

Ex-post evaluation of project
STDF/PG/344

"ESTABLISHMENT OF A REGIONAL
VIRTUAL FOOD INSPECTION SCHOOL
IN CENTRAL AMERICA AND
DOMINICAN REPUBLIC"

(ERVIA)

Report for:

STDF Secretariat

Submitted by:

Mr. Hugo Hays

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Glossary of Acronyms

BTSF	European Union's Better Training for Safer Food programme
CAC	Consejo Agropecuario Centroamericano / Central American Agricultural Council
CAFTA	Central American Free Trade Agreement
CAREC	Central Asia Regional Economic Cooperation
COLEACP	Europe-Africa-Caribbean-Pacific Liaison Committee
COMISCA	Consejo de Ministros de Salud de Centroamérica/ Council of Health Ministers of Central America
CTL	Centro de Capacidades Técnicas y de Liderazgo de IICA/ IICA's Centre for Technical Capacity and Leadership
EDES	Strengthening Food Safety Systems through SPS measures Project
ECAT	Escuela Centroamericana Aduanera y Tributaria
EFSA	European Food Safety Agency
ERVIA	Escuela Regional Virtual para la Inspección de Alimentos/ Regional Virtual Food Inspection School in Central America and Dominican Republic
FDA	United States Food and Drugs Administration
FSIS	USDA Food Safety and Inspection Service
FSMA	US Food Safety Modernisation Act
FSVP	US Foreign Supplier Verification Programme
GAP	Good Agricultural Practices
GMP	Good Manufacturing Practices
HACCP	Hazard Analysis of Critical Control Points
IICA	Inter-American Institute for Cooperation on Agriculture
INA	Instituto Nacional de Aprendizaje/ National Institute for Learning, Costa Rica
KPI	Key Performance Indicator
MERCOSUR	Mercado Común del Sur / Southern Common Market
OIRSA	Organismo Internacional Regional de Sanidad Agropecuaria / International Regional Organism for Health in Agricultural and Livestock
OTED	FDA's Office of Regulatory Affairs' Office of Training Education and Development
RECs	Regional Economic Communities
SICA	Sistema de Integración Centroamericana/ Central American Integration System

SICOR	Sistema de Información de la Cooperación Regional / Regional Cooperation Information System
SIECA	Secretaría de Integración Económica Centroamericana / Central American Economic Integration Secretariat
SMART	Specific, Measureable, Achievable, Realistic and Timebound)
STDF	Standards and Trade Development Facility at the WTO
SPS	Sanitary and Phytosanitary
USDA	United States Department of Agriculture
UNAN-León	National Autonomous University of Nicaragua, León

1 Executive Summary

This document reports on the ex-post evaluation of the “Establishment of a Regional Virtual Food Inspection School in Central America and Dominican Republic” (ERVIA), an STDF funded project which ran from 2012 to 2016.

As the name implies, the project involved setting up a virtual school for training food safety inspectors from all the countries within scope: Belize, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, and Panama. The project was requested by the Ministries of Agriculture from the region, and run by the Inter-American Institute for Cooperation on Agriculture (IICA). The project aimed to set up the Virtual school and design and implement a Food Safety inspection course for 20% of the region’s national inspectors. It involved universities from each of the countries and implemented a governance structure that included an Academic Council, an International Advisory Group, a Steering Committee and a Technical Committee. Additionally, an auditing course would be set up and there would be a virtual regional school that would continue on after the project. The project envisaged that governments from the region would provide political support for implementation of reinforced compliance rules on food safety measures.

The evaluation was carried out according to the assigned Terms of Reference (set out in Annex 6) by the selected evaluator, who obtained feedback from relevant stakeholders and project implementers through online interviews and structured surveys, reviewed the programme documentation and visited the implementation agency offices IICA (Inter-American Institute for Cooperation on Agriculture) in Costa Rica, between May and December 2018.

The purpose of the evaluation was to make an overall independent assessment of the performance of the ERVIA project, to identify key lessons learnt and to propose any recommendations for future similar projects.

1.1 Conclusions

Regional Context: The Regional Integration Agenda in Central America and food safety harmonization in general are not progressing as expected. However, this project has been an example on how to bring together Inspection and Auditing knowledge and experience across the region.

Impact factors: The longer-term impact of this project depends on students of the virtual school course sharing information obtained, increasing access of the training to more stakeholders, capacity of the universities to keep the course curricula updated, and institutional support for food safety inspection and auditing.

Increased knowledge: The project was successful in delivering high quality training to a subset of public sector food inspectors in the region but did not however reach the private sector. The lack of follow-up after the project ended compromises the increases in knowledge obtained, as the opportunity to efficiently continue to build on and update the framework that was set up is lost.

Sustainability: No real functioning regional virtual school structure was left in place after the end of the project which demonstrates the lack of sustainability of the initiative.

Weak support: Statements of commitment from national and regional governance bodies was not enough to carry the necessary support forward. At the policymaker level, food safety is still not given the required priority.

Focus more on National: National public systems for Food Safety inspection vary greatly in level of preparedness, knowledge and experience between countries. Spending more effort in addressing specific national knowledge and experience issues would allow greater impact of the Regional trainings, as there would be an increased understanding of the challenges they have in common.

Food Safety Enforcement: The private sector has weak motivation to receive food safety training. Greater public sector compliance enforcement of food safety related regulations would generate a stronger regional drive towards food safety.

Follow Through Training: Cascading and dissemination of the knowledge and techniques gained in these trainings is not clearly set out going forward. There has been no dissemination of knowledge gained after the project.

1.2 Recommendations

Stronger Policy Mandate: Even though Agriculture Ministers approved of this initiative at a Regional level, a greater political mandate and regular engagement should have been sought and obtained before setting up the Regional Virtual School.

Baseline desk study: A desktop exercise would have been necessary, to determine information such as training material and other online platforms and networks already existing, to explore possibilities of positive synergies in cooperation and collaboration.

Performance Evaluation: Public Food Safety system staff should be set Key Performance Indicators and this performance evaluated periodically to show results of the work done. This would bring about greater accountability of results and require improved levels of food safety knowledge.

IICA retain Coordinating Role: A self-sustaining, regional system for qualified Food Safety Inspectors and Auditors needs to be set up under a credible organization. IICA could fulfil this role as coordinator for the virtual inspection school going forward, together with the network of Universities.

Avail courses widely: The Regional School should serve as a Centre for Reference of Information not just for Inspectors but also for the whole of the Agri/Food sector on Food Safety.

Course Specifics: A summary is needed at the end of each topic. The inspection course should be more flexible and with shorter modules. Translation of the course material into English is needed for Belize and for it be reviewed by international stakeholders. The courses should start off with a phone call or physical meeting.

Training Material Homogeneity: Course material formatting and structure would be more standardised if only one organization develops all course modules rather than having a mix of different training sources.

Private Sector Involvement: “Keep it real” – the private sector can contribute to making the courses more practical. Set up a “train the trainer” system to disseminate the information. Private sector involvement is essential to build trust and common understanding.

Replication: Given its potential impact, other regions in the world should seek to implement similar solutions to the Regional Virtual School.

2 Introduction

2.1 Background

The STDF Working Group approved project application STDF/PG/344 "Establishment of a Regional Virtual Food Inspection School in Central America and Dominican Republic" in March 2012. This application was developed through an STDF PPG (STDF/PPG/344) which was approved in March 2011 and implemented by the Inter-American Institute for Cooperation on Agriculture (IICA) from its main office in Costa Rica. The project was supported by IICA's Centro de Capacidades Técnicas y de Liderazgo /Centre for Technical Capacity and Leadership (CTL). The project partners were the Ministries of Agriculture from Belize, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua and Panama, and the intended project beneficiaries were both the public and private sectors in the above-mentioned countries and more widely in the region. The project ran from 1 July 2012 to 30 June 2016, including a one-year no-cost extension granted by the STDF.

The total project value was US\$1,534,294, with an approved STDF contribution of US\$977,643 and in-kind contribution from IICA and participants of US\$556,651. This STDF contribution is well above the average amount STDF provides to projects. IICA also gave an additional undisclosed contribution (not initially budgeted for, and absorbed by IICA entirely) to support the technical implementation of the Regional Virtual School.

IICA was in charge of implementing the project pursuant to a contract concluded with the WTO in June 2012. Other entities involved in the project were ministries, food safety control agencies and universities from the eight partner countries, universities from Europe and the Americas, international and regional development partners including FAO, the Institute of Nutrition of Central America and Panama (INCAP), OIRSA and the Pan American Health Organization (PAHO), as well as national and international food safety institutions (such as Agencia Santafesina de Seguridad Alimentaria from Argentina).

For the supply and selection of national inspection personnel, the project relied on the commitment and involvement of national and regional food safety related authorities, represented by the Ministries of Agriculture in each country and regionally in the CAC (Central American Agricultural Council). Ministries of Health and other public institutions involved in food safety inspection were also involved in the project, recognizing it at regional level in the COMISCA (Council of Health Ministers of Central America). Other International and regional development partners also participated. The involvement of academia was strong in the process of both designing, enabling, and monitoring the training coordination, dissemination and certification process, represented by universities in each of the countries as well as international universities serving as academic guidance partners.

It was planned that the private sector, one of the main indirect beneficiaries of the project, would be involved in receiving courses from the project, however this did not yet take place. The private sector did not participate in the design nor implementation of the project.

2.2 Context

Food inspection systems are used to ensure that food and food production systems meet the necessary requirements to protect consumers from food-borne hazards. Furthermore, mutually recognized food inspection protocols play an essential role in facilitating trade in food products, regionally and internationally, since adequate inspection is a major element in achieving equivalency agreements covering national food safety control systems. Therefore, food inspection is an essential component of regional food safety harmonization processes.

If inspection systems are to yield optimal results, compatible with consumer protection and trade facilitation, both their design and implementation must be based on a series of principles, such as objective risk assessment—appropriate to the circumstances—and the use of risk assessment methodologies consistent with internationally accepted criteria. Modern food inspection systems must be based on process and risk, have to be fit for purpose, and must have clear conformity assessment procedures, all of which are possible provided there are properly trained human resources.

The countries of the Central American region and Dominican Republic have official food inspection systems administered mainly by the ministries of agriculture and the ministries of public health, which are responsible for establishing and enforcing standards. The institutions involved carry out their work via central and regional divisions or units. In some countries, such as Costa Rica¹, Panama², and the Dominican Republic³, other public agencies also have responsibilities in food inspection.

Although the Central America region has made progress with harmonization of food safety regulations at the regional policy level, at the practical level there is a lack of homogeneity between countries, regarding actual food inspection procedures. The diversity of national food inspection regulations has given rise to a wide variety of food inspection instruments and procedures throughout the Central American region. The different approaches are a result of historical, developmental, market orientation and geographic factors – for example Costa Rica as a more developed economy has a more sophisticated approach than Honduras, whereas Belize legislation differs from the rest of the region for historical reasons. El Salvador focuses mainly on imports and domestic market, whereas Dominican Republic has a greater focus on export products. Panama has a less developed agricultural export sector whereas Guatemala as a larger economy has a multi-layer structure. As a result of these differences in interpretation, there is a lack of mutual trust among countries as to the effectiveness of the other countries' food safety controls, something that works against trade facilitation.

¹ National Animal Health Service (SENASA) and the State Phytosanitary Service (SFE) in the Ministry of Agriculture, the National Production Council (CNP), and the Ministry of the Economy.

² National Directorate for Animal Health (DINASA) at the Ministry of Agricultural Development (MIDA), the Ministry of Health, the Plant Health Directorate (DINASAVE), the Food Safety Authority (AUPSA), Authority for the Protection of the Consumer and the Defense of Competitiveness (ACODECO) in the Ministry of Trade and Industry.

³ Ministry of Public Health and Social Welfare. Ministry of Agriculture: Department for Agrifood Safety (DIA) . The Animal Health Division of the General Livestock Directorate (DIGEGA). Ministry of Industry and Trade, and the National Institute for the Protection of Consumer Rights (PROCONSUMIDOR) n

The 8 participating countries are all full Members of the SICA (Central American Integration System), which has the aim to economically integrate the countries in the region and aspires to the expansion of a Customs Union amongst them. Regional harmonization efforts related to food safety objectives have been many and continuous. This work has been undertaken by a “Sanitary and Phytosanitary Measures Round Table” (SPS Table), within the ongoing process leading to the Central American Customs Union (Guatemala, El Salvador, Honduras, Nicaragua, and lately, Panama). The SPS Table has a full agenda comprising such work as development of harmonized technical regulations for processed foods, non-processed foods, fruits, quarantine post operation, etc.⁴ Food inspection, however, has not yet been included in the regional food safety harmonization process.

It is also important to note that the institutions involved in food inspection at national level do not have the resources to train their own inspectors. Most training in the countries is provided by technical cooperation agencies such as FAO, PAHO, OIRSA, and IICA, and focuses on specific issues. Training is also provided under SPS projects financed by the European Union, Spain, the United States, and Japan, but these are not sustained programs⁵.

The food inspectors school, therefore, would contribute an essential component to the entire regional food safety harmonization scheme: food inspectors with the same food safety knowledge baseline, talking the same technical language, inspecting foods using the same modern techniques, and becoming themselves promoters of change regarding food safety in the region. Such a body of inspectors would also provide a receptive audience for further regional capacity building in areas of food safety, and potentially lead to the achievement of equivalency agreements on food safety control systems within the region and even with other commercial partners outside the region.

The professional profile of food inspectors varies enormously in terms of their level of formal training and academic background. Some inspectors have only a high school education while others have some higher education, an undergraduate degree or even a master’s degree. There are veterinarians, agronomists, agro-industrial and food engineers, biologists, chemists and graduates in environmental health, aquaculture and animal husbandry. The ministries of agriculture of all the countries employ mostly veterinarians and agronomists, some of whom have master’s degrees.

2.3 Project Objectives

The project's objective was to improve and harmonise food inspection procedures and protocols in the eight partner countries through a virtual training platform (Regional Virtual Food Inspection School – Escuela Regional Virtual para la Inspección de Alimentos, ERVIA). The project aimed to provide common, baseline technical and attitudinal training for food inspectors in the eight target countries, to allow modernization and mutual recognition of national food inspection systems and thus contribute to the region’s development through trade facilitation and improvement in the health of consumers from healthier, safer foods.

The project had as an overall goal to contribute to the region’s development, through trade facilitation and improvement in the health of consumers from healthier, safer foods. The

⁴ <https://www.sieca.int/index.php/integracion-economica/integracion-economica/libre-comercio/medidas-sanitarias-y-fitosanitarias/>

⁵ <http://internet.sica.int/Paginas/Foros.aspx>. These are PRACAMS (EU), Promoting Food Security and Trade in Central America (USA)

challenge identified was the need for modernization and mutual recognition of national food inspection systems. In order to do this it targeted improving the knowledge, attitude and skills of official inspection personnel.

2.4 Project Logical Framework and Application

The initial proposal included a **Logframe matrix** (see Annex 9) on which the STDF required some additional work before arriving at a final, approved version. The Immediate Objectives (purpose) were re-formulated as they had initially been set out as results rather than objectives.

The expected End-of-project Situation was specified as follows in the Grant Application:

"The creation of a cadre of food inspectors, trained in modern inspection techniques and having an attitude leading to proactive participation in the improvement of food safety in the region, will contribute not only to eliminate or minimize incidents resulting in obstacles to trade, and to overcome the distrust of each country in the food inspection system of its regional partners, but also to continuous modernization and improvement of food safety regulations. Harmonized food inspection procedures across the region will make it easier to advance towards a customs union and positively impact the health of consumers. Furthermore, a modern food inspection and auditing system in the region would go a long way towards eventual equivalence agreements on food safety control systems within the region and called for by the legislation of important trading partners for the region, such as the United States and the European Union.

It is expected that at least 35% (sic) of food inspectors (ca. 800) in the region will have been trained by the school at the end of the project. The final goal of the school is to train every single food inspector in all eight countries, but the school will also be open to private individuals interested in obtaining the diploma, whether on their own or financed by the companies they work for. This is expected to increase several-fold the total number of individuals that the school would train in food inspection."

The Logical Framework appears clearly set out and follows a logical sequence in line with the STDF logframe approval criteria. The indicators included in the table do vary somewhat from the text presented in the final application document text, and they are not set out following "SMART" (Specific, Measurable, Achievable, Realistic and Timebound) criteria as they are not stated as time-bound. Although there is a workplan calendar table presented in Annex 2 of the application, the estimated period for completion needs to be set out in the logframe in order to facilitate clear understanding and follow up.

The Assumptions and Risks are clear and very poignant, as the main Risk identified turned out to be very relevant indeed, despite the preparatory work done beforehand by IICA. This was the risk of "Continued political support from Ministers of Agriculture and Public Health and their technical cadres, from academic and technical institutions involved, and from the private sector".

There are some discrepancies in the text of the application in relation to the logframe⁶. These differences should have been detected in a close review and follow up of the project

⁶ For example:

1. The "Expected End-of-project Situation" states as an objective 35% of regional food inspectors trained, whereas in the log frame table Purpose it is stated as 20%. This

documentation, and pointed out by the implementing organisation, as they now throw some doubt as to the real level of consensus on the figures to be achieved.

