of the above financial statement.

NOTES TO THE FINANCIAL STATEMENTS

THE SCIENTIFIC RESEARCH ORGANISATION OF SAMOA
NOTES TO FINANCIAL STATEMENTS
FOR THE YEAR ENDED 30 JUNE 2017

1. GENERAL

The Research and Development Institute of Samoa is an independent corporate body constituted and operating under the provisions of the Research and Development Institute of Samoa (RDIS) Act 2006 and amendments. Its name changed to The Scientific Research Organisation of Samoa (SROS) on 20th November 2008 following amendment of the Act. It is currently located at Nafanua.

The SROS objectives are:

a) to promote the national economy of Samoa based on research and development;
b) to undertake scientific and technical research with the primary aim of adding value to local resources or services;
c) to develop functional prototypes of products and processes based on scientific and technical research for the local or overseas markets;
d) to establish partnership with the private sector and commercial interests to support the Organisation's activities; and
e) ensure effective training for researchers and professionals engaged in scientific and technical research.

2. ACCOUNTING POLICIES

a) Statement of compliance

The statements have been prepared in accordance with International Financial Reporting Standards adopted by the International Accounting Standards Board (IASB), and interpretations issued by the Standing Interpretations Committee of the IASB.

b) Basis of preparation

The financial statements are prepared on the historical cost basis. They are presented in Samoan Tala.

c) Grants, aids in assistance, donations and capitalisation

The above are treated in the accounts in accordance with their nature and the form in which they are received;

i.) All items which are intended for the support and financing of the Organisation's operations and received in cash are taken to income on receipt.
ii.) All items which are received in the form of depreciable assets, are taken to income in the year of receipt.
iii.) All items that are received in the form of depreciable assets from the Government of Samoa are capitalised.

d) Cash and cash equivalents

Cash and cash equivalents comprises of petty cash, cash at bank and cash held by other Government Ministries for relevant projects form an integral part of the Organisation's cash management are included as a component of cash and cash equivalents for the purpose of the statement of cash flows.

e) Functional and presentation currency

The financial statements are presented in Samoan Tala (SAT$), which is the Organisation's functional currency and all values presented in Samoan Tala have not been rounded.

f) Property, plant and equipment

Items of property, plant and equipment are measured at cost less accumulated depreciation and any accumulated impairment losses.

Depreciation is charged so as to allocate the cost of assets less their residual values over their estimated useful lives, using the straight-line method.

The following rates are used for the depreciation of property, plant and equipment:-

Buildings and improvements	5%
Roads	20%
Motor vehicles	20%
Laboratory equipment	20%
Furniture & fittings	20%
Office and other equipment	20%

g) Foreign currency translation

Transactions in foreign currency are translated to Tala at the foreign exchange rates ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at balance date are translated to Tala at exchange rates ruling at that date. Foreign exchange differences arising on translation are recognised in the statement of income and expenditure.

2. ACCOUNTING POLICIES (Cont'd)

h) Deferred Income

Deferred Income represent grants that has been received by SROS from its Donor Partners in relation to Research and Product Development under the different Divisions within SROS (mostly via Project Proposals), which include the Food Science & Technology Division, Plant & Postharvest Technologies Division, Environment & Renewable Energy and Technical Services Division, which are supported by the Administration and Finance.

i) Income tax

The Scientific Research Organisation of Samoa is not subject to taxation.

j) Stock on hand

Stock on hand are stated at the lower of cost and net realisable value.

k) Leases

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases. Rentals payable under operating leases are charged to statement of income and expenditure on a straight-line basis over the term of the relevant lease.

l) Provisions

A provision is recognized in the statement of financial position when the Organisation has a present legal or constructive obligation as a result of past event, and it is probable that an outflow of economic benefits will be required to settle the obligation.

m) Employee Benefits

i.) Salaries and wages, annual leave and long service leave

Liabilities for employees' entitlements to salaries and wages, annual leave, long service leave and other current employee entitlements (that are expected to be paid within twelve months) are accrued at undiscounted amounts, and calculated at amounts expected to be paid as at reporting date.
Liabilities for other employee entitlements, which are not expected to be paid or settled within twelve months of reporting date, are accrued in respect of all employees at the present value of future amounts expected to be paid. A provision of one-third of sick leave balance as at year end is taken into account as a liability.

ii.) Superannuation contributions

The organisation contributes towards the National Provident Fund, a defined contribution plan in accordance with local legislation and to which it has no commitment beyond the payment of contribution. Obligations for contributions to the defined contribution plan are recognised immediately in the statement of income and expenditure.

