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What's inside:

USP Alafua Campus Open Day "Shaping your Future"

Secondary schools from all over the island descended on Alafua Campus to witness this year's Open Day. Mixed among them were ministers, Members of Parliament, members of the Diplomatic Corps, Government officials, International and Regional organizations, representatives of NGOs and several community organizations, including families and friends of USP Alafua staff and students.

The program started with a spiritual word and prayer from Reverend Vavatau Taufao, the Director of Education, Congregational Christian Church of Samoa. The welcome address was given by Campus Director Leatuaolevao Ruby Va'a then followed by an entertainment by the USP students' Cultural Performance.

The keynote address was delivered by the Minister for Communications and Information Technology, Hon. Tuisugaletaua Sofara Aveau. He encouraged and urged the school children from various schools that attended to be keen students who work and study hard for a better education and to have the chance to study at USP.

Tours were organized, with USP students as tour guides covering all the main sites around the campus.

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USP Alafua Campus Open Day "Shaping your Future"

Tour guides took groups of students to visit booths and view displays that were prepared by different areas or departments of USP Alafua campus. These visits included; the new farm, computer labs, library, SAS, bookshop, agricultural engineering, science labs, soil, crops and livestock farm, satellite studio, research projects, CCE and POPP booths. During these tours, students were told to capture and learn something new and important which would be useful for the next part of the program "the quiz".

"The quiz" which is an event held during every Open Day after the tour was the most fun part of the day. Students who were able to answer questions correctly and earned prizes if answers were correct. Students were also able to have fun by having dance competitions between schools.

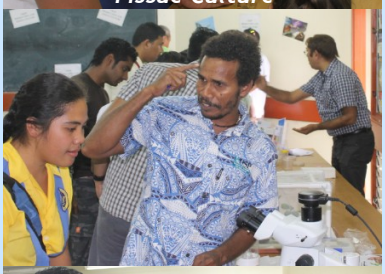
Two students from the foundation level were fortunate to receive fully funded scholarships to take foundation studies at USP from the Rotary Club of Samoa.

After the quiz, the last part of the program was the Alafua students' multicultural entertainment. Different cultures were showcased by students from different islands and all secondary school students and those that were present enjoyed the unique performances by the students.

SAFT Highlights from USP Alafua Campus Open Day

Secondary students from the different schools that attended the Open Day really showed interest mostly at the SAFT booths and displays. Tissue Culture, Bee keeping for the production of honey and displays of pests were displayed at room C2. Students were fascinated by the displays and the demonstrations that were shown to them. A butterfly drawing competition was also held at these displays.


Tissue Culture



The Agricultural engineering building was packed with students as they came for tour. Students were very interested to look into the theodolite machine and experience the different equipments that were seen.


Bee Keeping - Honey making demonstration

Students were also very interested at the Farm stop. Dr. Diarra and his students presented excellent demonstration and explained to the students the different areas at the farm such as the Sheep section, Piggery section and the Poultry section. Students were able to see how to operate the egg grading machine and became very surprised by it.


Agricultural engineering

All the SAFT stops were filled with students. They showed great appreciation and interest from the displays prepared by the staff and students of the School of Agriculture and Food Technology.


Soil laboratory

USP New Farm

SAFT highlights from USP Laucala Campus Open Day

The School of Agriculture and Food Technology was represented at the aforementioned open day through posters displays.

The posters were obtained from the following stakeholders; the Ministry of Agriculture of Fiji, Bio-security Authority of Fiji, SPC Landuse Resource Division and Goodman Fielder of Fiji Limited – Crest Chicken.

The SAFT promotional video was also used to give an account of the activities undertaken by students enrolled in agriculture programs at the Alafua Campus.

SAFT brochure was also handed out to students from visiting secondary schools.

Resource personnel manning the display were postgraduate and undergraduate students Sanjay Anand (SAFT, USP), Ami Chand Sharma (Chemistry lab), Ratu Toloi Vasuidreketi (Plant Protection), Nitya Nand and Shamal Raj.

General observations

Schools from the greater Suva area as well as several schools from the western division of Fiji visited the SAFT display booth. The number of agriculture science students from Suva schools were very low; a sentiment also shared by their teachers. This was also noted during school liaison (marketing) visits. However, western division and rural schools made up good numbers. The displayed information was very useful to the students who took noted for their agriculture science projects. A number of students from FNU and Navuso Agricultural School also attended.