The logical framework table was used for the purposes of reporting in the 6 monthly update reports and in the final report, showing progress made with a percentage, and mentioning details on the Sources of Verification used, as well as a “Comments (results and challenges faced)” column showing progress against the Logical Framework. The final report shows everything fulfilled at 100 %, except Activity 2.13 which is marked at 25%. This 100% is correct in the fulfilment of activities, except for the following comments on the version included in the final report:

1. Activities such as 1.5 and 1.7 in the final report do not state the year in which the respective meetings were held, specifically in 1.7 it does not say if the three joint meetings of the Academic Council and International Advisory Group were held or not. Even though these did take place, this shows insufficient lack of attention to detail in the interim and final reports.
2. Activity 1.9 (formation and functioning of the Steering Committee) states 100% compliant, however although it was officially formed, the Steering Committee did not operate – this should be marked as 50% or 75% compliant.
3. Activity 2.13 “Dissemination of news about the course among private sector organizations and invitation to participate” is marked as 25%, however only one brochure was developed, and there is no knowledge of this project in the private sector. Even though a Sustainability Proposal has been prepared (Annex 7), this indicator would be more accurate if it showed around a 10% achievement.
4. Activity 2.14 (Operation of the school on non-project funds) is stated as 100% compliant, however even though a Sustainability Proposal has been prepared, the Indicator has not been achieved, and should be marked as 0%.
5. Activity 3.3, the Activity mentions confirmation of the course fee, however there is no mention of this in the Comments table, nor in any minutes of the meeting.

In the application it is stated that the universities have agreed to “...remain as part of the school set up indefinitely...”. However, the lack of results after the end of the project throw doubts as to their full commitment as expressed.

change was done last minute to account for an updated, increased number of inspectors after carrying out a survey for this purpose.

2. The budget calculation for in-kind benefit also states 35%, though the assumption of number of participants remained similar and is therefore not affecting the total.
3. The Purpose also mentions 200 private sector individuals trained within 5 years of the start of the project – this is an indicator that is not then mentioned in the respective activities.
4. Activity 1.3 in the table mentions that it is envisioned that the University of Costa Rica will retain the permanent Secretariat, however in the section V.15 “Implementation and Management” it is stated that IICA would hold the Secretariat of the school during **and after** implementation of the project.

2.5 Project Implementation and Management

The School involved one university in each of the eight participating countries. The university of Belize dropped its support halfway through, excusing itself as the inspection course was not in English. Belize continued to participate through attendance by officials from Governmental organisations to meetings and training of inspectors who anyway continued to follow the project. This lack of translation into English appears to have been a project design error, as it would have needed to be programmed into the project from the beginning. The universities were entrusted with the task of delivering the training with IICA support, issuing course certificates jointly with the virtual school and supported the roll out of the course in their countries.

The International Advisory Group in charge of curriculum and class material development formed during the pre-project stage was composed of representatives from universities in Europe (Universidad Politécnica de Valencia, Spain), North America (University of Nebraska-Lincoln - UNL, USA; Universidad Nacional Autónoma de Mexico - UNAM), Central America (Universidad de Costa Rica), as well as food safety institutions, national and international, such as the Agencia Santafesina de Seguridad Alimentaria - ASSA, from Argentina. This group was subsequently expanded to include representatives of the Food and Agriculture Organization of the United Nations - FAO, the Pan American Health Organization - PAHO, and the International Regional Organization on Agricultural Health - OIRSA).

The Academic Council consisted of one individual from each participating university and the Technical Consultative Group made up of a representative from each food safety control agency in all eight participating countries.

Ineffective Steering Committee: In the project document, a Steering Committee was formed as the school's top governing body. However due to political changes in the Government Representatives, the group was not functional and it was not possible to organize meetings to discuss the project implementation actions and future steps.

Although during the implementation process the Academic Council and the Technical Consultative Group assumed the Steering Committee's role cooperatively, this dysfunctionality is both symptomatic of the lack of continued prioritization of Food Safety by governments and also one of the reasons for lack of effective support for follow up to the project.

The IICA held the Secretariat of the school while the project was being executed. Once the project was completed, a new structure for ERVIA was agreed to by the Academic Council and the Technical Consultative Group, in which a new Official Technical Committee, an Academic Council and a Secretariat became the Governing bodies. However this theoretical new structure has not materialised and therefore failed to produce concrete results, as universities that have expressed a confirmed interest in writing for continuing the Virtual School (National Agricultural University in Honduras, José Matías Delgado University in El Salvador and UNAN university in Nicaragua) have not yet placed the material on their virtual campuses. Right now, the material is also not accessible on the ERVIA platform.

3 Objectives and Methodology

3.1 Objective

This evaluation verifies reality versus what was envisaged and reported, analysing the project and logframe following a coherent narrative about how the intervention makes particular contribution, analysing how activities are expected to lead to outcomes and impact, and the contextual factors that may influence this. A mix of quantitative and qualitative methods are used, including surveys, e-mail exchanges and interviews with relevant stakeholders. The Evaluator relies on the OECD DAC principles on impartiality and independence, credibility, usefulness and participation of relevant, selected stakeholders.

The IICA website (www.iica.int) houses the ERVIA project. However, IICA is revamping its online training programme and has not yet been able to put the courses back online, due to improvements on the online platform being used, and also as these are available specifically for students that are participating once a new session is run. The evaluation evaluated the materials developed and which have been provided electronically (offline). The plan is still for the Inspector courses to be hosted by those universities that expressed an interest, these being the National Agricultural University in Honduras, José Matías Delgado University in El Salvador and UNAN university in Nicaragua. Meanwhile the Auditor course is being housed on the University of Nebraska website, waiting for the IICA site to be updated for hosting the material again.

The objective of this independent ex-post evaluation was to:

- Verify whether the project achieved the objectives set out in the project document;
- Address key questions related to the project's relevance, effectiveness, efficiency, impact, sustainability and learning and innovation. This included a detailed assessment of project activities and outcomes, including:
 - Designing, setting up and managing the institutional and operational framework for the virtual food inspection school. This includes analysis of the roles and responsibilities of the organizations involved, their respective contributions to design, develop and update/maintain the virtual school, including aspects related to financial and operational sustainability, systems to manage information on students enrolled in the school, etc.
 - Developing and rolling out virtual courses for food safety inspectors and food safety auditors. This included analysis on the content and substance of the courses (where available), communications and outreach about the courses, enrolment, completion (pass) rate, traffic on the platform, downloads, forum exchanges among participants within and between countries, etc.
 - Identify key experiences, good practice and lessons of interest to the beneficiaries of the evaluated project, as well as to STDF Working Group members and development partners more broadly (including for future STDF programme development).

3.2 Evaluability

Some challenges were faced during the evaluation. Reports for the project did not contain a lot of detail on the progress achieved, and records of meetings for example did not contain full

dates (including year), which slowed visualization of the full project storyline. The project ended 2.5 years ago and some of the implementation staff have either retired, moved on or unfortunately, deceased.

The core resource website is not available anymore and is having technical issues during an update of the platform. The evaluator has made a concerted effort to seek out and contact as many relevant stakeholders as was feasible, using online technology including e-mail and SurveyMonkey surveying software.

3.3 Methodology

The international consultant Hugo Hays was selected to conduct the ex-post evaluation of the project. His day-to-day work is carried out in the private sector, he is independent from all the parties concerned and has no conflicts of interests that could affect the objectivity of the evaluation. He has extensive experience in developing and implementing GAP, GMP, HACCP, and has successfully carried out several SPS related assignments and evaluations in the past, for example with the EU, GIZ, PTB and the STDF itself.

The structure and framework for this evaluation is based on the STDF's standard guidelines for the evaluation of projects funded by the STDF and on the OECD-DAC Principles for the Evaluation of Development Assistance.

As per the terms of reference (Annex 6), the objective of this evaluation is to verify whether the project achieved the objectives and outputs set out in the project document in the light of STDF evaluation criteria; and to identify whether the project has achieved any of the STDF higher level objectives:

- Measurable impact on market access;
- Improved domestic/regional SPS situation;
- Reduced Poverty;
- Key lessons learned identified, for the benefit of both recipients and donors and for future STDF program development.

The evaluation of the project is organized based on the STDF standard evaluation criteria of relevance, effectiveness, efficiency, impact, sustainability and lessons learned. The "Key Evaluation Questions" suggested in the STDF Evaluation Guideline were adapted and used to evaluate the project. From the analysis of these criteria some conclusions and recommendations are reached.

The project was evaluated according to the three main output areas, namely:

- Institutional framework of a regional virtual food inspection school
- Virtual course for food safety inspectors
- Virtual course for food safety auditors

The evaluation was conducted as a desk study, interviews with the project organizers and beneficiaries, and through survey feedback, and including the following phases:

3.3.1 Review of project documentation

This included a review of project reports, workshop materials, the project's proposal and action plan, training and dissemination materials, guides, the courses offered on the online platform developed, publications and other related documents, sent to the evaluator by the STDF Secretariat and the project coordinator, Ms. Ana Marisa Cordero of IICA.

3.3.2 Participant Feedback

A survey questionnaire (Annex 1) was developed, based on the standard evaluation criteria. The survey was designed and managed using an online system (“SurveyMonkey.com”), which allowed remote automatic gathering, storage and processing of feedback and assisted analysis and management of responses. The survey was directed at project participants, including beneficiaries and members of the coordination team, using a list supplied by the project. The survey was sent to 794 e-mail addresses supplied by IICA. Of these, 40 were no longer active, and of these, 205 responded and filled out the survey, constituting a 27% response rate.

This is a relatively low response rate, however external surveys are frequently below the 15% mark based on the Evaluator's experience. The responses obtained were very rich in comments and observations, which suggests that those who answered still felt motivated by the project more than 2 years after it had ended. To facilitate responses, the questionnaire was sent in Spanish, according to the stakeholders' mother tongue. The participants from Belize who participated in the project spoke Spanish.

Annex 3 presents the list of all stakeholders who responded to the questionnaire. Many stakeholders participated in more than one of the objectives of the project. The consolidated results of the comments from these surveys are attached in Annex 4.

This survey was conducted between 19th of November and 12th of December 2018. The questionnaire covered different areas of the project and allowed extracting opinions on its relevance, effectiveness, impact, sustainability and lessons learnt. Thanks to the rich and extensive feedback obtained from the survey, interviews were limited to agency implementation staff.

4 Findings and Analysis

The project was well set out, and developed high quality, up to date training materials which were delivered in a modern, attractive and accessible way. IICA served its purpose as coordinator and convenor of the project efficiently, despite internal staff turnover challenges and changing external counterparts in the countries covered by the project. IICA took executive decisions to support the execution of the activities, such as carrying out additional training for professional personnel from the partner universities as virtual tutors and facilitators, and extending the roll out of the project by 1 year, to ensure effective implementation of the project.

The reasoning and motivation to improve knowledge and harmonize on Food Safety inspection and auditing abilities in the region was clear from the beginning, which helped garner strong support on paper from the authorities and academia in the different countries.

The project was oriented at training a proportion of the inspectors and auditors in each of the countries, and at setting up a regional online virtual food inspection school. The project courses would then be taken up by universities in the countries covered, as well as a regional host and interested parties in the private sector.

However, the project has not been as successful as initially envisaged. There was a relatively low proportion of users attending the courses, and others dropped out during the training courses. It has also proven difficult to obtain practical political support due to lack of prioritization of food safety issues for engaging more fully with the Ministries of Agriculture on training for example.

The survey answers evaluate the project, as relating to its relevance, effectiveness, sustainability and impact, as successful and adequate (fully or somewhat). The full consolidated results of this survey are attached in Annex 4.

The following are the evaluation questions elaborated by the project evaluator in cooperation with the STDF Secretariat, which respond to the standard evaluation criteria of relevance, effectiveness, efficiency, impact, sustainability and lessons learnt.

A ratings scale of 1 to 7 is used to gauge the extent by which the project has performed to each question (where applicable), thus:

- | |
|--------------------------------|
| 7 To an Extremely Large Extent |
| 6 To a Very Large Extent |
| 5 To a Large Extent |
| 4 To a Moderate Extent |
| 3 To a Small Extent |
| 2 To a Very Small Extent |
| 1 To an Extremely Small Extent |

4.1 Relevance

Relevance was evaluated in terms of how adequately the project satisfied the food safety inspection needs of the beneficiaries and stakeholders.

How relevant was the subject matter of the virtual courses offered, from a technical perspective?

Rating: 6, Relevant to a very large extent.

The project had as one of the main objectives, to bring up to date the technical knowledge of the public servants who have in recent years been assigned new responsibilities in the area of food safety, to improve public health and competitiveness and facilitate trade, for which strategic modernization was required. With this harmonizing objective in mind, the course material needed to cover concepts from fairly basic to more sophisticated levels. By nature therefore there would be variation in the level of relevance.

Over 80% of stakeholders consulted confirmed that the project activities had been relevant in fulfilling the objectives of the project. Of the two courses, the Inspection training was deemed especially relevant; this may be because the auditing course was only presented to the university representatives in readiness for its roll out but has not yet actually been taught online.

How well did the virtual methodology fit with local needs, compared to other methods?

Rating: 6, the virtual methodology fit to a very large extent.

The virtual methodology was an integral part of the project's proposal, which was to universalize access to standardized training information. However, one of the observations noted was that the target audience of the courses were government official inspectors, who spend a lot of their time in the field visiting enterprises for inspection. It was interesting therefore to note that despite any perceived drawbacks, participants showed a very high approval of the training delivery method, 88%.

The use of video and a human presenter in front of the presentation screen was a valuable addition to the material, creating a personal link in a powerpoint presentation which could otherwise have appeared monotonous and less interesting to follow.

Nevertheless, one in ten participants indicated they would have preferred traditional, classroom training, and similarly 10% said that they would have benefitted from having at least one physical presence meeting. IICA did try to anticipate this type of reaction as much as possible, by dedicating a Virtual Campus Coordinator/Platform Administrator, an online training Curricular Designer, and a Quality verification technician. There were also at least one facilitator and a course tutor available from each university in the participant's country. The focus of these facilitators was very much on how to train using virtual technology.

Local needs were largely met but this varied between countries. The second inspector training period had an increased "single country" grouping of students, to make discussions more specific to the country. Participants were of differing opinion, as some of them expressed the regional composition of the trainings as an advantage, whereas others would have preferred more country specific examples.

Did the course sufficiently cover the subject of inspection and auditing in relation to the national needs?

Rating: 7, covered to an extremely large extent.

Participants were strongly in agreement, with a positive response to this question, with 86% responding affirmatively. As part of the project design, individual country presentations on subjects like legislative and administrative issues specific to each country, had been collected from each university. This created some delays, as Costa Rica, Honduras and Panama were slow to present their material, but this methodology produced good results.

4.2 Effectiveness

For each of the logframe indicators for output and outcomes, to what extent were the project objectives achieved?

This aspect of the project results was analysed mainly on the basis of the project reports as well as feedback from participating stakeholders. In addition, section 2.4 analyses the logframe in more detail. The following were the results quoted by the project as being the output of the project.

Output 1: Institutional framework of a regional virtual food inspection school

- One Academic Council comprised by representatives of seven Universities formed and leading the process.
- One Technical Consultative Group made up of representatives of the governmental sectors with competence in the subject of food inspection (Ministries of Agriculture and Ministries of Health) was formed.
- One sustainability proposal developed to guide and support the sustainability of ERVIA.
- A new organizational structure for ERVIA in place. The University of Costa Rica was chosen as the Acting Secretariat.
- University Jose Matias Delgado (El Salvador), UNAN Leon (Nicaragua) and Universidad Nacional Agrícola (Honduras) sent formal letters to IICA with the objective of developing virtual training initiatives at the country level. *Evaluators note: this has not yet resulted in a new course being offered or available online.*
- One regional network of academic experts on food inspection
- Technical basis to continue working on capacity development and harmonization of inspection mechanisms at the regional and country levels

4.2.1 Extent of Achievements Output 1:

Rating: 4, the institutional framework was set up to a moderate extent, but has not effectively remained in place after the project.

In comparison with the logframe, no Steering Committee is shown in the results, this is because the Steering Committee was named but never functioned. This was due to the rotation of

appointees in the different countries, and lack of prioritization of Food Safety by the SICA Member States.

No Follow-up to date: In general, project participants note that the project has not yet had any visible follow up. The courses have on the whole been taken out of the public domain and are now going to be offered by universities as part of their curricula. Out of the 8 countries in the project, limited continuity is apparent in only three of them.

Continuity of the Regional Virtual School: The structure set up and initially envisaged to continue the coordination of the Regional Virtual School has not really taken off in the two years since the project finished. Assurances were given that this will change in early 2019 when the National Agricultural University in Honduras, José Matías Delgado University in El Salvador and Universidad Nacional Autónoma de Nicaragua, León will host the training material developed by the project, but no concrete dates were provided. Letters of request to IICA were issued by all three universities expressing interest in continuing the course at a national level in July 2016 (Honduras and El Salvador), and November 2016 (Nicaragua).

No access to the Inspection course material: The training material developed for the inspection course is not available online in a structured format through the IICA Virtual Campus, not even for evaluation. This is due to the technical issues that involve migration of the IICA Virtual Campus to a new platform, and that the Universities with which it was agreed to host the material and continue the project have not yet done so.

Involvement of the Private Sector: The project had initially set a target of 200 private sector individuals to be trained within 5 years of the project start date. This has failed to materialize, and the conditions for the private sector to access the courses have not been given. This is a negative point as the private sector was a key component of the sustainability plan to fund the Regional Virtual School – it was envisaged that the inspection course would be charged at US\$ 200 per participant for inspection, and US\$ 500 per auditor, which means an income of between US\$ 40,000 (200 inspectors x 200 USD) and US\$ 100,000 (200 auditors x 500 USD) has been forgone. This is especially galling as there has been a very active market in the last two years in the region for Food Safety related courses from the private sector, in relation to FSMA and FSVP (US Food Safety Modernisation Act) requirements coming into force.