3. CASH AND CASH EQUIVALENT

		2017 SAT$	2016 SAT$
Petty cash		500	500
Cash at ANZ Bank (Samoa) Limited - main account		1,028,403	885,937
Cash at Westpac Bank Ltd - Technical Services		491,429	417,157
ANZ Bank (Samoa) Limited: project account	- SPC / PARDI Funds	121,217	125,197
	- Coconut Oil Refinement Fund	270,769	270,769
	- Avocado Margarine Fund	193,136	194,183
	- PHAMA	-	9,178
	- TCM EIF Tier II Project Fund	398,278	72,857
	- Water Supply & Sanitation Fund - MNRE	24,138	63,000
	- Photosynthetic Bacteria Research Funds	4,961	8,000
	- Others	195,541	207,934
		2,728,373	**2,254,712**

		2017	2016
4.	**TRADE & OTHER RECEIVABLES**	**SAT$**	**SAT$**
	Trade receivables	44,708	152,435
	Other receivables	90,715	-
	Less: Provision for doubtful debt	(18,884)	-
		116,539	**152,435**
5.	**PREPAYMENTS**		
	Prepaid Insurance	30,073	29,048
	Other Prepayments	-	8,725
		30,073	**37,773**
6.	**STOCK ON HAND**		
	Lab consumables on hand	179,770	137,121
		179,770	**137,121**
7.	**TRADE PAYABLES**		
	Trade Payables	78,126	116,441
		78,126	**116,441**
8.	**ACCRUALS**		
	Accrued expenses	43,560	78,572
	Audit fees	19,300	19,300
	Electricity	-	10,546
	Land lease	75	75
		62,935	**108,493**
9.	**ALLOWANCE FOR STAFF BENEFITS**		
	Staff annual leave entitlements	76,783	58,950
	Total allowance for staff benefits	**76,783**	**58,950**
	Movement for Allowance of Staff Benefits		
	Balance at beginning of the year	58,950	57,771
	Additional allowance during the year	20,504	33,067
	Utilised during the year	(2,671)	(31,888)
	Balance at year end	**76,783**	**58,950**
10.	**GRANTS FROM GOVERNMENT OF SAMOA**		
	Cash received from Ministry of Finance	**3,317,148**	**3,334,494**

11. DEFERRED INCOME

Donors	Opening Balance (2016)	Additional Funding	Costs Incurred	Ending Balance (2017)
SPC / PARDI Fund	125,197	-	3,980	121,217
Coconut Oil Refinement Fund	270,769	-	-	270,769
Avocado Margarine Fund	194,183	-	550	193,633
PHAMA - Frozen Taro Project Fund	5,963	-	-	5,963
PHAMA - Cocoa Fermentation Project Fund	3,214	-	-	3,214
FAO Consultancy Fund	72,190	-	9,949	62,241
TCM EIF Tier II Project Fund	71,857	635,971	309,549	398,279
Photosynthetic Bacteria Research Fund	8,000	-	3,039	4,961
Water Supply & Sanitation Fund - MNRE	63,000	-	38,682	24,318
Biomedical Research Fund-US Embassy	12,725	-	12,725	-
PHAMA Cocoa	-	7,500	932	6,568
Cocoa Phylogenetics	-	12,143	320	11,823
SIDS Donated Assets	94,407	-	24,104	70,303
Total Deferred Income	**921,505**	**655,614**	**403,829**	**1,173,289**

12. PROPERTY, PLANT & EQUIPMENT

Cost	Buildings & Roads SAT$	Furniture & Fittings SAT$	Laboratory Equipment SAT$	Office Equipment SAT$	Motor vehicles SAT$	TOTAL SAT$
1 July 2016	2,490,113	304,288	3,695,222	1,502,712	477,483	8,469,818
Additions	21,758	3,400	85,887	23,398	10,000	144,443
Disposals	-	-	-	-	-	-
At 30 June 2017	2,511,871	307,688	3,781,109	1,526,110	487,483	8,614,261
Accumulated depreciation						
1 July 2016	797,674	241,178	3,437,256	1,338,408	300,483	6,114,999
Depreciation	138,825	17,455	91,580	40,904	37,333	326,097
Disposals	-	-	-	-	-	-
At 30 June 2017	936,499	258,633	3,528,836	1,379,312	337,816	6,441,096
Carrying amount						
30 June 2016	**1,692,439**	**63,110**	**257,966**	**164,304**	**177,000**	**2,354,819**
30 June 2017	**1,575,372**	**49,055**	**252,273**	**146,798**	**149,667**	**2,173,165**