(Report by Sanjay Anand, PhD Student, School of Agriculture and Food Technology)

SAFT Highlight from USP Lautoka Campus Open Day

SAFT's presence at the Lautoka Open Day was very much appreciated by Secondary School students from different schools in the West and showed a lot of interest in agriculture.

About 2000 secondary school students from about 24 schools attended the Open Day. According to the Campus Director, there was a slight increase in the number of schools this year compared to 21 last year. Not all faculties attended this year's Lautoka Open Day but those who attended really put up a good show.

It was School of Agriculture's first time to represent Open Day in Lautoka this year. Continued promotion of SAFT booth program in Laucala, Lautoka and Labasa should be able to attract more potential students in the coming years. To achieve this, we will need to put up some demonstrations and include some preserved or live specimens. We were not able to get all these prepared due to time constraints this year. However, we felt that SAFT's presence this year in Lautoka was felt and greatly appreciated and we thank the invaluable support.

(Report by Poasa Tabuaciri, Lecturer in Animal Production, School of Agriculture and Food Technology)

Message from the Vice Chancellor and President, Professor Rajesh Chandra

We had another very successful Open Day at Laucala and most of our other campuses across the region. The feedback had been very positive. The various booths were all very busy and hosted large numbers of students and other stakeholders.

Prof. Rajesh Chandra

The success of the event today owed to the hard work of a large number of people. The Open Day Organizing Committee under the chairmanship of the Director, Development, Marketing, Communications and Alumni, Mr. Jaindra Karan and Manager Marketing and staff did an excellent job so that all components of the programme worked very well. All the Faculty Deans and their teams also did a very good job, as did the other sections that had their booths today. I wish to thank all of them very much for making us proud today.

I also wish to thank the Chief Guest, Honourable Major General (Ret'd) Jioji K. Konrote, Minister for Employment, Productivity and Industrial Relations for accepting our invitation and for giving an excellent address reflecting both Fiji's commitment to the development of knowledge society and to education and the important and central role of USP in the development of Fiji and our other member countries.

Most of our development partners, Excellencies and members of the diplomatic corps, business and community leaders all took time out of their busy schedules to attend our Open Day, for which we are grateful.

The Students Association, OCAC-PS, our other sections, media partners, sponsors, and volunteers all played important roles and I thank them.

I would also like to thank DVC LTSS for being the MC and VP Dr. Grewal for moving the vote of thanks

An excellent outcome. Many thanks to everyone involved.

USP Alafua Staff welcomes visiting Professor

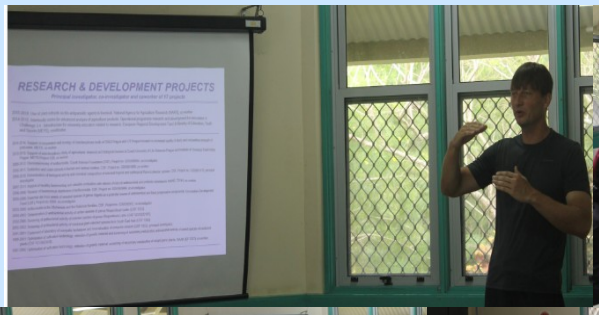
Professor Ladislav Kokoska from the Department of Crop Sciences and Agroforestry of the Faculty of Tropical AgriSciences of the Czech University of Life Sciences Prague (CULS) was welcomed by the staff of USP Alafua Campus.

Mr. Malaki with Prof. Ladislav

Head of School of Agriculture and Food Technology and Director of IRETA, Mohammed Umar with Senior lecturers, Head of Departments and other SAFT Staff attended this welcoming.

Prof. Kokoska presented possibilities of cooperation between USP and CULS in frame of the joint scientific and pedagogical activities. At first, he briefly introduced CULS, including the structure of the university and its main activities. Then, he proposed several possible topics for future research collaboration such as analyses of nutritional values of underutilized Samoan crops (plant species that are traditionally used but have not been adopted by large-scale agriculturalists yet) and assessment of biological effects of plants used in traditional Samoan medicine.

Staff members that were present were very impressed by the presentation. They asked questions and commented on various parts of his presentation. Prof. Kokoska has been working with the HOS SAFT for sometime and they have in partnership with other scientists published a paper on one underutilized Samoan crop that also grows in other PICs.