Results Output 2: To create a virtual course for food safety inspectors

- The virtual course on food inspection is available -in Spanish only- on IICA's virtual platform. *Evaluators note: this is currently not available and no access to the materials was given to the evaluator for technical reasons. Some material can be found on Vimeo, that is freely accessible.*
- Forty-three (43) professionals from the Universities were trained as virtual teachers and as academic assistants
- Two instalments of the virtual training were conducted: February 18 to September 18, 2015; and October 20, 2015 to April 26, 2016.
- 936 inspectors from eight countries were enrolled
- 544 inspectors completed courses (note: this is a 58% rate)
- 479 inspectors passed the training (note: this is a 51% rate)
- Honduras: 48; Dominican Republic: 47; El Salvador: 104; Panama: 23; Guatemala: 43; Costa Rica: 144; Belize: 6; Nicaragua: 64
- Seven letters of understanding were signed between IICA and Universities with the objective of supporting the development of the virtual courses in food inspection.

4.2.2 Extent achieved Output 2:

Rating: 5, the course was created to a large extent, though it was not translated into English.

Key aspects of the success of the inspector training component was the methodical, logical and visual construction of the courses, and assignment of recognized experts to each of the module.

The project has formed an excellent base from which to go into further detail for specific industries, processes and supply chain challenges related to Food Safety, as well as other SPS subjects.

Feedback from participants suggests that the inspectors trained gained the skills obtained and have applied it so that practical procedures within countries has become more harmonized as a result. The regional forum discussions during the inspector training course (Technical queries, Social fora) have contributed towards a standardized, recognized interpretation of food safety in the region.

However, the impact of the project has been reduced by the relatively low proportion of regional SPS inspectors who actually followed the courses developed. The project had initially aimed at training 35% of the inspectorate (text in the original application), then lowered the expectation to 20% (final application logframe) or 25% (project implementation documents) in line with an increased number of inspectors identified. Unfortunately, the level of inspectors trained overall was below this mark and instead of the 800 plus initially envisaged, only 479 inspectors were trained, with a big variation by country. This ranged from 7% of inspectors in Panama, to 26% in Costa Rica, with an average of 15% (except for Guatemala which due to a different definition criteria, presented only 64 inspectors in total, out of which 67% were trained successfully. Even in the countries where there was a stronger enrolment initially, there was a high dropout rate after the first two modules. This low proportion shows lower value for money as the cost of training each certified trainee is effectively nearly doubled. It also considerably lowers the value of in-kind contribution that the project budgeted for initially.

A table showing the number of available inspectors, and the number trained, represents the results more graphically:



No English Inspector Course: Unfortunately, the inspector course was not translated into English, which is necessary for the full regional inclusivity as Belize uses English and not Spanish as its official language. This appears to have been a deciding factor behind the non-adherence to the project by Belize.

Output 3: Virtual course for food safety auditors in place

- One virtual training on food auditing (available in English and Spanish in 2017) available for use by university partners.

4.2.3 Extent achieved Output 3:

Rating: 6, the auditor course was set up to a very large extent.

This course material was verified by the evaluator and was found to be of very high quality and comprehensiveness. The material was produced in English and Spanish, has uniformity as expected, and is available for application. It is not however yet available on the learning platform of IICA nor any of the Universities.

One small error detected was that GlobalGAP was excluded from the GFSI approved standards.

How effective was the project in increasing knowledge on the technical subjects related to inspection/auditing?

Rating: 6, the knowledge increased to a very large extent.

Knowledge increase as a concept, comes through as one of the main outputs of the courses, meaning that the information provided was effective in enriching the participant's skillset.

62% of participants stated that their technical knowledge had "increased a great deal", and 36% stated that their knowledge had increased overall. Comments from participants highlighted that microbiological contamination topics was the most significant in bringing new information to the participants and where knowledge had increased the most. Another aspect noted was the improved skillset in managing online training and related ITC aspects.

After the project, is there a more harmonised level of food inspection across the Central American and Dominican Republic region?

Rating: 5, to a large extent there is a more harmonised level of food inspection.

A better common understanding of Food Safety knowledge has definitely been achieved amongst those persons exposed to the training, due to the nature of the training having been done simultaneously and using the same materials. This conclusion is reinforced by the participants themselves, who rate the increase in harmonization at 77%. The decision during the second phase of inspector training to move to having more country-specific groups instead of mixing participants from different countries, reduced the potential for cross-cutting exchanges and experiences between participants.

The key issue is whether these trained inspectors and auditors will be able to in turn share and disseminate the knowledge gained during the course. Throughout the survey a lack of institutional support for increased training has been expressed, suggesting that cascading out to other colleagues of the training will not necessarily occur. This would be the ideal way for course participants to transmit information, via either on-site face-to-face trainings or “homework” online training mechanisms set up within the national or institutional cadres of inspectors. It will definitely not occur until the online materials become available again online.

What were the major factors influencing the achievement or non-achievement of the project objectives, outcomes and outputs?

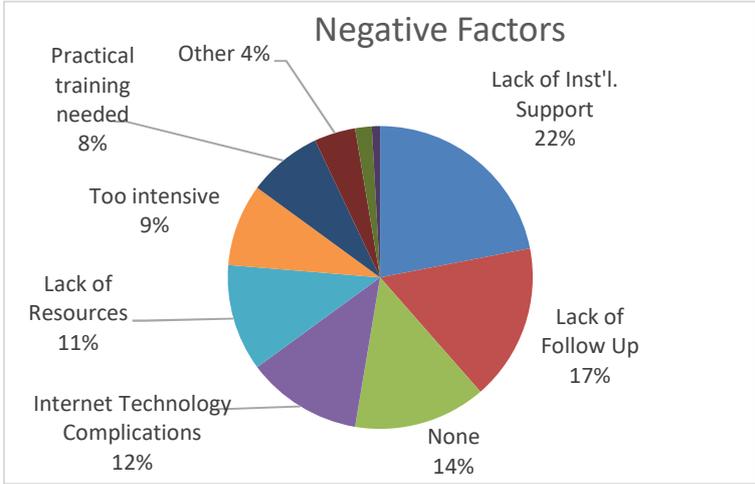
A wide range of factors was identified, which can broadly be separated into positive and negative factors.

Over a quarter of respondents indicated that substantial motivation was gained through increased knowledge of the subject, including scientific reasoning behind the subjects, and updating on latest technology. This suggests a great thirst for knowledge exists that is going unfulfilled in the region. Nearly one in four respondents highlighted the accessibility of the course and the use of online, virtual technology as a key element of the success of the project. Other points mentioned included Institutional Support at governmental and IICA level. The organization of the course was highly praised, as well as the excellence of the trainers.

In terms of negative factors mentioned, these were more varied. 22% of comments mentioned lack of Institutional Support for example. This included lack of interest by the authorities, lack of policies (national and regional), bureaucracy, political interference, lack of time provided for participants, lack of internet infrastructure. Another 17% cited lack of follow up, this included tardy response by some trainers to queries, difficulties in presenting technical questions and getting answers. It appears there were some problems with issuing certificates.

Certificate Issuance: The certificates of attendance were to be issued by the national universities. This led to some uncertainty and delay, some participants claiming they never received the certificates. This is critical and does not fulfil the objective of building regional trust in a harmonized way.

An important message is that there is an expectation that the courses can do much more, widening the scope to include more inspectors and auditors, some complaints were expressed that the training was not made available in-country to all potential candidates – this explains in part the reduced number of inspectors enrolled compared to the total available. 14% of participants said they saw absolutely no negative factors, which is reassuring.



Other areas for improvement included access to the platform either due to technical issues or slow/lack of internet, and lack of time/too intense. Participants pointed out there was a heavy weekly workload, which was difficult to juggle when travelling during inspections and with precarious internet connections. A minority of 8% made a point of saying that the online course needs backing up with some practical, face to face training, to allow for less static, more dynamic discussion and query resolution, as well as to get to know participants and tutors in person.

More contact with Trainers: There was an expressed need for at least some face-to-face interaction with other participants and trainers. Although difficult to do due to the amount of people on the course, with the local tutors based in each country this would not have been so difficult. A mechanism for face-to-face introductions would have been useful, especially for the majority of participants that had not been enrolled before on online courses. It is expected of trainers to attend their online class on a daily basis, and respond to student questions expeditiously.

To what extent were horizontal issues (such as gender and environment) addressed in the project?

Rating: 5, these issues were covered to a large extent.

The project, by its very nature of being online and providing equal access to all those enrolled, had by design built-in equality and reduced environmental impact. Gender balance was achieved at the level of trainers, who in fact numbered more women than men. As an example, the participants who responded were almost equally split men and women, 54% and 46% respectively.

Impact on the environment was reduced through not having printed material, saving on ink and paper, and a huge reduction in travel-related impact through CO₂ emissions for example.

Regarding the course materials, some participants would have liked the food safety courses to point out environmental measures linked to food production. An important side impact of using fewer toxic chemicals and reducing contamination risks by design is that less chemicals get distributed into the environment in the first place, reducing impact on biodiversity as well as on human health.

4.3 Efficiency

The project was able to deliver concrete results despite being hampered by lack of continuity in members of the different project structures. For example, for Output 1 (Institutional framework of a regional virtual food inspection school), the Steering Committee was supposed to constitute the school's major government body, but due to the political changes in the Government Representatives, the group was not functional and it was not possible to organize meetings to discuss the project implementation actions and future steps. Participation in the Technical Consultative Group from the government representatives from the Food Safety Control agencies was also not steady throughout the project due to changes in country governments.

The Academic Council on the other hand was very supportive and key in pushing the project forward to materialize the objectives. The personnel within IICA did change also, but thanks to professional dedication there was no major disruption to the project. The project was highly efficient in terms of having many virtual meetings, which reduced the need for frequent travel.

Were the activities and outputs delivered according to the project document (i.e. on time and within the budget)?

Rating: 6 & 5, to a very large extent within budget, but 5 to a large extent regarding timing.

The project was delivered within budget. A one-year no-cost (to STDF) extension requested by IICA in September 2014, based on the need to give time for a series of activities not contemplated originally, in order to train the professional personnel of the counterpart universities as virtual tutors and facilitators to ensure the effective implementation of the project. Also in early 2014 half the countries had governmental level changes that meant changes amongst the management staff of the official agricultural health and food safety services. For these reasons the start of the training was delayed until February 2015, and since the courses lasted six months and there were two sets of cohorts, the project was extended for one year with full approval by STDF.

Motivation of Academic Tutors and Course Facilitators: US\$ 150 were provided to the University designated staff for each course participant enrolled. However, this was paid up front and not based on any performance evaluation of the work done, nor was it adapted to show the big reduction in participants as the course progressed. It appears that this support structure could have been more closely monitored, as some participants complained of lack of support.

The inspector course was split into two halves for facilitating implementation over a larger number of inspectors. IICA paid for some additional activities such as training of trainers on pedagogy and “how to train”, as well as contracting a technological assistant to take care of the IT support needs.

Perception from stakeholders reinforces this idea, as the feedback is overwhelmingly showing the project remained on track throughout.

Use of financial resources: to the extent possible with the limited financial information provided (i.e. tendering data on the IT setups for the country videoconferencing equipment was not specified for. Payments to university tutors and facilitators is not clear, the initial payment is mentioned but not the follow up one), the assigned resources appear to have been fully and efficiently used. Additional financial resources were provided by IICA itself to support the platform development and rollout, as well as taking on a one-year extension with no additional cost to the donor. Additional efficiencies might have been gained by connecting performance rating to the amount given per tutor related to whether the cohort they supervised dropped out or not.

Efficient Implementation by IICA: The management of the project was efficiently carried out, despite several unforeseen events that did not favour this, such as the untimely illness and death of the online campus coordinator (Mrs. Lillian Chang) at IICA, and the retirement of the Head of Agricultural Health and Food Safety at IICA Headquarters in Costa Rica (Mr. Ricardo Molins). The project also adapted after the first cohort of trainees, in line with continuous improvement principles and feedback obtained from the participants. The coordinating organization IICA invested own funds (approximately 200,000 USD) over and above its initial project commitment, in providing technical staff and developing additional components that were essential to the project’s continued development.

Use of human resources: efficiency was built in as the national services and universities provided staff ad-honorem to support the participants, totalling an estimated 42,660 USD (based on application calculation for 6 months and multiplied by the two 6 month courses)

What changes and risks occurred during project implementation, and how was the project able to adapt to these changes and manage risks?

Lack of policy prioritisation on Food Safety: This meant that the project's main risk was realized. The project was noted and supported regionally by both the CAC (Consejo de Agricultura Centroamericano/ Central American Agriculture Council) and COMISCA (Consejo de Ministros de Salud de Centroamérica/ Council of Health Ministers of Central America) as expressed in meetings prior to the project commencement by Ministers of Agriculture and of Health respectively. However, there was no follow up by either body recommending implementation of mandatory food safety training for inspectors at all levels (customs, ministries of agriculture, public health and other such as commerce, as applicable, and municipalities), as had been assumed by the project, nor practical regional support for a continuation of the Regional Virtual School.

The project implementation depended on coordination between several stakeholders that included country member government officials, such as the Technical Group and the Steering Committee. This lack of progress, coordination and support is partly due to the unclear vision of the countries and the SICA (Sistema de Integración Centroamericana/ Central American Integration System) administrative bodies in building a consolidated, streamlined Food Safety Agency at both regional or national levels, that could address food safety from a whole supply chain perspective.

It's possible that if the private sector and consumers had had a stronger lobby towards trade, health and agriculture government officials in the Member States, government officials could have been more responsive and would have prioritised Food Safety issues more.

1. **Turnover of government officials.** Continuous rotation of persons in those committees created issues of continuity. Commitment from government bodies could have been far greater, which would have multiplied the harmonizing and professionalizing effect of the project. This was the most challenging element and disrupted the Steering Committee, which never functioned. The Academic and Advisory Groups took the place of the Steering Committee.
2. **More inspectors than anticipated.** Training of inspectors was split into two groups, and an additional year was requested for the project. IICA dedicated additional staff to the project at no additional cost.
3. **Lack of participation from University of Belize due to language.** This was unfortunately not solvable as the translation into English of the inspector course was not done.
4. **Delay in involving the private sector.** Lack of support from Government again was the main cause of this. Plans were set out in the Sustainability proposal, which if put into action will target the private sector.

Was the project a cost-effective contribution to addressing the needs of the beneficiaries?

Rating: 5, the project did so to a large extent.

75% of participants agree that this project adequately met their needs. However, some important points for improvement include the issue of appointment of students who were not really committed, and not all available positions were filled. Another claim is that there was a need for greater exchange of information between the participants. Furthermore, greater follow up to the trainings was suggested, including practical field visits which were expected in order to apply the knowledge gained.

The fact that the project had a heavy online/virtual component makes it inherently cost effective, in that the participants did not need to travel to take the courses. The reduced number of inspectors trained, effectively increases the cost per inspector of the course. The fact that the courses and the virtual platform have already been developed facilitate the ease of replication of the course, however the lack of clear leadership after the course raises questions about the sustainability, which impacts on the value for money of the initial investment.

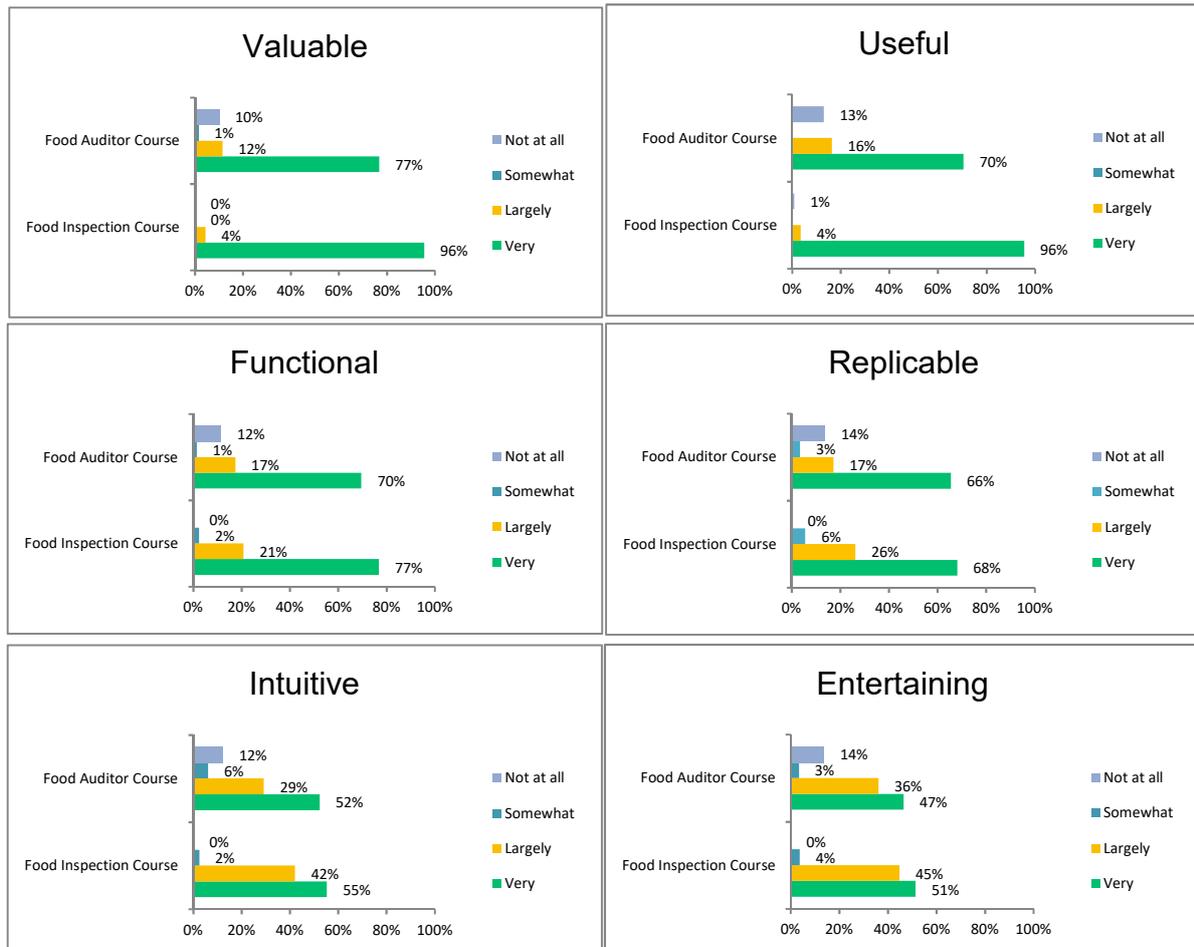
Base-line Evaluation: The lack of an initial baseline testing of participants does not provide a counter model that would have allowed better understanding of progress in knowledge increase by participants. It was mentioned that participants (ideally from all countries) needed to take a minimum knowledge course organized by the INA (Instituto Nacional de Aprendizaje, Costa Rica), but this was not confirmed. Nevertheless, statements from participants show strong progress on Food Safety practical and **theoretical knowledge**.

