



LEGISLATIVE ASSEMBLY OF SAMOA

**EDUCATION, SCIENCE COMMUNICATION &
INFORMATION TECHNOLOGY COMMITTEE
REPORT**

ON THE

**P.P. 2015/2016 No. 39
Scientific Research Organisation of Samoa Statement of
Objectives for the Year 2014 – 2017**

(Presented to the Legislative Assembly)

The Education, Science, Communication & Information Technology Committee recommends that the Assembly take note of its report

1. RESOLUTION:

At the end of its investigation, the Committee resolves that the Legislative Assembly approve:

- **P.P. 2015/2016, No. 39, Scientific Research Organisation of Samoa Statement of Corporate Objectives 2014 – 2017 ; and**
- **The Committee Recommendations listed below.**

2. RECOMMENDATIONS:

The Committee recommends the Government to;

- 1. Seek and secure more investors that will be interested in commercialising the successful outcomes of the organisation’s scientific and technical developments and research on local products.**
- 2. Extend the development and undertaking of scientific and technical research on our local production and services to serve both domestic and export markets.**
- 3. Expand scientific research to examine imported goods that might contain diseases for security and healthiness of the public.**
- 4. Advise the Organisation to immediately implement the capital projects proposed under specific projects, that will significantly help with the development of the Organisation and to achieve its objectives.**

3. FINDINGS:

3.1 Work in Progress

1. Vision

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

2. Mission

SROS aims to conduct scientific research and develop technologies with 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.

3. Objectives:

1. To promote the national economy of Samoa based on research and development.
2. To undertake scientific and technical research with the primary aim of adding value to local resources and services.
3. To develop functional prototypes of products and processes based on scientific and technical research for the local or overseas markets.
4. To establish partnership with the private sector and commercial interests to support the Organisation's activities.
5. To ensure effective training for researchers and technical research.
6. Augment and effectively manage financial and human resources of the organisation.

4. OVERVIEW

a. Areas noted by the Committee:

The progress made in the areas of prototype product development, strengthened service capabilities, collaborative partnerships and relationship building by the organization was noted by the Committee. Most of the corporate objectives declared in the SROS Statement of Corporate Objectives 2014 – 2017 are successfully in progress and have been carried forward from the Corporate Plan 2012 – 2015. There are no huge changes in the corporate objectives due to the fact that these objectives are still in progress, but there were slight changes with the drafting of the Statement to formulate it in relevance to its current activities and processes. They have also witnessed an advancement in their on going activities and projects.

The SROS has been productively pursuing an overall set of corporate objectives that has been drafted with strategies taken to achieve performance measures. A scheme carried out by the Organisation to achieve its given objectives were meticulously executed with its focus directed to the upgrading of its technical services that provide industry and public stakeholders access to accredit testing. Accredited testing is needed to answer increasing demands to meet quality standards, and obtain product specifications required for accessing overseas quality standards, and obtain product specifications required for accessing overseas markets. SROS also perseveres to up-skill and ensure effective training for their staff by establishing educational partnerships with overseas Universities. It was noted by the Committee that there is an MOC with the University of Victoria, Wellington in 2012, with the enrolment of two SROS staff members to start PhD, and Postgraduate Diploma Studies in 2013 and 2014, respectively.

It was noted by the Committee that these current projects listed below are currently active, some have been completed and received a tremendous result, and some are in progress and gradually moving towards better outcomes.

- ***Biofuel***
 Research is still in progress to evaluate jatropa (pafiti) as an alternative source of feedstock for biodiesel production, once the process is completed then a report will be tabled to help commercialise this project. The production and public awareness and promotional activities of biodiesel from coconut oil was completed, but the organisation is still looking for a potential investor that will be willing to commercialise this project. A joint proposal by SROS/STEC/MNRE to IRENA for a USD\$7,000,000 soft loan was successful and secured in Jan 2014 to commercialise the coconut oil biodiesel project. The plan was for STEC to be the leading implement partner in the project, unfortunately that deal failed because the STEC has withdrawn due to their incapability to meet the terms and conditions given under this soft loan agreement.
- ***Avocado Oil Processing Line & Avocado Margarine***
 The Avocado Oil has been produced to serve both the domestic and export markets. The organization had an investor that was interested to the idea of commercially producing Cooking Oil from Avocado; unfortunately that deal has been diminished due to the investor's financial restrains. Biddings has been re-advertised for interest parties to tender for the machine that manufactured oil from avocado, and carry forward the project to a business intensity. The full utilization of the extracted oil has seen the need to add more value to this new local oil, by producing an Avocado Margarine.
- ***Essential Testing Services and International Accreditation & Narcotics Laboratory***
 SROS continues to work to maintain international accreditation of their testing laboratories. This imperative Division have been separated and designated to achieve international accreditation of different services, to provide support to their clients that required testing for their products, and the analysis result they get are acceptable and recognized locally and abroad. The long term anticipation considering this crucial laboratory will be going to be expanded to other services. According to SROS, in 2013 they established a Narcotics Laboratory as an additional service to its newly established Technical Division. The main purpose is to provide testing of drugs for evidence to be used in court prosecutions. In the beginning of 2014 they have extended their work in their laboratory, to enable testing of hard drugs and precursors. SROS have established partnership with Ministry of Police, Office of the Attorney General and Ministry of Justice providing support for court cases, carrying forward testing for the marijuana or cannabis sativa L. In the beginning of this year this service has been expanded with the testing of other form of narcotics like ice or methamphetamine.
- ***Breadfruit Flour***
 Development of producing flour from breadfruit that is abundantly available in Samoa is completed. The organization has established partnership with SAME and

negotiations have proceeded with the University of Hawaii to assist SAME with the proposal of commercialising this project.