Effect of Beta - Mannanase and Allzyme activity on the utilization of Copra Meal based diets by growing pigs

Student Project

Pigs play important social and economic roles in the South Pacific region. One of the major constraints for efficient pig production however, is the high cost of feed which affects slowed down the pig industry in the region. At the moment, commercial pig farming in most countries of the region is dependent on imported feed. The high cost of imported feed has slowed down the growth of the pig industry in the region. The only way to offset the expensive cost and maximize profit is to lower the production cost through research into locally available alternative cheap feed materials. This research was carried out by Pine Andy, Takili Tairi and John Meonga under the supervision of Dr. Siaka Diarra.

The study was conducted to compare the supplementation of two exogenous enzymes namely Allzymes SSF and ß – Mannanase singly or in combination on the utilization of high copra meal based diets by growing pigs with the specific objectives of studying the effects on: growth performance, carcass yield and organ measurements.

Weighing of animal organs and carcass

The researchers have concluded that Allzyme SSF supplementation at 300g/ton will improve the utilization of diets based on 30% copra meal by growing pigs in term of weight gain. ß-mannanase or the combination of Allzyme SSF and β-mannanase in the same ratio has no beneficial effects. Further studies on the enzyme level, pig age, diet composition and copra meal level are recommended.

Increasing awareness of forests and natural disasters in the Pacific Island Countries

Countries in the Pacific Islands are susceptible to natural disasters. While disasters have always occurred, indications suggest that their frequency and intensity are increasing. In particular, climate change is predicted to increase the frequency and intensity of disaster events in the future.

This increase of frequency and intensity of natural disasters requires a more holistic approach in dealing with natural disasters.

In response to increasing losses of life and damage to property, many countries are making efforts to take preventive measures to minimize damage and to improve their abilities in disaster management, i.e. preparedness, response and recovery.

"Evidence from the Asia-Pacific region demonstrates that forests, when appropriately planned and managed, can withstand and protect against natural disasters of varying degrees and types." Says Aru Mathias, FAO Forest Resource Management Officer.

Forests and forestry often can play limited roles in mitigating some natural disasters and their impacts, and in post-disaster reconstruction and recovery.

News Bits

It's estimated that 268 million people have been affected by disasters during 2002-2011. Floods and storms account for most of the fatalities and damage to property.

http://www.fao.org/asiapacific/news/detail-events/en/c/325607/

CANARIUM NUT - THE NEXT

Commercialization of a Melanesian nut is underway, drawing on expertise acquired in developing Australia's macadamia nut industry

Among the must-try delicacies when in Melanesia is the canarium nut, called 'nangai' in Vanuatu, 'ngali' in Solomon Islands and 'galip' in Papua New Guinea. A treasure trove of cultural lore dating back thousands of years exists for this nut. Like cocoa in the Americas, it is traditionally a prestige food with nutritional and putative medicinal value. Drawing on a decade of ACIAR research, a new chapter is being written for the canarium nut. A value chain analysis carried out under the Pacific Agribusiness Research for Development Initiative (PARDI) has provided an overarching pathway to develop new trade opportunities, and farmers and processors are rising to the challenge.

Canarium nut products on sale in Vanuatu

Assisting them for the past four years is Professor Helen Wallace of the University of the Sunshine Coast. She says the PARDI team's goal is to facilitate the development of an international brand that is owned and driven by local villages. Professor Wallace describes the taste of canarium nut as similar to almond but with a soft, distinctive texture.

Traditional canarium nut processing

Canarium nuts before processing

The project commenced in October 2011 with extensive stakeholder analysis.

One of the early findings was a need for more basic equipment and improved transport. For example, it was found that nut production could immediately be increased under the current system if women—who dominate nut harvesting and kernel preparation—had more buckets.

Other activities under the current system needed to change; for example, manual cracking was greatly disliked. In traditional production systems, women crack nuts from dawn to dusk, one nut at a time, taking two days to fill a 20-litre bucket, which sells for about A$80. Mechanical crackers were clearly needed, and the PARDI team addressed this by introducing nut-cracking technology developed for Australia's macadamia industry, which they adapted for local conditions. Innovation was also needed to extend the quality and shelf life of the harvested nuts, since canarium kernels are easily broken and their high oil content means they can deteriorate quickly. The team brought in solar dryers that naturally and affordably preserve the kernels.