4.4 Impact

To what extent did participants rate the online training as a valuable, workable, user-friendly, engaging, useful and replicable system, that is worthwhile replicating to other regions?

Rating: 6, to a very large extent.

The following charts cover both the inspector course, which was widespread and took place over two 6 month periods, and the auditor course, which was only presented to the universities and coordinating bodies of the project.



Participants ranked the courses as “very” Valuable, Useful, Functional, Replicable, Intuitive and Entertaining, with these descriptive adjectives ranked in decreasing order. Although the Intuitiveness and Entertainment value were ranked least descriptive of the courses, there was still strong consensus that these terms still “very”, or “largely” described these product outputs as such.

These results show how the approval rating of the courses was universally high. This lays strong foundations for the courses and demonstrates the thirst for this kind of information, as well as

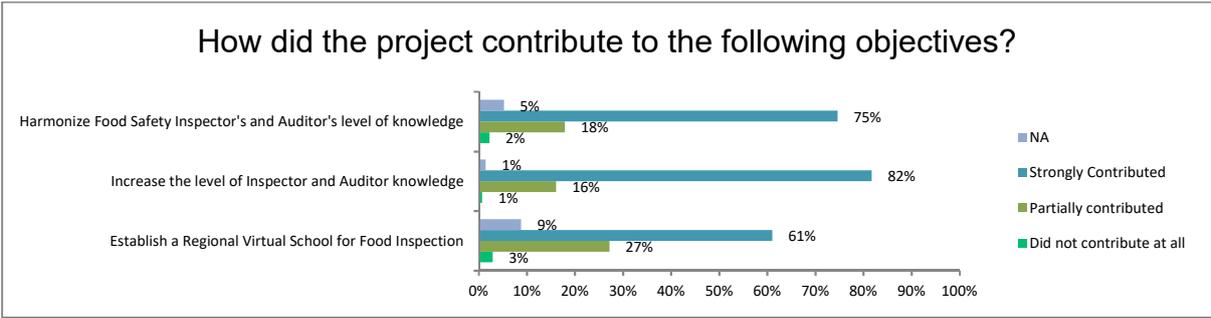
the fact that they were very well thought out and instilled strong following amongst the participants.

No Base-line Evaluation: The lack of an initial baseline testing of participants does not provide a counter model that would have allowed better understanding of progress in knowledge increase by participants. It was mentioned that participants (ideally from all countries) needed to take a minimum knowledge course organized by the INA (Instituto Nacional de Aprendizaje, Costa Rica), but this was not confirmed. Nevertheless, statements from participants show strong progress on Food Safety practical and **theoretical knowledge**.

Has the project resulted in a positive, measurable impact on market access, improved domestic and regional SPS situations, and if so, how and which?

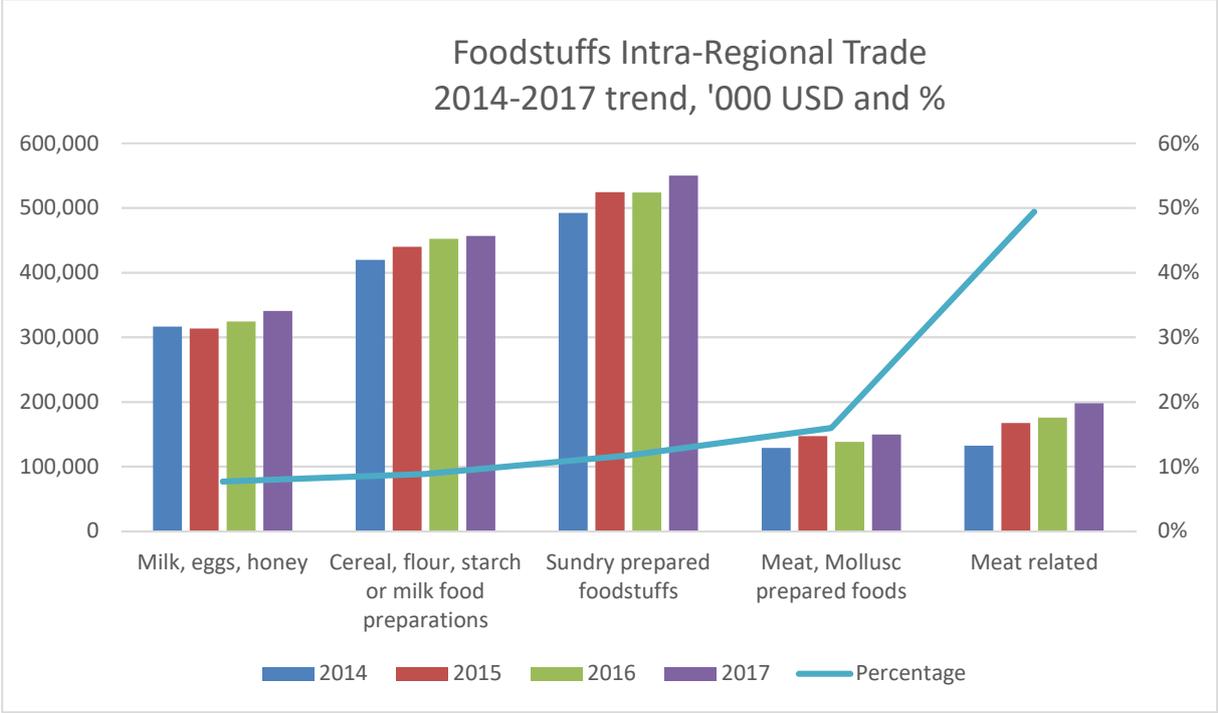
Rating: 6, to a large extent.

Within the context of the project, the most positive and measurable impact was the level of satisfaction by the project participants, and the increased knowledge and harmonization of inspection and auditing criteria at national and regional level. The setting up of the regional school is however not yet a reality.



The performance of Central American countries in intra-regional trade shows that the main intra-regional exporters are, in this order: Guatemala, El Salvador and Costa Rica, at a considerable distance from Honduras and Nicaragua. In terms of intra-regional imports, the list has the following order: Honduras, El Salvador, Guatemala and Nicaragua. El Salvador is the country where the regional market is more important, given its relative participation (more than 40% of its exports), followed by Guatemala. Costa Rica has the lower percentage (less than 15%). Costa Rica and Guatemala show regularly a positive surplus in intra-regional trade.

In terms of Intra-regional trade in foodstuffs, the trend is clearly for greater integration, as can be seen from the following graph taken from the SIECA Sistema de Estadísticas de Comercio⁷ of the top 10 food exports from 2014 to 2017. The graph shows an increase in intra-regional trade for the top growth sub-sectors, ranging from 9% growth in milk, eggs and honey, to 49% in meat related products.



This increase in trade cannot be linked unequivocally to the developments of this project, as the effect of better trained and harmonised inspectors is a longer term one. However, the data does show that the region’s trade in foodstuffs is increasing, and underlines the growing importance of harmonised approaches to food safety especially in more sophisticated types of products that are prepared and animal products, which have a requirement for more assiduous following of food safety protocols.

Has the project contributed at all to equivalency agreement processes, or economic integration in the region (i.e. in the Central American Customs Union)?

Rating: 3, to a small extent.

Undoubtedly systems that are more attuned to each other will be generating more confidence on control procedures applied at trading partner level. During and after the term of the project, the “northern triangle customs union” was constituted and moved forward significantly, between Guatemala and Honduras, and then incorporating El Salvador⁸. Panama and Nicaragua have also signed up to form part of the Customs Union and are progressing with this aim. However as mentioned before, at a regional level the CAC and COMISCO bodies within the

⁷ <http://www.sec.sieca.int>

⁸ https://www.centralamericadata.com/en/search?q1=content_en_le:%22Central+American+Customs+Union%22

SICA merely acknowledged the project and its results, but did not act to regulate the need for food safety inspectors in the region.

Is the platform developed being used for other courses?

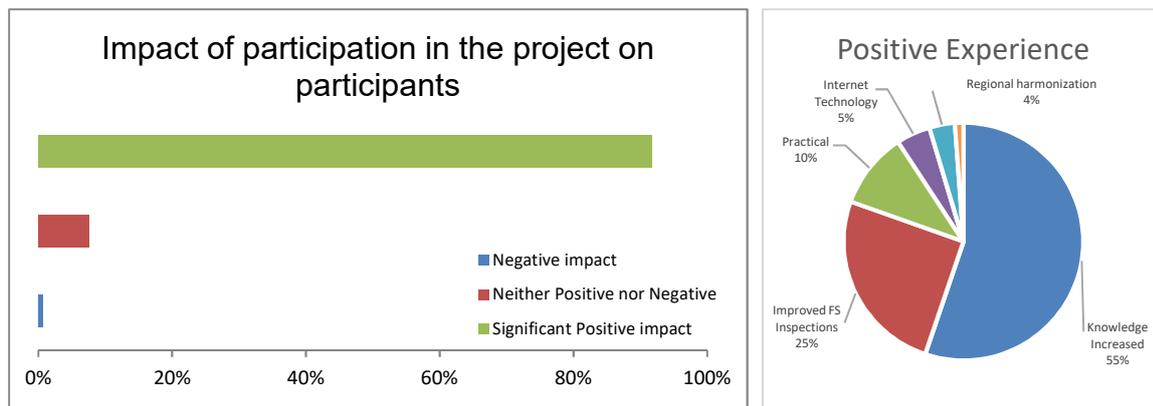
Rating: 5, to a large extent.

The platform at IICA pre-dated the launch of the ERVIA project, therefore this was one of the projects that made better use of existing technology. Experience was gained by the team during the development of the course, which served to improve performance of the platform and aide participants in making better use of the system.

The ERVIA experience served as input to the FeedLatina STDF Project (Regulatory Harmonization and Feed Safety in Latin America and the Caribbean) carried out in 2016, where it served as the basis for the design of the virtual courses in GMP and HACCP for animal feed. The objective of the project was to enhance technical capacity at the industry and regulatory levels in the region through training on Regulatory Affairs, Good Manufacturing Practices, HACCP, Good Laboratory Practices and other related topics.

Was there any real positive impact on the participants, resulting from the project?

Rating: 7, to an extremely large extent.



An overwhelmingly positive impact resulted from the project on the participants, as can be seen from their responses.

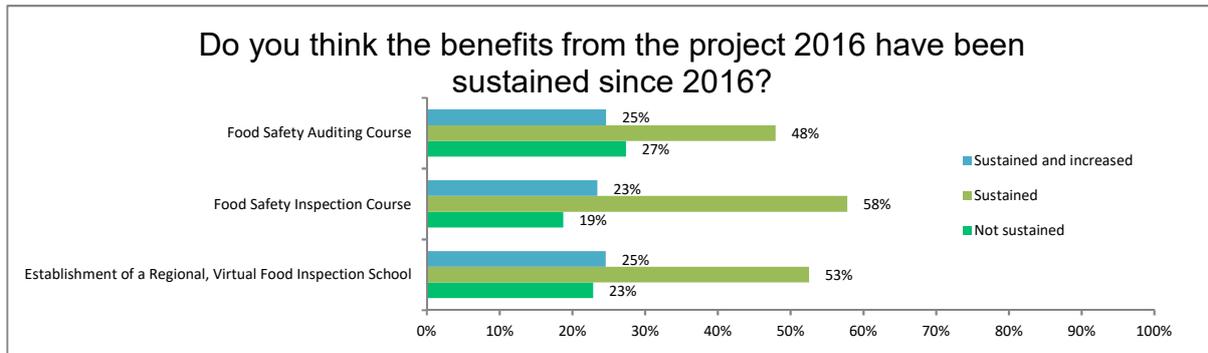
As mentioned before, the biggest impact has been the substantial increase in knowledge, and second in importance was the Improvement in carrying out of Food Safety Inspections.

As an example from one of the coordination team, some sample comments are attached in Annex 8.

4.5 Sustainability

To what extent will the benefits of the project continue after the end of STDF funding, and what still needs to be done to support this?

Rating: 4, to a moderate extent. The lack of perceived sustainability of the project is one of the weaker points noted by stakeholders that participated in the project.

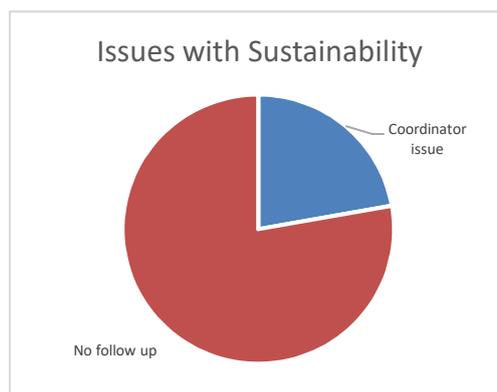


Although around 3 in every 4 stakeholders stated that in their opinion the project had either had its results “sustained”, or “sustained and increased”, one quarter of all participants stated that the benefits of the project had not been sustained. The complaint that came through the most was that there had been “no follow up”, and that the Virtual School had never materialized as expected.

However, as one participant pointed out *“The material that was presented during the courses contained modern concepts, steps to follow and techniques, that will continue to apply for many years going forward, enriched by the skills and knowledge that each person acquires in the field in which they specialize.”*

Do the recipients of the project have the necessary capacity to sustain the results?

Rating: 4, to a moderate extent.



This question raised several areas for improvement regarding the follow up. Comments included the lack of follow up during and after the course, such as lack of response to participant technical questions, and the fact that some coordinators were not from the food sector. Another comment mentioned that the coordinators needed more institutional support in order to increase

the sustainability of the virtual school. Another comment that came through is that the courses need continuous follow up, to update on new findings, knowledge and techniques.

What follow-up activities, if any, are planned and/or required to sustain these results over time?

Follow up activities were noted related both to the virtual school and also to the activities carried out by participants in their day to day work.

A sustainability proposal was drawn up at the last project meeting, with an “Official Technical Committee”, however the results proposed have not yet materialised. There are agreements in place since 2016 for transferring the Virtual School information to the universities of UNAN and Universidad Nacional de Agricultura in Nicaragua and Honduras respectively, José Matías Delgado University in El Salvador and to the national coordinating body within the UCR university in Costa Rica.

Did the project build in strategies for continuing the activities financed by the project?

Rating: 4, to a moderate extent.

The project developed a Sustainability proposal which described on paper is properly oriented, however there have not yet been any material results, more than two years after the project finalized.

Some University representatives (National Agricultural University in Honduras, José Matías Delgado University in El Salvador and Universidad Nacional Autónoma de Nicaragua, León,), mentioned their interest to continue working in the initiative not only at the regional level but also at the national level as a way to improve the technical performance of the inspectors based on the country's situation.

The sustainability proposal included:

- Universities and Technical Advisory Group coordinating actions
- Universities assumed rotating coordination for two years and work on the design of an administrative proposal
- University of Costa Rica assumes interim coordination
- IICA technical collaborator
- Discussion with governments and alternative universities for the sustainability of the course at the local and regional level
- Openness to the private sector
- Identification of strategic partners
- Identification of other contributions in the process

It was suggested by stakeholders was that the ERVIA School should be established by law at the regional level, and this would make the School a much stronger and recognized entity.

What are the major factors which influenced sustainability of the project?

Lack of follow up activities was noted as the main factor affecting sustainability of the project benefits. This is clearly linked with lack of support from governmental bodies both nationally and regionally.