13. AMORTISATION SCHEDULE

The Amortisation Schedule relates to the donated Assets for SROS Activities from the Government of Samoa after the hosting of the SIDS meeting in September 2014. These Assets are amortised to income over 5 years for Office Equipments which are the same rates at which the Assets are depreciated.

	2017 SAT$	2016 SAT$
Costs of Donated Assets		
SIDS Assets funded by the Government of Samoa	120,520	120,520
Total cost of assets	120,520	120,520
Accumulated Amortisation		
Opening accumulated amortisation	26,113	2,009
Amortisation for current year	24,104	24,104
Closing accumulated amortisation	50,217	26,113
Unamortised Amount	**70,302**	**94,407**
Current portion of amortisation	24,104	24,104
Non - current portion of amortisation	46,198	70,303
Unamortised amount	**70,302**	**94,407**

14. TECHNICAL SERVICES INCOME

Technical Services	133,837	166,769
	133,837	**166,769**

15. DONOR PROJECT INCOME

Secretariat of the Pacific Community / PARDI fund	3,981	5,934
Coconut oil refinement fund	-	9,161
Avocado margarine fund	550	10,648
PHAMA Frozen Taro Project fund	-	17,868
PHAMA Cocoa Fermentation Project fund	-	6,464
PHAMA Cocoa Project	932	-
FAO Consultancy fund	9,949	24,019
TCM EIF Tier II Project fund	309,548	63,205
Photosynthetic Bacteria Research fund	3,039	8,590
ACIAR Project Fund	21,859	105,931
Republic of Korea funds - Fruit Wine fund	145,877	-
MNRE - Water Supply & Sanitation Project	38,682	-
IUCN Biodiesel fund	10,943	-
Sales Biodiesel fund	-	124
Sales Breadfruit Flour - Gluten Free fund	1,200	268
Biomedical Research Funds - US Embassy	12,725	-
Cocoa Phylogenetics Project	320	-
	559,605	**252,212**

THE SCIENTIFIC RESEARCH ORGANISATION OF SAMOA
NOTES TO FINANCIAL STATEMENTS
FOR THE YEAR ENDED 30 JUNE 2017

		2017	2016
16.	**OTHER INCOME**	**SAT$**	**SAT$**
	Amortisation Income	24,104	24,104
	Consultancy fees	27,500	-
	Other income	33,812	127,786
		85,416	**151,890**
17.	**PERSONNEL COSTS**		
	Salaries and wages	1,647,393	1,625,173
	NPF employer contributions	118,029	96,925
	ACC Employer Levies	15,694	16,030
	Higher Duty Allowances	11,504	15,053
		1,792,620	**1,753,181**
18.	**OCCUPANCY COSTS**		
	Electricity	206,647	308,184
	Land lease	15	15
		206,662	**308,199**
19.	**ADMINISTRATIVE COSTS**		
	Advertising and promotions	54,961	53,630
	Accounting fees - current year	-	3,159
	Bank charges	1,833	1,772
	Internet charges	38,278	29,996
	Fees, License and registrations	9,914	11,935
	Rental / hire	20,445	-
	Fuel and oil	15,777	17,610
	Printing and stationery	56,272	61,829
	Repairs and maintenance - motor vehicles	19,393	21,972
	Repairs and maintenance - building	25,165	8,286
	Repairs and maintenance - office equipment	2,810	7,039
	Repairs and maintenance - plant & equipments	2,443	3,812
	Repairs and maintenance - furniture and fittings	1,976	2,011
	Subscriptions	4,875	1,910
	Telephone, fax and postages	20,410	14,911
	Travel and accommodation	65,729	27,987
	DSA / Transit / Permit Visa & Incidental Allowances	89,291	-
	Water supplies	5,054	5,274
	Insurance	86,155	72,469
	Local travel	5,251	2,952
	Consultancy fees	2,250	8,167
	General expenses	74,289	48,706
	Provision for doubtful debt	18,884	-
		621,454	**405,427**
20.	**Directors Fees & Board Expenses**		
i.	Board expenses	3,613	775
	Balance represents board expenses for meetings held throughout the year.		
ii.	Directors' fees	88,276	65,063
iii.	Board of directors allowances	-	638
		91,889	**66,476**

The above amount consist of sitting allowance & annual Directors fees paid to eligible Directors who include; Sulamanaia Nuuetolu Montini Ott., Asiata Dr. Satupaitea Viali, Dr. Sonny Manuleleua Lameta, Tusani Iosefatu Reti, Jewel Monica Adeline Cook and Other Directors, who are public servants, were not paid sitting allowance & annual Directors fees.

