



CTA LEARNING JOURNEY REPORT: MEETING FOOD SAFETY STANDARDS FOR PRODUCT AND PROCESS CERTIFICATION OF AGRI-FOOD ENTERPRISES, AND FOR GOOD HEALTH AND NUTRITION, TRINIDAD 02-06, NOVEMBER 2015

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ABSTRACT:

A 5-day Food Safety Learning Journey for Pacific-Caribbean food experts took place in Trinidad & Tobago on the 2-6th November, 2015 which aimed at building the capacity of Pacific-Caribbean experts in order to support Small and Medium Enterprises (SMEs), agro-processing and food services industries in meeting the food standards for production and distribution of healthy and safe foods in the Pacific and Caribbean respectively.

Premier Quality Services Limited (PQSL) with two international experts; Mr Sean Victor and Mrs Margaret Weston who have significant capacity and experience in Agro-Enterprise development delivered and conducted the training workshop.

Specific training in Good Manufacturing Practices (GMPs) and Hazard Analysis Critical Control Points (CCP) principles were the focus of the workshop and the learning journey will continue until the American Society of Quality (ASQ) certification is attained.

INTRODUCTION:

Food safety is fundamental to the health and well-being of individuals and families, as well as to the general public and hence vital to the prosperity of any nation. Significantly, food safety is critical in ensuring the health of the most vulnerable populations who are particularly at high risk for food borne diseases. This perhaps prove the fact that food safety is an integral part of Food Security which ensures that all people at all times have physical and economic access to sufficient, safe and nutritious food.

In 2010, the Pacific Regional Food Summit held in Vanuatu (www.spc.int/lrd/index.php?option=com_docman&task=doc) identified and confirmed **Food Safety** as one of the major issues in the Pacific region that contributes to food insecurity. If this was true, perhaps the establishment of Pacific Regional Food Safety Alliance was indeed an opportunity whereby each member country could be assisted in the area of food safety standards and compliance.

In Fiji and in its neighboring Pacific islands, visitors and tourists who visit their shores appear to lose confidence in the safety of local foods produced, which diminished their access due to fear of food poisoning. This is because visitors and tourists are aware and understand food safety issues. For example, food may look fresh and nutritious, however may be unsafe to consume due to poor handling and unhygienic practices. These may be reasons why most tourists do not choose to eat in most local restaurants, however prefer hotels meals. This poses a great challenge not only for Fiji but also for our

November 15, 2015

neighboring Pacific islands hence the need to ensure that the Pacific region addresses this food safety challenge efficiently and effectively perhaps through the proposed Pacific Regional Food Safety Alliance.

Similarly rejections of some of the Pacific regions major food exports such and fish, fruits and vegetables from its importing partners frequently occur due to fear of unsafe levels of hazards associated on such foods and that importing countries ensure they protect the health of their consumers (Lako et al., 2012). On the other hand, safe food is in demand because it does not cause harm to consumer when it is prepared or eaten according to its intended use. Having safe food is the right of consumers, therefore catering and food processing industries ensure safe foods are produced irrespective of sources and the various processing methods carried out.

This means that the seriousness of the food safety issues in the Pacific region could only be addressed within the region through a Pacific regional approach through investments in tertiary education for example in the study of food science or food safety curriculum in order to build capacity within the region and supported by food safety organizations which could be uniquely positioned to help grow Pacific regional economy in order to increase high-value jobs in key sectors, foster innovative products such niche food products that will drive economic development, and enhance the safety and value of exports. In this regard tertiary institutions in the Pacific region including the University of the South Pacific (USP) as the regional university to seriously examine their roles in developing and supporting the Pacific regional food safety society to ensure they deliver relevant curriculum to match the needs of society e.g. food safety and food security and not merely crunching numbers as a form of profit making. This is because USP is a crop agency responsible of producing graduates that should have the capacity to resolve regional issues including food security and food safety. Similarly tertiary institutions are meant to elevate overall national prosperity and serve as an important tool for national and international security including food security.

OBJECTIVES AND OUTCOMES:

The aims of the workshop was to build the capacity of Pacific-Caribbean food experts in order to support SMEs, agro-processing and food service industries in meeting the standards for production and distribution of healthy and safe foods in the Pacific and Caribbean respectively.