The universities selected have different levels of development of their Virtual Campuses. These are:

Costa Rica: UCR-CITA, *virtual campus*: <http://www.cita.ucr.ac.cr/>

Salvador: Universidad Dr. José Matías Delgado, *virtual campus*: <http://aulasvirtuales.matiasvirtual.net>

Guatemala: Universidad Rafael Landívar, *virtual campus*: <http://principal.url.edu.gt/index.php/academia/departamento-de-educacion-virtual>

Nicaragua: Universidad Nacional Autónoma de Nicaragua, León <https://www.unanleon.edu.ni/>. Related *online campus*: UALN <https://www.ualn.edu.ni>

Honduras: Universidad Nacional de Agricultura, *virtual campus*: <http://181.210.13.244:8081/moodle/>

Panama: Universidad de Panamá, *virtual campus*: <https://upanama.up.ac.pa/>
<http://campusvirtual.up.ac.pa/>

Dominican Republic: Universidad ISA (no virtual campus): <https://www.isa.edu.do/en>

IICA virtual Campus: <http://campus.iica.int/course/index.php?categoryid=19>

Free access to ERVIA inspector course videos on Vimeo, but in a non-structured fashion: <https://vimeo.com/channels/ervia/page:1>

The evaluator visited each site to verify that the ERVIA material is not currently available on any of them, as of December 2018.

Was sustainability (including follow-up activities, scaling up and dissemination of results) adequately considered at the project design phase and throughout the project?

Rating: 3, to a small extent.

Feedback from participants validated the project's impact, mainly from the point of view that much of the subject matter covered has the same basic science behind it and most of the modules do not vary so much over the medium term. However, in order to keep the course up to date there is a need for continuous improvement and tweaking of the material. From the perspective of increasing and maintaining impact, the project has had a weakness in handing over to national/regional organizations, as evidenced by the fact that there are as yet no follow up training activities planned or in execution.

The absence of a binding mechanism to make participants commit and comply with the training in countries like Honduras, Panama, Nicaragua, El Salvador and Dominican Republic were raised by the Academic Council representatives, as one of the main reasons why members dropped out of the training.

IICA has stated that it hopes to have between January and February 2019 the courses available again on the platform in order for them to be offered for training of more national inspectors and for training of internal inspectors and auditors the private sector, and that the initiative will

be presented to other countries to determine if there is interest in implementing the Regional Virtual School.

The lack of involvement of the private sector is a weakness in the project. It could have been possible to set up a “train the trainer” system whereby qualified individuals could have taken the course and then disseminated the information that has been through a process of benchmarking at a regional level. Private sector trainers would then be available on the market to spread the knowledge either within the private sector food production businesses or back to the public sector in customized trainings. The private sector, especially the businesses that are export oriented, has a high demand for professional inspection and compliance training, especially online training which does not involve lengthy and expensive travel logistics. Official courses are not available currently, and producers are required by FSMA rules to undergo a training on preventive food safety, with at least one competent individual per site. The FDA has endorsed a training structure, the Food Safety Preventive Controls Alliance⁹, which could possibly have engaged with the ERVIA in order to facilitate businesses in obtaining their qualification in a cheaper manner (FSPCA endorsed courses are priced at around 600 USD each) – this would have been a good way to monetise the virtual school and maintain its sustainability.

Sustainability is a challenge because once the project is finished, everyone returns to their activities. The counterparts expect that IICA will continue to have the same role and they also forget that they are an important actor in sustainability that implies commitment and technical and financial resources (Government, Universities).

The following finding from the Evaluation of EU’s Cooperation with Central America¹⁰ from 2015 shows that the lack of political will at regional level has already in the past hampered the sustainability of another regional school (ECAT):

The Escuela Centroamericana Aduanera y Tributaria (ECAT), created in Honduras with the support of the EU successfully trained 5,000 people (civil servants and private sector) over the course of three years. The seminars, diplomas, technical assistance and internships helped to create a large network of alumni that allows networking and the exchange of experiences and ideas among ECAT graduates. However, the EU and its partners were not able to ensure the sustainability of the school, nor did the corresponding programme have clear plans for an exit and handover strategy of the EU. Consequently, ECAT was no longer operating at the time of this evaluation.

In 2012, SIECA elaborated a plan for a new “Centro de Estudios de la Integración Económica” (CEIE). Taiwan offered 2.2 million US\$ for its construction, but SIECA is still looking for the financial support needed for its operational costs. However, ultimately, training alone will not be sufficient to remove the remaining non-tariff barriers. The slow pace in addressing this more fundamental challenge is for the most part not due to technical issues, but to bureaucratic interests of ...administrations, protectionism and insufficient political will”.

⁹ <https://www.fda.gov/food/guidanceregulation/fsma/ucm284406.htm>

¹⁰ https://ec.europa.eu/europeaid/sites/devco/files/evaluation-central-america-report-volume1_en.pdf

5 Conclusions and Recommendations

5.1 Conclusions

The **main takeaways** most strongly expressed from feedback by project stakeholders include:

1. The courses were highly valued but expectations have been that this was a first step that would evolve into a platform that carried other courses on related subjects such as risk analysis and monitoring, and that would delve more into national specificities that were not addressed in the generic, regional courses.
2. Stakeholders consulted universally approve of the project's outcome, and clamour for a follow up phase, as there is still a great need for further dissemination of inspection techniques and knowledge.
3. The high value of essential, background and cutting-edge knowledge gained on some of the more technical food safety aspects, especially the microbiological tutorials.
4. The recognition that the project did contribute strongly to harmonizing criteria amongst participants, who have expressed that their methods of inspection have been updated and based on the new-found knowledge.
5. The lack of institutional support towards Food Safety as a priority issue, for most countries in the region. This is related to the lack of awareness by the society at large, and by political leaders in particular, who rotate within the institutions and did not highly commit their participation to the project. The low signing up rate of inspectors and the high drop out rate are also indicative of how bringing inspector/auditor knowledge up to date is perceived as not a priority.
6. The methodology of the course was quite intense, but pedagogically well balanced, with clear information and a stimulating modality combination. A small minority of participants did struggle with time management and study expectations. A small minority of participants complained that they did not receive their end of course diplomas.
7. National contact points for the online training in some countries could have been more proactive in providing local technical support for operating the platform, and clarifying local interpretation queries to participants.
8. The selection process for participants on the course was not transparently clear to all stakeholders. The perception was that some participants were not interested in the course and that others who would have benefited more were excluded.
9. The project finished without an established, visible continuity plan rollout and this is a disappointment which appears to have baffled some survey respondents, who see the need for a continued regional management of the project rather than it being "taken over" by nationally based universities. The most repeated request during the evaluation has been the need for follow up, for the courses to be repeated, and for the Virtual School to promote itself and take action on the objectives of regional harmonization of inspection/auditing training in Food Safety.

The main objective for this project, which was to bring inspectors' knowledge up to date with modern inspection concepts and methodology, still remains crucially important for this and other regions across the world. The onus for compliance now lies squarely with the private sector, who must apply preventive controls and systems that demonstrate compliance upon external verification. The training of inspectors is a crucial step in bringing harmonized criteria out into the field and to take regional integration, SPS harmonization and increased trade facilitation out of the regulatory documents and into practice.

The region is at least on paper committed to increasing Food Safety harmonization and implementing a strong Regional Integration Agenda. This process is however not moving forward at the expected rate of progress. This project showed that it is possible, feasible and desirable to bring together in one place the resources related to Inspection and Auditing knowledge and experience across the region. Impact from the courses going forward depends on several elements:

1. How well the participants in the courses transmit the concepts gained to their colleagues and other stakeholders.
2. The continued dissemination of knowledge to an increasingly wider group of stakeholders, in order to maintain coherence and root any discrepancies and discussions in scientific reasoning.
3. The capacity to coordinate updates that will keep participants up to date with food safety developments in the sector and in the region.
4. Continued institutional support for the industry, academia and the public sector to work together, adhere to and apply a streamlined, practical and rigorous approach to Food Safety Inspection and Auditing, both official and self-regulated.

In view of the review of documentation, results seen during the evaluator's visit and from a majority of the respondents to the surveys, overall the project was successful in answering the needs of the beneficiaries, and addressing the needs, especially of the public sector food inspectors.

The main conclusions are set out below.

Modernisation and Benchmarking: The project successfully aligned participating inspectors with modern inspection principles and techniques, many participants were thankful for the clear lessons and objective guidance provided by the course. The supply chain has also benefited thanks to the wider sharing of clear, science-based knowledge that addresses practical aspects of food inspections.

Successes: This project was successful in setting up a well-founded, regional food safety training course, and in training a sizeable number of public sector inspectors. It has been able to test and demonstrate that this can be done on a regional, multi-country level, and has served up valuable lessons in how to go about doing so.

Sustainability: The project has failed so far to leave behind a functioning regional virtual school that can continue the work into the near future. The course material is currently not being used (though it may be in the near future), and there is a crucial lack of political support to carry

the concept forward. Now that this online training platform was successfully established and gained traction amongst the region's inspectors, the perception is that no longer having it, is a backwards step.

Weak support: Although the project obtained statements of commitment from the national and regional governance bodies, this was not enough to carry the necessary support forward. It remains to be seen whether this support can be reinforced going forward, however awareness of food safety as a priority at policy maker level is worryingly lacking.

National before Regional: One of the conclusions from the project is that there is a need to prioritize the harmonization of food safety at national level first, focusing on the particular needs of each country, related to the level of sophistication of the different national food safety inspection structures.

Food Safety Obligation: The fact that HACCP and GMPs are not universally enforced for existing food and feed producers trading within country borders and in the central American region. This creates a weak motivation for the private sector to follow awareness training related to Food Safety. Therefore, regulation is a necessary step to bring the region into compliance with international obligations and protect its population from food borne illnesses. This would generate a stronger regional drive towards food safety.

Private Sector left out: The lack of involvement of the private sector is a weakness in the project. A potential ally that the project did not exploit at all was the export oriented private sector. Exporters to demanding markets are already complying with highly sophisticated Food Safety requirements, and hold a great deal of knowledge already on implementation and state of the art mechanisms for applying food safety measures, including internal audits, monitoring, reporting, etc.

No private sector individuals were trained on the inspector courses. This reduces the practicality of inspectors' training, which became mostly theoretical. This also means that although the knowledge provided to government institution officials was very beneficial, the principle of self-regulation and demonstration of compliance by the market participants has not been reinforced.

Follow Through Training: The process for cascading the knowledge and techniques gained in this course to all other relevant persons in each country is not clearly set out going forward. The perception is that the further dissemination of the knowledge to public institutions was not contemplated in the project design other than leaving it to the market forces by offering it to universities in the region.

Duplication and Value for Money: There already exists material oriented towards training of Food Safety Inspectors, from various sources. For example, the training courses developed by COLEACP in the EDES project¹¹ (restricted to ACP member countries), and freely available material developed by USDA¹² Food Safety and Inspection Service (FSIS) and FDA¹³ FDA's Office of Regulatory Affairs' Office of Training Education and Development (OTED). The

¹¹ <https://training.edes.coleacp.org/course/index.php?categoryid=16>

¹² <https://www.fsis.usda.gov/wps/portal/fsis/topics/inspection/workforce-training/regional-on-site-training/inspection-methods/inspection-methods>

¹³ <https://www.fda.gov/Training/ForStateLocalTribalRegulators/default.htm>

European Union runs the “Better Training for Safer Food¹⁴” programme which government officials who work in food safety can attend for free, and some “e-learning” training courses are included on the BTSF Academy¹⁵. These courses are available in English, Spanish (in the case of BTSF) and French (in the case of EDES). There are also online courses offered by private entities, such as the “Portal de Inocuidad¹⁶” from Argentina, at accessible prices.

5.2 Recommendations

5.2.1 Project specific recommendations

Stronger Policy Mandate: It would be desirable to have a greater political mandate on food safety at both national and regional level for setting up the Food Safety Regional Virtual School. The Regional Integration Secretariat mentions Food Safety as a priority in its “Central American Agricultural Policy 2008-2017¹⁷”, assigning it high priority. However there has not been any regulatory follow up in favour of creating the School, or preparing the legal groundwork for it to be founded and funded. This would make the School a much stronger and recognized entity, with a more certain future. This does link up with the need for each government to first strengthen the Food Safety Management at national level, by for example setting up Food Safety Agencies. During the project it was responsibility of the Universities and different national bodies participating to try to promote the strengthening of food safety mechanisms nationally, and this should continue to be the case.

Performance Evaluation: It was seen that holding inspectors to account for their performance during the online course was linked to a greater participation and pass-rate. Therefore, strengthening of performance evaluation on food safety knowledge should be included in national mechanisms for evaluating food safety. Desertion of participants was higher in those countries where no performance evaluation mechanism was implemented, therefore this should be considered integral to the course structure in order to increase motivation of participants

IICA retain Coordinating Role: IICA served as an excellent manager of the project and school, together with the Academic Council which worked well. It would be desirable that IICA, as a recognized regional body, retains this coordination role going forward together with the network of Universities, until such time as a Central American body can be identified to take on the coordinating role. However, IICA would have to find funding, possibly from the SIECA regional Secretariat. Given the lack of political support provided during the project, this is unlikely to be forthcoming in the short term. Right now, the post-project coordination is floundering.

Adapt to Disparate Levels: It was noted that there are notable differences in the levels of preparedness, academic background and technical knowledge of food safety inspectors among the countries. Going forward it is important that some work is done at a country level to adapt the materials to address this specific situation.

Avail courses widely: The courses developed should be made available to interested parties in the private sector, and not be restricted to governmental officials, as transparency of inspection

¹⁴ http://ec.europa.eu/chafea/food/trainings/available-trainings_en.htm

¹⁵ <https://btsfacademy.eu/training/course/index.php?categoryid=5>

¹⁶ <https://www.portaldeinocuidad.com/web/auditorias-de-inocuidad-alimentaria/>

¹⁷ <http://www.sica.int/busqueda/Libros.aspx?IDItem=20796&IdCat=35&IdEnt=690&Idm=1&IdmStyle=1>
Regional Measures, point 9, p55.

criteria and explanation of the scientific basis behind application of criteria benefits the whole industry and region. A part of the information held in these courses should be used for training provided to producers who are granted a license to produce. This would give the Regional School a different dimension and serve as a Centre for Reference of Information not just for Inspectors but also for the whole of the Agri/Food sector on Food Safety.

Course Specifics: Specifically regarding the course, it is important that each module includes a summary at the end of each topic by the tutor, covering theoretical and practical points. The inspection course as a whole was 6 full modules, over 6 months, requiring dedication and considerable study time of 2 hours per weekday. Future replicates of the course should be more flexible in having shorter module “packages” which the participant can cover in their own time. The inspector course should also be translated into English in order to obtain full buy-in from Belize, as well as to make the course ready for review internationally and increase the level of trust and exchange of information between Central America and other regions. Also in order to increase buy in by the participants and to develop a better rapport with the trainer, it would be a good idea to start the courses off with a phone call or physical meeting.

Training Material Homogeneity: The auditing course produced by the University of Nebraska has a high level of quality and consistency. Stemming from the comments regarding applicability and ease of learning, it would have been beneficial to have one organization to develop all courses, rather than have a mix of different training sources. For example the tutor from Argentina had some sessions which were spoken training, which was not so useful for stimulating multi-sensorial learning such as when the tutor is placed next to a projection of the course powerpoint.

Qualified Trainers and Update System: It is important in order to maintain and replicate results of the project, that a self-sustaining, regional system for qualified Food Safety Inspectors and Auditors be set up under a credible organization, to keep updating the course curricula, and to extend the courses to a wider geographic spread. Legislation is continuously being updated across countries of the region, as well as in the markets importing food from Central America. The Virtual School should make sure it has a system for following up and keeping the courses updated, such as on legal and administrative aspects, references, techniques and technologies, in order to maintain relevance and interest in participating in these courses going forward.

Involve Private Sector: The Regional School should integrate the existing knowledge and experience from the private sector so that it can contribute to making the courses more practical. A “train the trainer” system should be set up whereby qualified individuals could have taken the course and then disseminated the information using benchmarked information. Private sector trainers would then be available on the market to spread the knowledge either within the private sector food production businesses or back to the public sector in customized trainings. This would be especially useful amongst private operators, who could use material and knowledge provided to go forth and promote the food safety principles that lie behind compliance with GMPs, and issues related with government institution inspections.

Prior Research into Existing Training: The project should have included a desk study and background research to determine and evaluate what courses already exist and to approach them for possible cooperation within a regional framework, either to generate base material for the Regional School or to complement the ERVIA project. Collaboration between the regional SIECA Secretariat and the US or EU could have generated positive synergies in cooperation and possible longer term collaboration, as well as benchmarking best practices in online training and development of materials in the most cost efficient way possible.

5.2.2 General recommendations

As mentioned in the Conclusions, this project has formed an excellent base from which to go into further detail for specific food and agricultural industries, processes and supply chain challenges related to Food Safety, as well as other SPS subjects.

Partnerships: In order to further the impact of this project, it is important to identify further strategic partners in who could support the continuation and implementation of the Regional Virtual School. This could be as part of a wider focus for SPS Capacity Development funded under the SPS Agreement, which could include a strong component for developing Equivalence mechanisms and carrying out regulatory comparison between the countries of the region. Further development of harmonized documentation and processes is necessary to serve as the basis for applying the knowledge gained in the inspection courses. The fact that Food Safety training has not been included in other development projects aimed at the region shows potential for seeking out development partners who could contribute. The priority has been with national strengthening, rather than regional.

Regional Reference: In terms of building up confidence in each other's national Food Safety inspection systems, the region should work more strongly towards establishing a recognised centre of reference for such matters, possibly through OIRSA. Eventually this could mean a Regional Food Safety Agency, in the guise of EFSA, where technicians from the different countries would work towards a common goal.

Support Harmonisation Work: OIRSA, as the specialist technical body within the CAC, carries the responsibility of harmonizing legislation on Food Safety regionally. Further support is needed in this area, seeking harmonisation of procedures across borders and clarifying expectations for food businesses in a modern self-regulation/assurance model.