- ***Coconut Oil Refinement Project***
The objective of this project is to refine the quality of coconut cooking oil by using new means of filtration and local resources, to strip or reduce the aroma of coconut oil which makes the oil undesirable for cooking purposes.
- ***Postharvest Technologies***
The organization has outlined one of its strategies to develop postharvest technology for at least two crops to facilitate the revival of agricultural produce and products. Testing has been completed for frozen fresh taro as another alternative pathway to export the taro to NZ and Australia, due to their countless quarantine policies and regulations that affects the invariable exporting of fresh taro from Samoa to these very huge markets. The organization is also considering the packaging of frozen taro, if attractive packaging to consumers will be an option then vacuum packaging machines will be required. A container of frozen taro is now in NZ for a first trial and breadfruit is also in process for examination on a same basis as taro.

b. Proposed Projects

The Statement of Corporate Objectives states specific projects and support for government policies;

- ***New Laboratory***
The organization perceives the need for a New Centralised Laboratory. At the moment the organization are operating their technical services from 3 different buildings, but there is a big risk in taking samples out from another building to another building for further processes. So a one big laboratory is needed to run the whole process of a research up to its final stage, particularly with the standards required for technical services through International Accreditation. This will also provide more space for other projects that the organization needs to implement, utilizing these old buildings.
- ***Compound Security Fence***
The organization is now insisting to secure funds to build a security fence for the organization. The organization is obligated to action this immediate need because of the current existing Narcotics Laboratory, installation of security cameras in the Narcotics Laboratory is also a priority to the organization due to security reasons.
- ***Purchase of Organisation vehicles***
There are plans to purchase a new pick up to help with the 4 research divisions that are sharing one pick-up. The organization has only 3 vehicles. The van is used by the corporate services to do their daily administrative work, and the other pick- up is

allocated for the CEO. The organization is not planning to ask the government to purchase the vehicle from the budget but the organization is looking at some of the savings from their existing projects. The organization is also planning to replace the current aged van. The organization believes that this will ease the strain on its finance spent on the maintenance of this vehicle.

It was noted that there were projects proposed for 2014 – 2017 that will contribute to achieving the Organizations objectives.

- ***Cocoa Value Adding Product***
Cocoa intended for different markets or products can have distinct fermentation requirements, and this study aims to characterize the local varieties when fermented.
- ***Coconut Flour Project***
Given the successful development of an efficient process for making gluten free flour from breadfruit and cassava, the aim of this project is to extend and refine this process to make flour from desiccated coconut meat, which is a major by-product from the production of virgin coconut oil.
- ***Orchid propagation & essential oil extraction project***
The project will specifically be directed at the propagation of various beautiful orchids and the extraction of aromas from fragrant plants

The Statement of Corporate Objectives added two new Strategies to facilitate the economy of Samoa based on research and development.

- ***Research into Animal Feed***
This project acquire to research into animal feed formulation using locally available resources. This project will support livestock sub-sector of Agricultural sector especially producing animal feed for our pigs and chickens. The organisation can analyse every potential ingredients that are available with our local resources using to formulate the feed, to make sure that when the final formulation is completed there is balance and sufficient nutrition required in these animal feeds.
- ***Establishment of a Small Scale Fish Cannery***
The organization is also planning to look if there is a possibility of setting up a small scale fish cannery. The idea derives from the establishment plan of the Bombobee Fish Company in Samoa. The Bombobee will be focusing on just the loining of desired fish species like the albacore, common dolphin fish, if the deal to launch their company in Samoa goes well. So the big fishing boats that will bring in the particular catches for the BumbleBee Company will also have other by-catches, fish like yellow fin and others. So it would be a great idea to utilize this opportunity to build a small fish cannery besides the Bombobee to make use of these by-catches to produce fish

cans for Samoa. The organization will only consider whether this idea will be technically feasible, but economically and commercially feasible the organization does not have the capacity to look into those areas. The initiative will create revenue for the government and job opportunities for our people. This is just a concept of a future project preparing by the organization to utilize the opportunity if the Bombobee deal becomes successful.

5. ACKNOWLEDGEMENTS:

The Committee would like to acknowledge the Board and the management of SROS and its services provided for the country, especially its effort to develop new technologies and products to benefit Samoa's local industries, government ministries, corporations agencies and communities and in turn the national economy. The Committee also wishes to thank the management for the opportunity given to review its Statement of Corporate Objectives 2015 – 2017.

6. WITNESSES

During the course of its investigation, the committee was able to hear oral evidence submitted by:

Scientific Research Organization of Samoa

- | | | |
|--------------------------|---|---------|
| 1. Tilafono David Hunter | - | CEO |
| 2. Pousui Fiame Leo | - | Manager |

7. **SIGNATURES OF COMMITTEE MEMBERS**

Tofa LENATAI Victor Faafoi Tamapua
CHAIRMAN.

Susuga IFOPO Matia Filisi
DEPUTY CHAIRMAN

Tofa AVEAU Tuala Lepale Niko Palamo
MEMBER

Tofa TUSA Misi Tupuola
MEMBER

Tofa LEVAOPOLO Talatonu
MEMBER.

Afioga TUFUGA Gafualeata Faitua
MEMBER

Tofa TUILEUTU Alavaa Voi
MEMBER