As an academia from the regional and premier tertiary institute of the Pacific, my involvement in this Pacific-Caribbean Food Safety Learning Workshop provided five principal outcomes;

- i. I took leadership in the selection and facilitation of the 4 Pacific food safety representatives from Tonga, Vanuatu, Kiribati and Fiji that were trained on the American Society of Quality (ASQ) Good Manufacturing Practices (GMP) and Hazard Analysis Critical Control Points (HACCPs) principles and practical experiences.
- ii. The establishment of a “Pacific Regional Food Safety Alliance” by the Pacific participants that is expected to be the training and certifying food safety standards and body for the Pacific regional countries.
- iii. Permitted 5-days of interaction and networking opportunity with the PQSL organisations, the Caribbean and my Pacific counter parts including three of my ex-food science students which provided sharing of experiences especially in the applications, compliance and non-compliance of GMP and HACCPs in various food processing and services industries that they represent.
- iv. Opportunity of visiting and observing major food companies in Trinidad and the application of the competency in the identification of GMP and HACCP compliance and non-compliance.

November 15, 2015

- v. The development and implementation of the ASQ HACCP Certification journey of the 6 Pacific Food Experts planned for late 2016 or early 2017 and to ensure all are certified.

CONTENTS AND RELEVANCE TO FIJI AND THE PACIFIC ISLANDS:

Food trade and food security could only be successfully facilitated when **foods are safe** especially in today's global food market. A safe food supply can only be achieved through the development of effective food safety management system. These are essentials for the well-being of consumers, farmers, processors and manufacturers region-wide. These food safety systems must be all be based on sound science, sound risk management, and sound risk prevention. In Fiji and in other Pacific islands, safe foods could be achieved through planning, development, implementation and monitoring of a Food Safety Programme hence the importance of food safety training in Trinidad. The two major aspects of the food safety training were the GMPs and the HACCPs system.

GOOD MANUFACTURING PRACTICES (GMP)

GMPs are practices that are required in order for food manufacturers to conform to guidelines recommended by agencies that control authorization and licensing for manufacture and sale of foods. These guidelines provide minimum requirements that a food product manufacturer must meet to assure that the products are of high quality and do not pose any risk to the consumer or public. The fundamental of GMP is its contribution as operational control in monitoring, verification and validation of activities and mechanisms. Hence very critical for the Pacific regional countries including Fiji, because of the food safety and quality issues impacting food trade in the Pacific include cyanide in cassava, cadmium in taro, mercury, histamine and ciguatera in fish and *Escherichia coli* in green leafy vegetables coupled by poor handling practices, high food spoilage rate due to high humid-temperate climate (Lako et al., 2012). There has also been weak national and regional food control and monitoring systems in place. These issues could be addressed by the development, implementation and monitoring of the GMPs first and then the Hazzard Analysis Critical Control Points (HACCPs) system later, hence the importance of the training.

The training also highlighted the value of GMPs and HACCPs in the economic growth and development of companies. In the Pacific region, even though the region is blessed with abundance of high value natural agricultural and fisheries food resources, it is unfortunate that these have not been fully utilized for economic growth. This therefore calls for paradigm shift especially with the complex-web of the food supply chain from manufacturer to consumer involving re-packagers and redistributors of food that creates oversight by many agencies. For example with regulators, this poses a huge new set of challenges and responsibilities and that countries must think and act in new ways. For this be effective and successful, it will require not only a paradigm shift but also a new paradigm with new partnerships across nations and across sectors, hence the importance in the establishment of the Pacific Regional Food Safety Alliance at the workshop.

HAZZARD ANALYSIS CRITICAL CONTROL POINTS (HACCPs)

It well understood that agriculture and fisheries are important engines of food trade for the Pacific region that boosts their economic growth. However due to strict food safety and quality regulatory requirements such as HACCP certification from importing partners especially the developed world, export markets have been impediments to potential markets. This encourages rejections and barriers in accessing markets and food exports for Fiji and it's Pacific Island Countries (PICs). Rejections may also due to inadequate labeling, poor

grading and packaging standards. These food safety issues appear to be related to inadequate capacity in ensuring and maintaining food safety and quality along the food chain; from farm to fork, and well as weak national and regional food control and monitoring systems which demands strong capacity building within the Pacific region in the area of food safety including GMPs and HACCPs. Even though these are already part of the food safety law and regulations for Fiji (Fiji Islands Government Gazette Supplement, 2009), the management structures, inspections and certification services are carried out by the Food Unit of the Ministry of Health of which their services have not been efficient and effective enough. They appear to focus more on exported foods rather than processing for local consumption. This had resulted in poor quality and unsafe foods and high incidence of food poisoning locally. Laboratory services for validation of some data is usually carried out by the Institute of the Applied Sciences at the University of the South Pacific, however others are sent abroad due to unavailable tests locally.