Private Sector Inclusion: Further involvement of the private sector is absolutely essential, not only in order to obtain buy in and clarifying interpretation of rules, but also to align and deal with increasing duplication of private sector standards, destination market legislation, and to develop a transparent relationship with private trainers and certification inspectors/auditors. FSMA requirements are creating a large demand for further training by the private sector, as they highlight the need for prioritization of food safety, and private and public sector need to be talking the same language.

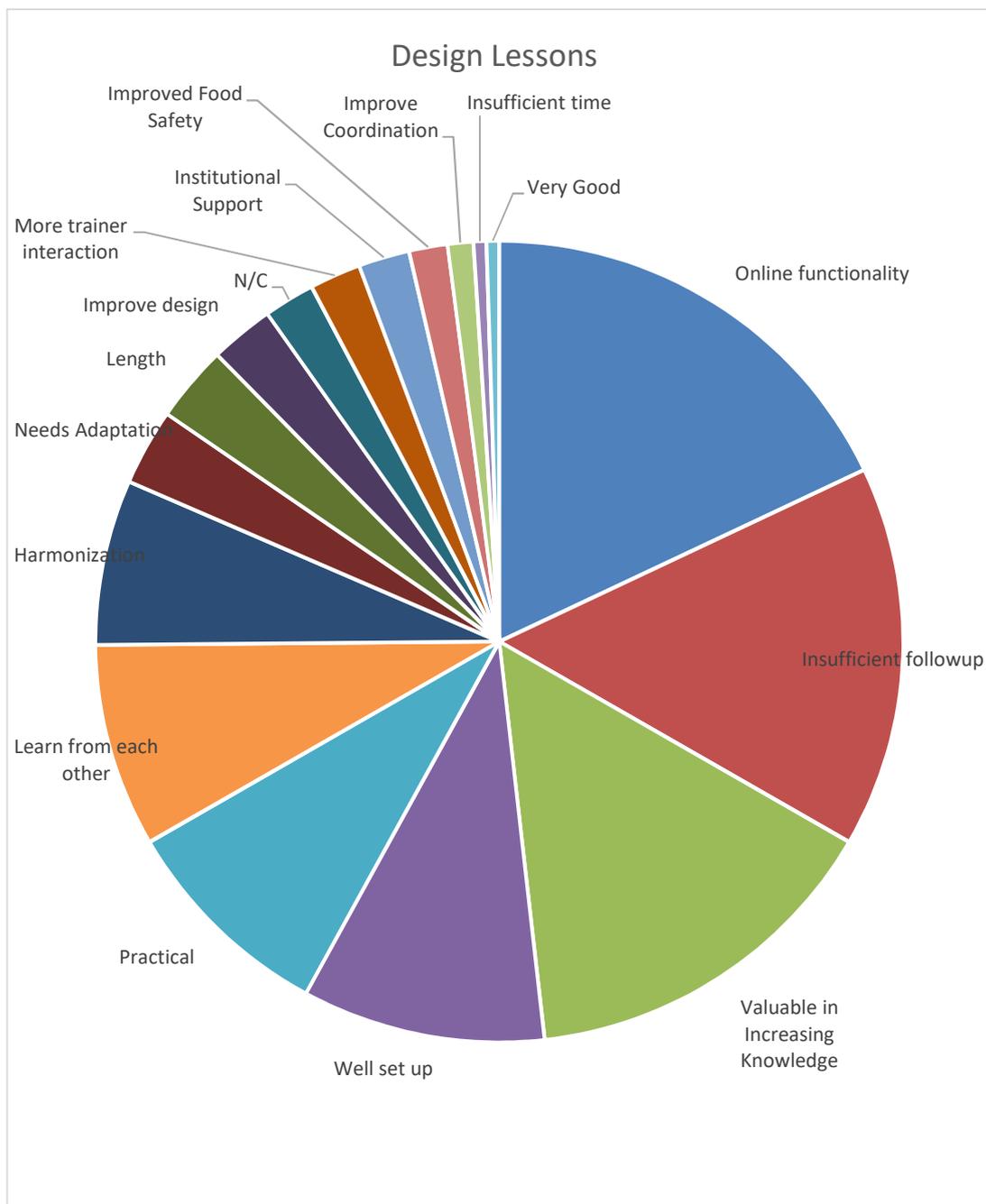
Replication: The Regional Virtual School is an idea worthy of being implemented in other regions of the World, as it has proven to be a model that despite the difficulties, has obtained good results. Logically this would be other parts of Latin America, but RECs in Africa would hugely benefit from this material as well, boosting their existing lack of regional integration for example.

6 Lessons Learned

These lessons are drawn directly from the participant feedback, as distinct from the recommendations, which were drawn up by the evaluator.

What lessons can be learned from the project regarding the process of project design and implementation?

Comments from the project participation were useful and varied on this point, as can be seen from the following pie chart they covered a wide range of points. Feedback received was overwhelmingly positive, although there were some useful points for improvement.



Valuable points were presented regarding the following subjects, details available in Annex 8:

Design

Benefits of the online platform

Greater Adaptation to National Realities

Length of the course

Implementation

Training Coordination Issues and User Support

The need for Follow Up and Expansion

The need for Stronger Institutional Support

About the Increased Knowledge and Benefits of Training

Learning from other Participants

What lessons can be learned from the project, which may be of importance to the broader donor community and which should be disseminated more widely?

As one of the first regional coordinated online training platforms funded by STDF following a regional approach, there were many lessons learnt that should be considered for any similar project in the future.

Amongst the takeaway lessons from this project is that now that this online training platform was successfully established and gained traction amongst the region's inspectors, the perception is that no longer having it, is a backwards step.

The courses were highly valued but expectations have been that this was a first step that would evolve into a platform that carried other courses on related subjects such as risk analysis and monitoring, and that would delve more into national specificities that were not addressed in the generic, regional courses.

Follow up and keeping the courses updated, such as on legal and administrative aspects, references, techniques and technologies is seen as a priority for maintaining relevance and interest in participating in these courses going forward.

The takeaways most strongly expressed from feedback by project stakeholders include:

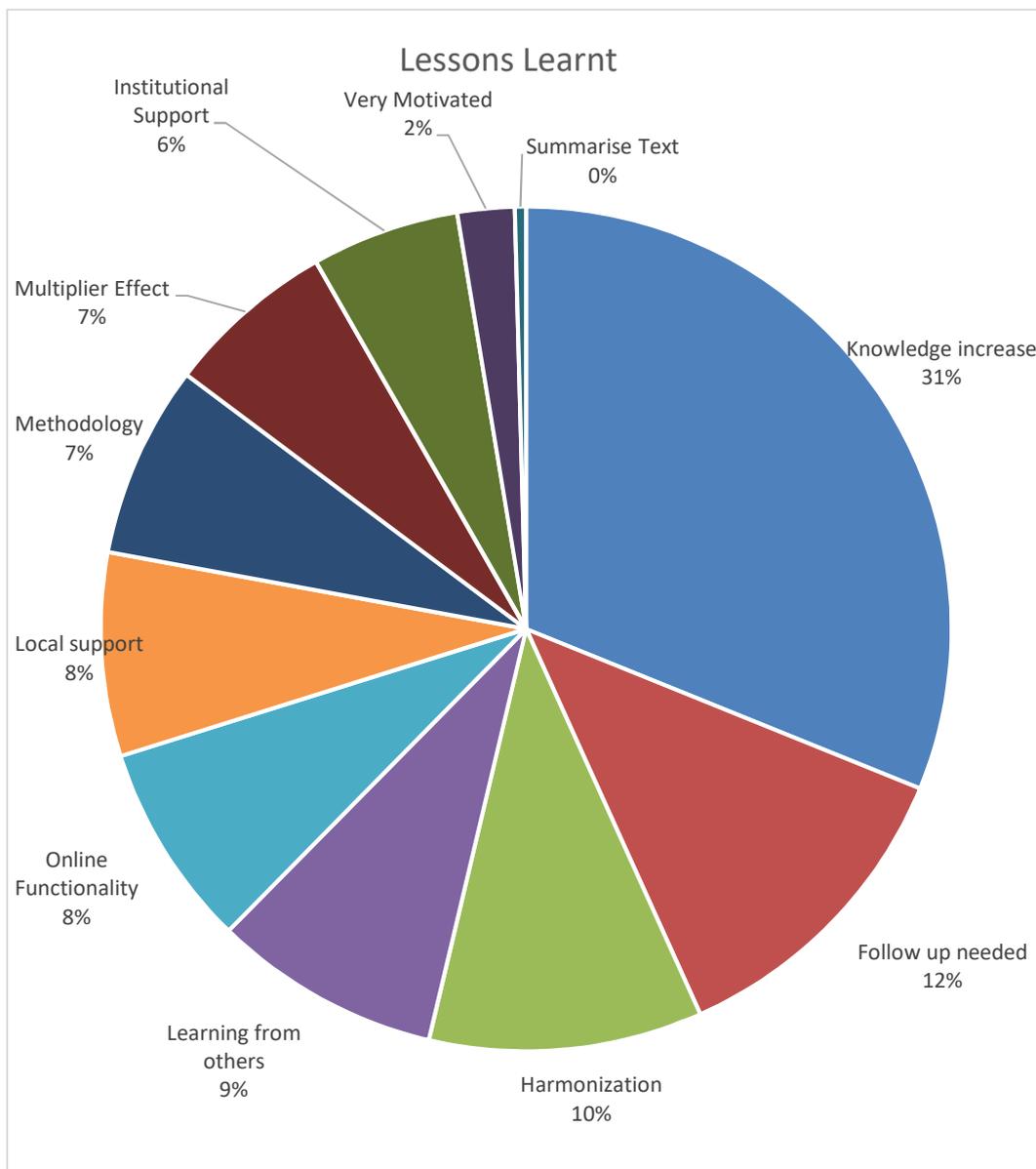
1. There is widespread praise on how these courses have enabled knowledge dissemination from a central, respected reference point that serves as a benchmark, in a simple, efficient and effective way using technology that to some of the participants was completely new. Amongst participants the sense of achievement at being able to understand how to learn using online tools is evident.

2. The practicality of the information and tests/quizzes was remarked on as a positive aspect, in terms of being able to solve problems related to day to day work. There were some comments regarding the relatively low value given to online tests. Requests for the course to include some physical, hands-on training as part of perfecting inspection and auditing skills in the field.
3. One important point was that the course material needs to be sourced where possible from within the region, rather than say from South America as was the case for some of the modules.
4. The regional approach was seen as very valuable, although there is an expressed need for prioritizing greater harmonization at a national level first, focusing on the particular needs of each country, related to the level of sophistication of the different national food safety inspection structures.
5. National contact points assigned by the Universities for the online training in some countries could have been more proactive in providing local technical support for operating the platform, and clarifying local interpretation queries to participants.
6. Learning from other colleagues proved to be an added bonus, as tips and understanding was traded between users in online discussion forums. It was suggested that the information sharing could be facilitated more using a structured information sharing system, to the benefit ultimately of improved food safety in the countries and across the region.
7. A sense of awareness about how the region faces great disparities in resources, technical knowledge and institutional support and organization. This realization motivated stakeholders to conclude that regional harmonization in legislation, processes and standardization of criteria in applicable institutions regionally is a high priority.
8. The lack of institutional support towards Food Safety as a priority issue, for most countries in the region. This is related to the lack of awareness by the society at large, and by political leaders in particular, who rotate within the institutions and did not highly commit their participation to the project. The low signing up rate of inspectors and the high drop out rate are also indicative of how bringing inspector/auditor knowledge up to date is perceived as not important.
9. The private sector did not participate in any of the courses, other than the respective universities. This means that although the knowledge provided to government institution officials was very beneficial, the principle of self-regulation and demonstration of compliance by the market participants has not been reinforced.
10. The fact that HACCP and GMPs are not enforced for existing food and feed producers in the central American region creates a weak motivation for the private sector to follow awareness training related to Food Safety, it would be advisable for generating stronger regional drive towards food safety.
11. The project did train a core set of persons on how to manage the online training system. However, it would have been beneficial to identify volunteers and entice the better performing candidates towards becoming trainers themselves, thereby establishing a

network of trainers who could multiply the effect of the courses in the region, at a practical level. This would have been especially useful amongst private operators, who could use material and knowledge provided to go forth and promote the food safety principles that lie behind compliance with GMPs, and issues related with government institution inspections.

12. Desertion of participants was higher in those countries where no performance evaluation mechanism was implemented, therefore this should be considered integral to the course structure in order to increase motivation of participants.
13. It was noted that there are notable differences in the levels of preparedness, academic background and technical knowledge of food safety inspectors among the countries. Going forward it is important that some work is done at a country level to adapt the materials to address this specific situation.

The feedback from stakeholders in the course again was quite rich and varied. Comments are included in Annex 8.



What actions have been taken by the beneficiary, STDF partnership or others to disseminate, learn and follow-up on the outcomes of the project? How could STDF increase the sharing of good practice on SPS capacity building coming out of this project?

One of the conclusions of the project was that although this project was conceived to address the need to harmonize food inspection protocols across the region, it became evident that further work on the improvement of the technical capabilities of the inspectors at a country level is needed. This is a priority as harmonized criteria on food inspection at country level forms the basis for building the same goal at a regional level.

The request for further training at national level made by the National Agricultural University in Honduras, José Matías Delgado University in El Salvador and Universidad Nacional Autónoma de Nicaragua, León was seen as a starting point to achieve harmonization of food inspection techniques and protocols at a country level, however there has been no further progress after the initial expression of interest.

Political involvement and commitment to the subject of regional Food Safety is lacking and crucial for advancing on this subject. The changes in the Government Representatives within the Technical Consultative Group was one of the project's main challenges.

The project administrator and Academic Council recognized that although virtual learning techniques have become a very important option to reach new target audiences in food safety, public sector officials that work at central and regional levels are not used to this new learning approach. Within the framework of the project, the introductory module was strengthened to improve participant's technological skills.

Annex 1: Survey Used in the Evaluation

This annex is presented in electronic Excel format due to its spreadsheet format.

Annex 2: Key Evaluation Questions and Analytical framework

The ToR already suggest **criteria and questions** in line with the STDF Evaluation Guidelines. These have been adapted and complemented, they are listed in the following table.

Criteria	Evaluation Questions	Instruments to apply
Relevance	1. How relevant was the subject matter of the virtual courses offered, from a technical perspective?	Survey Survey Experts Synthesis
Relevance	2. How well did the virtual methodology fit with local needs, compared to other methods?	Document analysis Interviews Surveys Synthesis
Relevance	3. Did the course sufficiently cover the subject of inspection and auditing in relation to the national needs?	Surveys
Effectiveness	4. For each of the logframe indicators for output and outcomes, to what extent were the project objectives achieved)?	Document analysis Interviews Website analysis
Effectiveness	5. How effective was the project in increasing knowledge on the technical subjects related to inspection/auditing?	Interviews Website analysis Survey
Effectiveness	6. After the project, is there a more harmonised level of food inspection across the Central American and Dominican Republic region?	Interviews Survey
Effectiveness	7. What were the major factors influencing the achievement or non-achievement of the project objectives, outcomes and outputs?	Interviews Surveys
Effectiveness	8. To what extent were horizontal issues (such as cultural diversity, poverty, gender) addressed in the project?	Document analysis Interviews Surveys Synthesis
Efficiency	9. Were the activities and outputs delivered according to the project document (i.e. on time and within the budget)?	Document analysis Interviews Synthesis
Efficiency	10. What changes and risks occurred during project implementation, and how was the project able to adapt to these changes and manage risks?	Interviews Survey Experts
Efficiency	11. Was the project a cost-effective contribution to addressing the needs of the beneficiaries?	Document analysis Interviews Synthesis
Impact	12. To what extent did participants rate the online training as a valuable, workable, user-friendly, engaging, useful and replicable system, that is worthwhile replicating to other regions?	Surveys Interviews Project documents
Impact	13. Has the project resulted in a positive, measurable impact on market access, improved domestic and regional SPS situations, and if so, how and which?	Surveys Interviews Project documents

Impact	14. Which case stories from countries and international organizations where the project outputs have been used successfully, can be reported?	Surveys Interviews Project documents
Impact	15. Has the project contributed at all to equivalency agreement processes, or economic integration in the region (i.e. in the Central American Customs Union)?	Interviews
Impact	16. Is the platform developed being used for other courses?	Interviews
Impact	17. Was there any real positive impact on the participants, resulting from the project?	Surveys
Sustainability	18. To what extent will the benefits of the project continue after the end of STDF funding, and what still needs to be done to support this?	Document analysis Interviews Website analysis Surveys Synthesis
Sustainability	19. Do the recipients of the project have the necessary capacity to sustain the results?	Surveys Synthesis
Sustainability	20. What follow-up activities, if any, are planned and/or required to sustain these results over time? Did the project build in strategies for continuing the activities financed by the project?	Interviews Survey
Sustainability	21. What are the major factors which influenced sustainability of the project?	Document analysis Interviews Surveys
Sustainability	22. Was sustainability (including follow-up activities, scaling up and dissemination of results) adequately considered at the project design phase and throughout the project?	Document analysis Interviews
Learning and Innovation (cross-cutting)	23. What lessons can be learned from the project regarding the process of project design and implementation?	Document analysis Interviews Website analysis Surveys Synthesis
Learning and Innovation (cross-cutting)	24. What lessons can be learned from the project, which may be of importance to the broader donor community and which should be disseminated more widely?	Interviews Website analysis Surveys Synthesis
Learning and Innovation (cross-cutting)	25. What actions have been taken by the beneficiary, STDF partnership or others to disseminate, learn and follow-up on the outcomes of the project? How could STDF increase the sharing of good practice on SPS capacity building coming out of this project?	Surveys

Annex 3: List of Survey Respondents

This annex is presented in electronic Excel format due to its spreadsheet format.