21.	**DONOR PROJECT COSTS**		
	Secretariat of the Pacific Community / PARDI costs	-	5,934
	Coconut Oil Refinement costs	-	9,161
	Avocado Margarine costs	550	10,648
	PHAMA Frozen Taro Project costs	-	17,868
	PHAMA Cocoa Fermentation Project costs	-	6,464

	2017	2016
21. DONOR PROJECT COSTS (Cont'd)	**SAT$**	**SAT$**
PHAMA Cocoa Project	932	-
FAO Consultancy costs	9,949	24,019
TCM EIF Tier II Project costs	309,548	63,205
Photosynthetic Bacteria Research costs	3,039	8,590
ACIAR Project costs	21,859	105,931
Fruit Wine Project costs	142,377	2,008
Water Supply & Sanitation Funds - MNRE costs	30,541	-
IUCN - Biodiesel Project costs	10,943	-
Breadfruit Flour costs	1,200	-
Biomedical Research Funds - US Embassy	12,725	-
Cocoa Phylogenetics	320	-
	543,983	**253,828**

The difference between the Donor Project costs and Donor Project income are (i) Fruitwine Project $3,500.00, (ii) Water Supply & Sanitation Funds - MNRE $8,141.00, and (iii) Secretariat of Pacific Community $3,981.00. These costs are recorded as fixed assets under SROS.

22. OTHER COSTS		
Avocado Fruits Collection	7,691	-
Avocado Oil	600	-
Lab consumables	91,919	149,129
Freight and handling costs	22,724	22,475
Accreditation costs	63,177	58,842
Plant hire expenses	3,407	3,984
Interviewing panel allowances	750	-
Gas expenses	45,967	112,274
Clothing allowance costs	7,400	6,200
Cleaning expenses	19,563	23,306
Staff training costs	32,104	26,243
Telephone allowances costs	3,350	3,600
Professional services expenses	9,955	31,728
Awareness expenses	56,512	25,760
Other internal project costs	8,015	20,174
Office catering costs	12,380	16,702
	385,513	**500,417**

23. RELATED PARTY DISCLOSURES

i. Salaries and short-term employee benefits	641,289	616,346

Balance represents remuneration of key member of management during the year.

24. PROJECT GRANTS

a) The following projects are currently carried out by SROS as the Implementing agency, in which the actual funds are held by Government via the Ministry of Finance (MOF). Per confirmation from MOF, the following balances represent the unused funds at balance date.

Project Description	Balance as at 30/06/2016	Funds received	Funds expended	Balance as at 30/06/2017
Turkey Grant (Ethanol Project)	51,828	-	-	51,828
IUCN Biodiesel Project Funds - MNRE	23,283	-	-	23,283
Turkey Grant (Breadfruit Project)	5,567	-	-	5,567
Republic of Korea - Fruit Wine Project	283,306	-	58,523	224,783
Japanese Embassy - Sustainable Growth of Fragrant Plants for Poverty Reduction Project	26,154	1,206	-	27,361
ACIAR funded Regional Fruit Tree Project	47,735	-	21,859	25,876
Total Project Grants held at MOF	**437,874**	**1,206**	**80,382**	**358,698**

i. Turkey Grant (Ethanol Project): Purpose: To develop and optimize a process to produce bioethanol from the identified starchy feedstock by maximizing sugar production from flour.
ii. IUCN Biodiesel Project Funds - MNRE: Purpose: To determine the optimum conditions and characteristics of the alkali process for biodiesel production using *Jatropha* oil as a feedstock.
iii. Turkey Grant (Breadfruit Project): Purpose: To identify breadfruit pathogens, especially virulent strains, present during pre- and post-harvest of breadfruits, and determine phylogenetic relation between the isolated pathogen strains.
iv. Republic of Korea - Fruit Wine Project: Purpose: To produce wine-like beverages from various ripen fruits that are grown, available and abundant in Samoa, for domestic and export markets.