Canarium nuts kernels in the solar dryer

(*By Gio Braidotti, http://aciar.gov.ac*)

News Bits

Serious threat to the Pacific

- FAO Director-General, Jose Graziano da Silva

Jose Graziano da Silva

The whole planet is being affected by its devastating impacts. Shifts in rainfall patterns, rising sea levels and sea surface temperatures have had disastrous effects on rural production, food security and livelihoods, especially among developing countries.

Dr da Silva told the 11th FAO Southwest Pacific Agriculture Ministers Meeting in Port Moresby that this problem has existed for several decades, but unfortunately it has been neglected for many years by the international community.

"Yet 2015 may mark a historic turning point in the way the world addresses global warming. We have the climate negotiations in Paris in December which take place in the same year that also witnessed the catastrophic damage caused by Cyclone Pam to many countries of this region. "That disaster is a clear warning of what climate change can do today but also in the future with even more devastating consequences."

News Bits

In Vanuatu, the most affected of these countries, the vast majority of crops and livestock were destroyed, as well as most of the equipment used for fisheries. FAO has been working with the Government and other partners to develop a post humanitarian relief strategy aimed at rebuilding the major economic sectors and provide assistance to farmers, fishers and other rural workers. "But we need more commitment from all our Member States. We are doing our part," said Dr da Silva.

During the same month of the Pam tragedy, FAO approved the launch of a Climate Change Trust Fund for the SIDS, which is being already set up using extra budgetary resources. "The hazardous, longstanding impacts of climate change on food security, as can be seen in Vanuatu, only reinforce the urgent need for debates on the climate agreements that are expected to emerge from the Paris conference at the end of this year."

Dr da Silva said these harmful impacts of climate change also stress the need to place agriculture high on the agreements. "We need to create more resilient food production systems that are better adapted to the changing climatic conditions. Better watershed management, improved soil quality and gender empowerment are only some examples. The right policies to ensure food security and build resilience and productivity typically come with substantial benefits, particularly for the rural poor. "Climate change can only be addressed using an 'all of government' approach. Therefore, ministries of agriculture, fisheries and forestry need to be at the table when countries develop and implement domestic policies to address climate change and national positions for the negotiations. "FAO is here to help you and provide you guidance on how to actively participate in those debates." da Silva said there is a second man-made big crisis affecting the Pacific, that deserves urgent attention and that is the increasing prevalence of non-communicable diseases or NCDs.

Obesity and NCDs have become important public health issues worldwide, but especially for the Pacific Island Countries. Following the Second International Conference on Nutrition held in Rome, FAO has added nutrition as a cross-cutting theme to the Organization's strategic objectives. "And after the successful adoption of both outcome documents – the Rome Declaration on Nutrition and the Framework for Action – FAO will address the problem of nutrition and NCDs in the Pacific through a series of measures, including the Pacific Regional Initiative on Value Chains for Food Security and Nutrition in the Pacific Islands. We believe that healthy food and healthy lives starts with healthy soil.

http://www.fao.org/asiapacific/news/detail-events/en/c/288614/

USP
THE UNIVERSITY OF THE SOUTH PACIFIC

Journal of South Pacific Agriculture

CALL FOR PAPERS

The Journal of the South Pacific Agriculture (JOSPA) is a peer reviewed Agricultural journal which publishes research articles, critical reviews, general papers and short communications in tropical agriculture. It has highly qualified editors and a transparent peer review system which normally takes about 6 to 8 weeks from submission of manuscript to the decision with reviewers' comments.

We are inviting contributions relevant to agriculture in the tropics for JOSPA's Volume 18 issue.

Please send manuscripts as email attachments to the editor at diarra_s@usp.ac.fj

Deadline for submission will be 21 October 2015. Guide for authors will be provided upon request. Refer to section on **Submission of Manuscripts** for additional information required on submission.

For technical enquiries, please contact the Managing Editor:

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AUGUST IMAGES

Biology lecturer with Open Day Chair, Ronna Hadfield

IRETA display during Open Day

Josie Fuimaono with student

USP Staff during Open Day

IT Manager with CSL Management

USP Students during Open Day

Ian Faleono

Fijian boys performance for Open Day

Bookshop Open Day display

Fijian girls performing for Open Day

Tongan students