Annex 4: Consolidated Results of Survey Responses

This annex is presented in electronic Excel format due to its spreadsheet format. To safeguard anonymity, the names of the respondents are not mentioned next to their responses.

Annex 5: Persons contacted during the Evaluation

PROYECTO ESCUELA REGIONAL DE INSPECCION DE ALIMENTOS

LISTA DE CONTACTOS:

GRUPO ASESOR INTERNACIONAL

NOMBRE	PAIS	CARGO	CORREO ELECTRONICO
Rolando Flores	Estados Unidos	Universidad de Nebraska, Lincoln Director Centro Procesamiento Alimentos	rflores2@unl.edu
Marcos Monteverde	Argentina	Secretario, Agencia Santafesina de Seguridad Alimentaria	monteverdemarkos@hotmail.com
María Salud Rubio	México	Profesor Titular, Facultad de Medicina Veterinaria, UNAM	msalud65@gmail.com
Juan Antonio Serra	España	Profesor, Departamento Tecnología de Alimentos, Universidad Politécnica de Valencia	jaserra@tal.upv.es
Marjorie Henderson	CITA	Especialista en Inocuidad de Alimentos	almaigad@gmail.com
Ileana Leandro	Costa Rica	Directora, Núcleo de Inocuidad de Alimentos, Instituto Nacional de Aprendizaje	ILeandroGomez@ina.ac.cr ileandrogomez@hotmail.com
Enrique Pérez	Costa Rica	Senior Advisor Foodborne Diseases and Zoonosis. Organización Panamericana de la Salud	pereze@pan.ops-oms.org
Oscar García	Honduras	Oficial en Inocuidad de Alimentos de OIRSA	ogarcia@oirsa.or
Marisa Caipo	Perú	Oficial en Inocuidad de Alimentos de FAO	Marisa.Caipo@fao.org
Marjorie Henderson	CITA	Especialista en Inocuidad de Alimentos	almaigad@gmail.com
Ana Victoria Román	INCAP	Profesor, Departamento Tecnología de Alimentos, Universidad Politécnica de Valencia	aroman@incap.int

**GRUPO TÉCNICO CONSULTIVO
LISTA DE REPRESENTANTES**

PAÍS	ORGANIZACIÓN	NOMBRE	CORREO ELECTRÓNICO
Costa Rica	Servicio Fitosanitario del Estado (SFE)	Magda González	mgonzalez@sfe.go.cr
	Servicio Nacional de Salud Animal (SENASA)	German Rojas	grojas@senasa.go.cr
	Ministerio de Salud, Dirección de Regulación de la Salud, Unidad de Control	Jennifer Lee	jlee@ministeriodesalud.go.cr
Nicaragua	Ministerio de Salud, Dirección de Regulación Sanitaria	Ricardo Orozco	dra@minsa.gob.ni
	Ministerio de Agricultura	Manuel de Leon	manuel.deleon@dgpsa.gob.ni
Panamá	Ministerio de Salud - Departamento de Protección de Alimentos (DEPA)	Anais Vargas	arvargas@minsa.gob.pa anaisvargas_71@hotmail.com
	Ministerio de Desarrollo Agropecuario (MIDA)	Emmeris Quintero	emmerisq@yahoo.com
		Manuel González	manuelgonzalez@mida.gob.pa
Guatemala	Ministerio de Agricultura, Ganadería y Alimentación (MAGA)	Otto Fernando Maldonado	motto_fernando@yahoo.com
	Ministerio de Salud	Gladys Arreola Camargo	gladysarreola@yahoo.com
El Salvador	Ministerio de Agricultura	Helmer Esquivel	helmer.esquivel@mag.gob.sv , helmer_esquivel@yahoo.com
	Ministerio de Salud	Raúl Barahona	ebarahona@salud.gob.sv
Honduras	Ministerio de Agricultura	José Heriberto Amador	jhamadors@gmail.com
	Ministerio de Agricultura	Juan R. Velázquez	jvelasquez@senasa-sag.gob.hn
	Ministerio de Salud, Dirección de Regulación sanitaria	Mirta Escobar	fciamirta_37@yahoo.com
Belice	Belize Agricultural Health Authority (BAHA)	Miguel Figueroa	miguel.figueroa@baha.bz
República Dominicana	Ministerio de Agricultura	Raúl Peralta	mlecheraulperalta@yahoo.com
	Ministerio de Agricultura	Rafael Nuñez	rafaelnunezmieses@hotmail.com
	Ministerio de Salud Pública	Salvador Hiciano	salvadorhiciano@yahoo.es

**CONSEJO ACADÉMICO
LISTA DE PARTICIPANTES**

PAÍS	CENTRO ACADÉMICO	NOMBRE	Correo Electrónico
Costa Rica	Universidad de Costa Rica (UCR)	Marjorie Henderson	almaigad@gmail.com marjorie.henderson@ucr.ac.cr
Nicaragua	UNAN -León	Azucena Montenegro	azumontenegro@yahoo.com
		Ivania Toruño Fonseca	ivatoruno@hotmail.com
Panamá	Universidad de Panamá	Omaris Vergara	omaris.vergara@yahoo.com
Guatemala	Universidad Rafael Landívar	Mario Santizo	msantizo@url.edu.gt
El Salvador	Universidad Jose Matías Delgado	Lilliam Carmen Carreño	lccarreno@ujmd.edu.sv
Honduras	Universidad Nacional de Agricultura Catacamas	Fanny Maradiaga	fmaradiaga@yahoo.com
República Dominicana	Universidad ISA	Edwin Reyes	ereyes@isa.edu.do
Belice	University of Belize	Feliz Tzul	felixtzul@yahoo.com

**TUTORS AND FACILITATORS
LISTA DE PARTICIPANTES**

Grupo # 1 Honduras		
Facilitador	Joel Luis Santos Melara	joelsanm@yahoo.com
Tutor Académico	Fanny Maradiaga	fmaradiaga@yahoo.com
	Rosa Arelys Betancourth Raudales	rosacat_07@yahoo.com
	Juan Amilcar Colindres	colindresja@yahoo.com

Grupo # 2 El Salvador		
Facilitador	Omar Cardenas Soriano	oeardenas@ujmd.edu.sv
Tutores Académicos	Lillian Carreño	lccarreno@ujmd.edu.sv
	Guillermo Antonio Bonilla	gabonillah@ujmd.edu.sv

Grupo# 3 Panamá		
Facilitador	Lurisol García	lurisol.gracia@up.ac.pa
	Dianeth Torres	dianeive@hotmail.com
Tutor Académico	Omaris Vergara	omaris.vergara@yahoo.com

Grupo#4 Nicaragua		
Facilitador	Ivannia Toruño	ivatoruno@hotmail.com
Tutor Académico	Indiana Dávila Prado	indianadvilaprado@yahoo.es
	María Jesús Sandino	mjsandinom@hotmail.com
	Christiane González Calderón	olynarsal@gmail.com

Grupo# 5 República Dominicana		
Tutores y ...	Yanilka Alcántara	yanilkaalcantara@hotmail.com
asistentes académicos	César Gómez	cgomez@isa.edu.do
	Bernarda Reynoso	breynoso@isa.edu.do
	Clara Angel	cangel@isa.edu.do
	Wendy Marín	wmarin@isa.edu.do
	María Elisa Peña	mpena@isa.edu.do

Grupo# 6 Costa Rica		
Tutores Académicos	Adriana Araya	ADRIANA.ARAYA_M@ucr.ac.cr
	Marcy González	marcy.gonzalez@ucr.ac.cr
	Rebeca López	rebeca.lopez@ucr.ac.cr
	Manuel Montero	manuel.montero@ucr.ac.cr
	Eliana Mora	Eliana.mora@ucr.ac.cr
	Diana Víquez	diana.viquezbarrantes@ucr.ac.cr
	Marjorie Henderson G.	marjorie.henderson@ucr.ac.cr
Facilitador Académico	David Robles Rojas	david.robles.rojas@gmail.com

Grupo#7 Guatemala		
tutores y...	Miriam Chávez	michavez@url.edu.gt
asist.académicos	Wilfredo Fernández	wilf.fernandez@gmail.com
	Maria Renée Pappa	mrpapa@url.edu.gt

	Ana Imeri	ana.imeri@hotmail.com
Grupo # 8	Guatemala # 2	
tutores y...	Miriam Chávez	michavez@url.edu.gt
asist.académicos	Wilfredo Fernández	wilf.fernandez@gmail.com
	Maria Renée Pappa	mrpapa@url.edu.gt
	Ana Imeri	ana.imeri@hotmail.com

Annex 6: Terms of Reference for the Evaluation

EXTERNAL EX POST IMPACT Evaluation of STDF Project "ESTABLISHMENT OF A REGIONAL VIRTUAL FOOD INSPECTION SCHOOL IN CENTRAL AMERICA AND DOMINICAN REPUBLIC" (STDF/PG/344)

Background

1. The STDF Working Group approved project application STDF/PG/344 "Establishment of a Regional Virtual Food Inspection School in Central America and Dominican Republic" in March 2012. This project was developed through an STDF PPG (STDF/PPG/344) which was approved in March 2011 and implemented by the Inter-American Institute for Cooperation on Agriculture (IICA). The project partners were the Ministries of Agriculture from Belize, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua and Panama. The project beneficiaries included different stakeholders from the public and private sector and academia in the above-mentioned countries and more widely in the region. The total project value was US\$1,534,294, with an approved STDF contribution of US\$977,643. The project ran from 1 July 2012 to 30 June 2016.
2. IICA was in charge of implementing the project pursuant to a contract concluded with the WTO, on behalf of the STDF, in June 2012. Other entities involved in the project were Ministries of Agriculture and Health, food safety control agencies and universities from the eight partner countries, universities from Europe and the Americas, international and regional development partners including FAO, the Institute of Nutrition of Central America and Panama (INCAP), OIRSA and the Pan American Health Organization (PAHO), as well as national and international food safety institutions (such as Agencia Santafesina de Seguridad Alimentaria from Argentina).
3. The project's objective was to improve and harmonize food inspection procedures and protocols in the eight partner countries through a virtual training platform (Regional Virtual Food Inspection School – Escuela Regional Virtual para la Inspección de Alimentos, ERVIA). An institutional structure was set up to support ERVIA, with tasks divided between an International Advisory Group (university partners and international and regional organizations charged with overall supervision and approving training materials), an Academic Council (universities in the eight partner countries charged with developing and rolling out training courses), and a Technical Consultative Group (food safety control agencies in the eight partner countries charged, among others, with taking stock of the body of food inspectors and identifying participants). A virtual course on food inspection was developed and uploaded on IICA's online learning platform in Spanish, resulting in successfully training more than 470 food inspectors and creating a regional network of experts. A virtual training course on food auditing for university partners was made available on IICA's platform in English and Spanish.
4. The STDF Working Group selected this project for an independent ex post evaluation in October 2017. This document sets out the Terms of Reference for the International Consultant to carry out this evaluation.

Description of tasks

5. Under the overall supervision of the STDF Secretariat, and in cooperation with IICA, the project partners, and well as other stakeholders involved in this project, the Consultant shall carry out an independent ex-post impact evaluation of STDF/PG/344 in accordance with the STDF Evaluation Guidelines ([Appendix 1](#)). Specifically, the consultant shall:

Documentation

- i. Review all available documentation related to the project together with a list of key stakeholders involved and their contact details. The information will be provided electronically by the STDF Secretariat and IICA, the implementing agency.
- ii. Contact stakeholders involved in project implementation to obtain any other relevant information or documents, as appropriate.

Evaluation framework

- iii. Develop an evaluation framework, which should be discussed with the STDF Secretariat prior to its finalization and use. This framework should, at a minimum:
 - Clearly elaborate the questions to be asked during the evaluation, based on the OECD/DAC evaluation criteria (i.e. relevance, effectiveness, efficiency, impact, sustainability), as well as the indicators identified in the project document's logical framework to measure performance;
 - Identify and elaborate the methods and tools (e.g. survey questionnaires, key questions for face-to-face/Skype interviews, analysis of the use of the website/other user interfaces developed under the project, etc.) to be used to conduct the evaluation;
 - Identify key individuals to be consulted during the evaluation, including representatives of (i) the project implementing organization IICA; (ii) participants/beneficiaries of project activities in the region; (iii) the relevant national government agencies and universities involved in the project, and (iv) any other stakeholders relevant to and/or involved in the project (e.g. regional and international organizations, development partners, etc.).
 - Outline a time-frame to conduct the evaluation and to finalize the evaluation report.

Conduct evaluation

- iv. Contact representatives of project stakeholders and beneficiaries (using methods identified in the evaluation framework) to obtain their views and feedback about the project, addressing key questions related to the project's relevance, effectiveness, efficiency, impact, sustainability and main lessons learned. This should include a detailed assessment of project activities and outcomes, including:
 - Designing, setting up and managing the institutional and operational framework for the virtual food inspection school. This should include analysis of the roles and responsibilities of the organizations involved, their respective contributions to design, develop and update/maintain the virtual school, including aspects related to financial and operational sustainability, systems to manage information on students enrolled in the school, etc.
 - Developing and rolling out virtual courses for food safety inspectors and food safety auditors. This should include analysis on the content and substance of the courses, communications and outreach about the courses, enrolments (including geographic origin of participants, their background, and expertise, their

feedback/assessment of the courses), the completion (pass) rate, traffic on the platform, downloads, exchanges among participants within and between countries, etc.

Evaluation report

- v. On the basis of all the information collected and feedback received from the various stakeholders consulted, draft a detailed evaluation report that analyses and assesses the overall performance and results of the project.
- vi. The evaluation report should make recommendations specific to the activities conducted under this project, as well as more general recommendations that may be useful to improve the design and delivery of future SPS-related capacity building projects that address the same or a similar subject, and/or include the development of virtual training solutions in or beyond the region. In addition to considering key evaluation questions, this report should identify the context in which the project was implemented, linkages (if any) to, and comparisons with, other related projects/programmes, opportunities created by the project and/or any challenges faced, as well as any recommended follow-up actions or outstanding needs, etc. This report should be drafted in accordance with the agreed format (see Appendix 1)
- vii. The draft report should be submitted to the STDF Secretariat no later than 31 August 2018. The Consultant should revise the report taking into consideration the Secretariat's comments and suggestions (several rounds of comments can be expected) until these are acceptable to the Secretariat. The deadline for finalising the report is 12 October 2018.
- viii. On the basis of the final evaluation report, provide updated content on the key findings and recommendations of the project to be used by the STDF Secretariat to update the project page on the STDF website.
- ix. Provide to the STDF Secretariat electronic copies of documents relevant to the evaluation (reports, training resources etc.), for inclusion in the STDF Virtual Library.

Annex 7: ERVIA Sustainability Proposal

REGIONAL VIRTUAL FOOD INSPECTION SCHOOL (ERVIA) IN CENTRAL AMERICA AND THE DOMINICAN REPUBLIC

Considerations:

- As part of the ERVIA project, a team of universities and a Technical Committee have been created. The universities that form part of the team serve as academic counterparts and assist in monitoring the online training of food inspectors. The Technical Committee, on the other hand, is made up of official food inspection entities of the region, and is responsible for guaranteeing the safety of marketed food. Before ERVIA was established, coordination among these stakeholders in the different countries was very limited; however, they now share the common goal of developing training programs for food inspectors in their countries.
- ERVIA is consistent with the provisions of the Central American Agricultural Policy (PACA), the process of the Central American Customs Union, and international commitments. The school is backed by political and official entities that strive for excellence in food inspection, in order to obtain the recognition of the region's trading partners in the area of food safety.
- ERVIA seeks to harmonize technical concepts related to food safety, in order to standardize food inspection and auditing criteria, and, in this way, facilitate trade.
- The objectives of ERVIA are described in the original project, which states that *“the creation of a cadre of food inspectors, trained in modern inspection techniques and having an attitude leading to proactive participation in the improvement of food safety in the region, will contribute not only to eliminating or minimizing incidents resulting in obstacles to trade, and to overcoming the distrust of each country in the food inspection system of its regional partners, but also to continuous modernization and improvement of food safety regulations. Harmonized food inspection procedures across the region will make it easier to advance towards a customs union and positively impact the health of consumers.”* It is important to maintain these objectives and take advantage of the progress achieved thus far in order to strengthen the impact on these topics.
- ERVIA has successfully begun training inspectors using a standardized curriculum that stresses the importance of food safety in inspection processes. Stakeholders involved have carried out joint work and have streamlined efforts to conduct training sessions on food inspection and create learning materials to be used in the training program.
- The ERVIA project, which is coordinated by IICA, will end on June 30, 2016.
- It is in the interest of the academic and official sectors participating in the project to ensure the sustainability of ERVIA through active participation and a strategic partnership.
- The universities involved are responsible for guaranteeing the sustainability of ERVIA; however, the support, strategic partnership, and active participation of official sectors are essential to this endeavor.
- The sustainability of ERVIA will depend on the establishment of an organizational framework that guarantees the availability of resources needed to maintain the platform, pay for tutors and academic assistants, and update learning materials.
- The project has always considered the possibility of making the private sector a

beneficiary of ERVIA training sessions.

- Improvements suggested by each country will also need to be made in order to guarantee the sustainability of ERVIA and achieve the objectives. To this end, the following proposal has been prepared.