24. PROJECT GRANTS (Cont'd)

v. Japanese Embassy - Sustainable Growth of Fragrant Plants for Poverty Reduction Project: Purpose: To promote orchids and fragrant oils as another means for income generation and job creation in the rural communities.

vi. ACIAR funded Regional Fruit Tree Project: Purpose: To increase the efficiency of breadfruit and pineapple value chains through improved productivity and postharvest handling practices, and to enhance private sector and Government research and extension capacities in support of fruit industry development.

vii New Project received in June 2017, within this Financial Year 2016/2017:
PHAMA Cocoa Project: Purpose: To determine the best drying conditions for fermented cocoa beans using a new design of solar dryer, for the ultimate aim of producing high quality fermented cocoa beans for export and for a high quality chocolate product.

viii Cocoa Phylogenetics Project: Purpose: To improve science-based decisions on which cocoa varieties to propagate, this project aims to collate genetic information (Trinitario, Forastero, Criollo) of Samoan cocoa plants to their morphological features (high yielding, disease tolerance, etc.) as well as their chocolate aroma profiles for an improved product for export.

b) Equipments procured under Sustainable Growth of Fragrant Plants for Poverty Reduction Project:
The total funds expended under this project held with MOF to the amount of SAT211,721 comprises of research equipments related for this project. i) SAT$202,209 (USD$77,021.25 equivalent) for lab equipments procured in December 2015, ii) SAT$9,460 (USD$5,373.00 equivalent) for lab equipment procured in May 2017, iii) SAT$52 for bank related fees. These equipments are planned to be utilised in the Financial Year 2016/2017 at the project beginning of the project, and some of these equipments will be transferred to the Private Sector for Commercialisation purposes.

25. CAPITAL COMMITMENTS

The Ministry of Finance has approved a budget of SAT$3.31 million (2016: SAT$3.33 million) for the period ended 30 June 2017. There were no Capital Budget for this financial year 2016/2017.

26. CONTINGENT LIABILITIES

The directors are not aware of any contingent liabilities for the period ended 30 June 2017. (2016: SAT$NIL).

27. EVENTS OCURRING AFTER BALANCE SHEET DATE

There are no events subsequent to balance date which require recognition or disclosure in this financial statement. (2016: SAT$NIL).

28. APPROVAL OF FINANCIAL STATEMENTS

The board of directors approved the financial statements of the Organisation on …30... / …10... / ..2017..

6 Annex (Analysis of Financial Performance Measures)

Table of Key Performance Measures

Performance Measures	This Year Actual 2016-2017	Last Year Actual 2015-2016	Budget Next Year 2017-2018	Comments
Revenue	3,317,148	3,334,494	3,243,944	We note a slight decrease in Revenue or Government Grant for this year's actuals compared to the previous year FY2015/2016 mainly a 4% decrease in Operating and a slight decrease in Personnel cost.
Other Income	778,858	570,871	561,924 (cost recoveries target 166,423)	We note an increase of 36% in the overall Other Income mainly due to the high project fund utilization during the year. However we note a 20% decrease in cost recoveries from Technical Services Division of $133,837 compared to $166,769 in the previous year.
Total Revenue	**4,096,006**	**$3,905,365**	**$3,805,868**	
Expenditure (Personnel, operating & depreciation)	3,990,692	3,577,590	3,790,533	The expenditure utilization for this financial year is 12% higher than the previous year mainly due to the increase in administrative costs and Donor Project costs.
Surplus / (Deficit)	105,315	327,775	3,834	The surplus achieved in this FY2016/2017 has dropped by 68% compared to the previous year due to increase in travel costs, personnel costs, change in Board fees policy, repairs and maintenance of Buildings as well as increase in depreciation expense for the year.
Current Assets	3,054,755	2,582,041	2,583,485	The increase noted in current assets has accounted for controlled spending within the year and additional project funding such as TCM EIF Tier II project as well as new additional projects on Cocoa.
Total Assets	**5,227,920**	**$4,936,860**	**$7,621,406**	
Current Liabilities	1,391,134	1,205,389	1,480,191	The increase in Current Liabilities is mainly from the increase in deferred income funds for projects to the value of $655,614 in total during this year.