In terms of capacity building, higher education curriculum needs to be reviewed to ensure that food safety especially GMP's and HACCPs are included as part of a teaching programme especially at the regional university such as the University of the South Pacific (USP). Unfortunately, the Senior Management Team (SMT) had just recently endorsed the deletion of the Food Science courses of which food safety in the form of food microbiology and quality foods which teach GMPs and HACCPs have now been removed. Perhaps a review of such decisions needs to be made to ensure that USP fulfills its CROP agency obligations to the Pacific regional countries in delivering its core business of being relevant to the region by training, teaching, researching and servicing the region with food safety knowledge, technical and professional know how.

As a way forward into ASQ HACCP certification, I am committed to develop the HACCP plan for Sai Yee Foods Fiji Limited by early 2016 and its implementation planned for the end of 2016 or early 2017. These will be accompanied by enrolling and sitting for the ASQ Auditor Certification examination in October 2016.

ESTABLISHMENT OF THE PACIFIC REGIONAL FOOD SAFETY ALLIANCE

Compliance with international food safety and quality standards is necessary not only to gain market access for export commodities, but also to supply the lucrative tourism industry in Fiji, as well as for the well-being of the local population. Doing this will require greater coordination and enforcement of regulatory standards across nations, in accordance with our international obligations that ensures safety regardless of where the product is produced. This may perhaps demand the adoption of a more unified regulatory lens and work together toward the common goals of food safety at regional level, hence the establishment of the "Pacific Regional Food Safety Alliance".

Similarly, controlling the safety of imported food is also an enormous challenge for the small island states and areas of the Pacific region including Fiji. Often, consumers are exposed to food that is sold after its specified use-by date and/or has undergone temperature abuse before or during distribution, the use of language on the food label that could not be read by consumers especially for rural communities, etc are some examples of challenges. It is therefore important and appropriate that countries and the region monitor these seriously through the newly established "Pacific Regional Food Alliance".

The core functions of the "Pacific Regional Food Safety Alliance" are to;

- develop food safety standards for the Pacific region and later become an independent or third party certification body

- assist companies to comply with food safety standards beginning with GMPs and HACCP and then later provides third party certification.

Because the Pacific regional countries including Fiji lacks data in various areas of food safety, the newly established alliance may need to conduct research in order to gather and pool regional data together based on sound scientific evidence and risk analysis principles that do not unnecessarily create barriers to trade. This has the potential for significant impact not only on the public health of the region and its health care delivery system, but also on the regional economic development. If data is available perhaps creating the modern means of sharing data regionally and nationally would be the way forward due to limited resources. The data will need to be analyzed and used to proactively identify and prevent problems. Detecting and preventing national and regional problems, demands national and regional data sharing and data mining.

CONCLUSION:

As representative of USP in Food Security in Higher Education, my sincere appreciation to CTA for its continuous support and consideration for the Pacific Island Countries (PICs). The Pacific regional countries are small, vulnerable, limited in resources and capacity, which needs to be supported. Even though only 6 Pacific delegates were trained, the outcome achieved were enormous. These 6 delegates when become Certified HACCP Auditors, will join the 6 Fiji-International Trade Centre (ITC) Food Safety Counsellors based in Fiji. Perhaps more trainings should be carried out for other countries of the Pacific region that missed out.

Furthermore, perhaps CTA and PQSL could engage me in conducting similar workshops around the Pacific regional countries in collaboration with them. A professional training course in GMPs and HACCPs could be developed at the Pacific TAFE, USP due to the deletion of the Food Science courses that contains the food safety components.

With the establishment of the "Pacific Regional Food Safety Alliance, the executives are putting together a constitution for the purpose of registration for recognition. However for this network to be successful and achieve its aims, all Pacific delegates need to constantly in contact and work together to ensure a pass with a certification in the ASQ Auditors examination as a priority and with a HACCP certification of the food company selected to work on. For this to take place, I suggest that each delegate to pay to sit for his/her own examination fee for the ASQ Auditors examination scheduled for Australia in October 2016 as a sign of personal commitment, while CTA funds for the examination return trip to Australia, accommodation and meals. It would good that PQSL and the trainers provide the participants with the outstanding documents in order to help facilitate and pursue their HACCP plan development and for ASQ examination preparation especially with limited relevant textbooks available.

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