Proposal for the organization of ERVIA

ERVIA will have the following organizational structure:

1. Official Technical Committee (OTC)

The OTC will be made up of two representatives of the competent authorities in each country, as well as their corresponding substitutes (two persons per country will attend the meetings).

Responsibilities of the OTC:

- Oversee the quality and updating of learning materials for ERVIA courses, together with the Academic Council.
- Define the inspectors who will participate in each country.
- Monitor the work carried out by the tutors and inform the academic counterpart of any issues.
- Recommend personnel from official services who could serve as tutors.
- Provide the necessary conditions to enable the inspectors to complete the courses.
- Monitor the performance of the inspectors as participants in the courses, based on feedback provided by the Academic Council, and recommend any corrective actions if necessary.
- Coordinate any actions related to the sustainability of ERVIA with ministerial authorities, the private sector, intersectoral committees, and international organizations involved in food safety matters in the countries of the region.
- Manage cooperation and funding resources for ERVIA, in coordination with the Academic Council.

2. Academic Council

The Academic Council will maintain its current structure. It will be composed of university counterparts in each country participating in the project (Belize, Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, Panama and the Dominican Republic).

Responsibilities of the Academic Council:

- Oversee the quality and updating of learning materials for ERVIA courses, together with the Official Technical Committee.
- Create and update learning materials based on the needs of the OTC and other strategic partners.
- Provide tutors who will monitor the training of students in each country and ensure that they are effectively carrying out their responsibilities.
- Issue course certificates in the corresponding countries.

- Periodically report to the OTC on the performance of course participants.
- Manage cooperation and funding resources for ERVIA, in coordination with the OTC.
- Identify methods for providing academic recognition, based on the internal rules of the participating universities.

3. Secretariat

A university elected based on a simple majority by the OTC (one vote per participating country) and the Academic Council (one vote per participating country) will serve as the Secretariat of ERVIA for a period of two years.

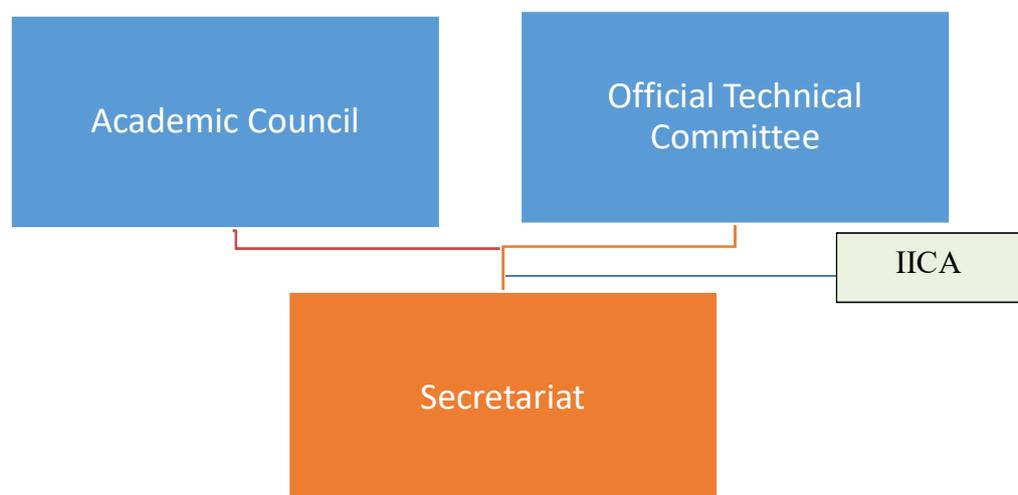
The Secretariat will manage funds from the following sources:

- A 5% contribution from each university for administrative expenses.
- A 10% contribution from each university for the maintenance of the school’s IT platform as well as a fund for creating and updating learning materials for training purposes to ensure that they are relevant and of high-quality.
- Donations

Each university will collect tuition payments in that country; once each university has paid its operating costs, it will transfer the abovementioned 5% and 10% contributions to the Secretariat.

IICA will serve as a technical advisor for ERVIA.

Diagram of the organizational structure of ERVIA:



4. Economic structure

In order to guarantee the sustainability of ERVIA, the following basic costs must be taken into account:

- Cost of using the platform (platform, server, domain use and technician responsible for the operation of and access to the system)

- Cost of tutors who provide student support (payment for each student to whom support is provided)
- Cost of issuing certificates and administrative expenses related to registration and official communication between country representatives and the Academic Council (cost per student, estimated at \$10/student)
- Cost of creating new training modules and updating existing learning materials or any digital updates that may be necessary (e-learning per hour) (10% of income)
- Administrative costs of financial resources (5% of income)
- Cost of a Webex-style communication system for carrying out the meetings of committees and councils; in this way, technology can be taken advantage of and costs associated with in-person meetings (such as travel expenses for participants) can be avoided (estimated at \$150/year)
- Cost of creating promotional materials, a website, and social networks in order to share the courses with the private sector (to be estimated).

Next steps:

- The representatives of the public and academic sectors will discuss the commitments described in this proposal with the corresponding universities and governments.
- On Wednesday, June 29, each university will present its corresponding cost structure based on the proposal presented by CITA UCR.
- The acting Secretariat will move forward with preparing a proposal for its procedures manual.

Annex 8: Comments from Stakeholders

4.2.4 Impact, Was there any real positive impact on the participants, resulting from the project?

“In my particular case, it was a challenge and a commitment to participate from (my country) in the coordination of a regional project, the experience helped me to grow significantly as a professional because in each virtual meeting, we spent shared time with many professionals in the region on matters related to food safety. Similarly, we had the following and support of the entire team of experts who were in charge of the regional coordination and who were responsible for the success of the project. Since 2012, we had been working to make the courses a reality, and since then, I have met a lot of inspectors who were part of this project (ERVIA) who have expressed that the course gave them tools to improve. Similarly, inspectors who were not trained to ask if they will have the opportunity to be trained. Another aspect to highlight is virtual education, there is no doubt that it is a tool to improve capacities and that it can continue to be implemented and improved at the regional level.”

From the participant side, some other examples:

“From this experience my motivation increased to continue training and supporting my country in food safety. Additionally, my experience has achieved that I can achieve better performance and better positions.”

“Enrichment of knowledge and criteria in carrying out food safety inspections to businesses in the food production chain and food services”

“Very positive experience. Filled with valuable and effective information. I must conclude that I would repeat the course given an opportunity, to renew knowledge and keep up to date”

“It has allowed me to strengthen and harmonize the scientific knowledge that allows me to improve my work daily”

“It left me contacts and created ties of friendship among specialists in the region that has been valuable”

“I can now teach the knowledge acquired to colleagues in the area of food safety”

6. Lessons Learnt, What lessons can be learned from the project regarding the process of project design and implementation?

Design

Benefits of the online platform:

The project resulted in unification of technical criteria for the evaluation of establishments that produce, process, pack, sell, and transport food

The realization that you do not necessarily have to be face-to-face in a classroom to learn, its implementation is very important to acquire and enrich knowledge.

The most important lesson the use of the applied technologies to daily work

It was designed correctly, an example of this is that once the first course was over there was enough time to seek out lessons learnt and apply continuous improvement, as each country had particular drawbacks.

It is a very assertive project in terms of its design and implementation, since it offers the possibility of expanding knowledge on a virtual level, giving the required time and adequate follow-ups.

Greater Adaptation to National Realities

It is necessary to know more about the financial management of the institutions that participate for each country, to know to what extent the implementation in time would be feasible.

That is a great initiative and very important for Latin America, however the countries have rules and regulations with points different from each other so it should be formed first by country and perhaps a second to see those differences and homogenize ideas.

The economic-cultural reality of the countries of our region is very uneven.

The need to Complement Virtual with Practical:

The design is very well adding in situ visits and regional exchanges.

If the idea was to unify criteria, more attention needed to be paid to that

The design guarantees the maintenance of surveillance for food safety, since it is based on the technological / scientific development and the needs of the peoples or countries of the area.

This project showed that you can work regionally to improve national systems. The design needs to consider the needs of each country, implementation also should consider the regulations that are given in each country

The project showed that the technology allows a greater integration of several countries

There is a need to apply more focus on inspections needed by the specific country from which the participant is from.

Length of the course

The time of the course is very long (6 months). For inspectors of the public and private sector it is better to be short courses of 1 or 2 months maximum.

Implementation

In terms of the implementation it's excellent except I recommend implementing it to 100% of inspectors.

Establish a follow-up protocol to be able to influence the states to give 100% support to the participants

Sending updates or articles with recent information, which for the same cost is not available all the time.

Friendly platform, practical work, improve feedback with teachers, face-to-face meetings

Training Coordination Issues and User Support:

Give more weight to the tests and questionnaires when issuing the grades.

Virtual tasks should have more weight to implement what they have learned.

All the indicated activities were carried out and a good grade was obtained, but at the time of receiving the final qualifications they do not match up.

The project was very well organized, a lot of knowledge from the teachers, a lot of dedication to learn from, but unfortunately no final diploma was issued nor received.

Define certain processes beforehand and not during the course implementation

The search for more ease in terms of staff that is not very adapted to technology, I had to look for a lot of help to be at the level of learning.

The design made it motivating to obtain information, but some links did not work, some backup information was missing, other information was not according to the regional reality, rather from South American countries, perhaps because the speaker was from those countries, unlike the Brazilian Rapporteur based in Canada, excellent information plus the presentation and backup information, that the rest would have followed that line, the result would be better.

Enable a laboratory with computer equipment accessible to personnel in training.

But the constant follow-up and support of both the technical team to teachers and students and the teachers to the students must always be done in the fastest way to ensure the delay of the participants did not delay in his labors

Very good design and implementation, but the approach of those responsible for each country should improve, as in El Salvador there was no communication.

The need for Follow Up and Expansion:

Replicate the courses, the Virtual School must be constant

Very good design and implementation, in my opinion they should only improve the approach of those responsible for each country, well in El Salvador there was no communication, ..

The project followed a novel approach, it hurts that it could not be maintained for longer, to see the long-term fruits.

Establish a follow-up protocol to be able to influence the states to give 100% support to the participants

It should be extended to a greater number of inspectors

Training could be implemented for technicians at the national level to feed them on topics of interest for the agricultural and livestock sector.

Measures should be implemented to monitor the project, continuing education and if criteria have been harmonized at the regional level,

The training courses must be continuously updated since the technologies change and it must be harmonized with all the instruments and legislation

Disappeared, where is it, does it continue with the same objectives? It seems to have lost the drive to meet the need of which they were born. If the Virtual School still exists, it must make itself more VISIBLE.

The need for Stronger Institutional Support:

The project was well designed to be applied in the region, but due to the changes of directions that occur in the institutions, it is impossible to have a good implementation of the project.

It is important that governments are committed in some way to fulfill their technical participation to strengthen these initiatives.

The harmonization of sanitary inspection criteria seems to me to be the best lesson since both what is applied in one country must be applied in the other in a way that facilitates food trade as long as the established sanitary regulations are complied with.

I think you can give more emphasis to follow-ups.

A lesson learned is that in our country it takes a lot of work to be done and the inspectors' training is needed since many of the people who do the work do so with the least knowledge.

Form alliances or agreements with the different state instances where the food control personnel are, so that the personnel training is permanent with the support of the Regional Virtual School of Food Inspectors

The project is good, but an institutional, national framework with capacity and authority should have been established.

About the Increased Knowledge and Benefits of Training:

The use of good manufacturing practices

Knowledge about bacteria, microbes and parasites

That there is information that can be useful for us, that is why it is necessary to train continuously on different topics of interest.

It was well oriented to increase knowledge for application in our work area.

You learn to do our work in an orderly technical way to help the population develop in terms of food hygiene

Learning from other Participants:

It was a very active, participatory, multi-disciplinary project, where teams were formed, made up of people with different profiles and cultures to achieve a specific and harmonized goal.

The interaction with individuals from other countries and the teachers under the platform is higher performance and lower cost

6 Lessons Learnt, What lessons can be learned from the project, which may be of importance to the broader donor community and which should be disseminated more widely?

Online discussion forums played a significant role in information sharing between participants

This project showed how to effectively initiate legal rapprochement, harmonization of processes and standardization of criteria in applicable institutions.

One of the biggest weakness was the need for stronger project focus on sustainability and continuity of activities and results.

More than a quantifiable evaluation is the value of what was learned in the application to solve the problems

The subject is covered in a clear manner, knowledge is essential as an inspector

Accessibility of the course, through the online method. The platform is user friendly and the topics are important to be taught in other countries.

It is worth mentioning that this project helps in a direct way to obtain safe products and ensure the food of the peoples of the region, giving the confidence of having systems that guarantee safety and quality of the products of the region to be able to compete in a global markets.

We all need to be in constant training to provide a better job and ensure that the food of our countries comply with health standards and can be applied to other projects as the benefit is for the population

Annex 9: Original Logframe Matrix

From Final Application 14-5-2012

	Project description	Measurable indicators/targets	Sources of verification	Assumptions and risks
Goal	To provide common, baseline technical and attitudinal training for food inspectors in the eight countries, to allow modernization and mutual recognition of national food inspection systems and thus contribute to the region's development through trade facilitation and improvement in the health of consumers from healthier, safer foods.	Food inspection is increasingly being conducted on the basis of risk in all countries of the region.	Survey after the first group of inspectors have graduated and begin their inspection duties.	The authorities and technical cadres in charge of food safety in the eight countries are satisfied with the results of the course, continue to support the project, and accept the school's diploma as effective and achieving the objectives set in the project.
Immediate objective (purpose)	Modern harmonized inspection procedures conducted by a properly trained cadre of food inspectors and food safety auditors in all countries of the region.	20% of all food inspectors trained per country and at least 200 private sector individuals in total trained within five years of the start of the project.	Number of diplomas granted per country.	Continued political support from Ministers of Agriculture and Public Health and their technical cadres, from academic and technical institutions involved, and from the private sector.
Expected result # 1 (outputs)	Institutional and operational framework of	International Advisory Group, Academic Council, Technical Group and Steering Committee formed.	Confirmation letter from each member of the group.	N/A

	Project description	Measurable indicators/targets	Sources of verification	Assumptions and risks
	a regional virtual food inspection school			
Activities	1.1. Expansion and/or confirmation of the International Advisory Group	At least seven international advisors comprise this group.	Letters of confirmation from each member of the International Advisory Group.	N/A
	1.2 Formation of a Technical Consulting Group consisting of food safety control officials from all involved services in all participating countries	Technical Consulting Group formed and confirmed by national authorities	Letters of confirmation from each member of the Technical Consulting Group.	N/A
	1.3 Formation of the school's Academic Council (made up of one representative from each participating university)	Academic Council formed and installed. It is envisioned that the University of Costa Rica will retain the permanent Secretariat.	Academic Council roster	All academic institutions contacted during the pre-project stage confirm their participation and nominate a representative.
	1.4. Four meetings of the International Advisory Group	At least four meetings held to discuss curricula for inspectors and auditors, development of materials, and modifications or improvements needed.	Meeting agendas and proceedings.	
	1.5 First meeting of the Technical Consulting Group	Meeting held to discuss and agree on the proposed curriculum for inspectors and formation of the Steering Committee.	Meeting agendas and proceedings	
	1.6 Second meeting of the Technical Consulting Group	Coordination among food safety control authorities in all participating countries regarding food safety inspection achieved	3Meeting agendas and proceedings	

	Project description	Measurable indicators/targets	Sources of verification	Assumptions and risks
	1.7 Meetings of the Academic Council plus the International Advisory Group. Confirmation or modification of curriculum and academic processes.	Three joint meetings of the Academic Council and the International Advisory Group held to discuss curriculum and modify or confirm it, as needed, and plan other academic activities.	Meeting agendas and proceedings.	Schedule of members of both groups must permit their participation.
	1.8 Joint meetings of the Technical Consulting Group and the Academic Council (1 per year).	Agreement on possible revisions of curriculum or processes to fit the needs as the project progresses.	Meeting agendas and proceedings.	None in particular.
	1.9 Formation of the school's Steering Committee during the first joint meeting of the Technical Consulting Group and the Academic Council. This meeting will also initiate a discussion on the school's sustainability.	Steering Committee formed by election during the first joint meeting of the Technical Consulting Group and the Academic Council. It is envisioned that the Steering Committee will function unchanged throughout the duration of the project, will be composed of three members from each group, and will have an elected chair belonging to the Academic Council.	Steering Committee roster available.	The chair of the joint meeting should be occupied by a member of the Academic Council to avoid changes due to potential public sector movements.
	1.10 Six-month report to STDF and Ministers of Agriculture and Public Health	Reports presented and available.	STDF Secretariat's receipt of the six-month report. and copy of report to Ministers.	None in particular.
Expected result # 2 (outputs)	Virtual course for food safety inspectors developed and in place	Virtual course for food safety inspectors available.	School's webpage and CDs.	

	Project description	Measurable indicators/targets	Sources of verification	Assumptions and risks
Activities	2.1 Confirmation or revision of proposed curriculum for food inspectors received from the International Advisory Group.	Draft of curriculum for the food inspectors' course was developed during the project preparation stage.	Draft of the curriculum for the food inspectors' course is available.	The International Advisory Group must deliver on time
	2.2 Submission of the planned curriculum for food inspectors for comments by the school's Technical Consulting Group and confirmation of the course fee (30-day comment period).	Comments received.	Messages received from members of the Technical Consulting Group and corresponding comments.	Technical Consulting Group members must respond on time or their comments will not be taken into account
	2.3 Development of class materials by the International Advisory Group.	Agreement reached on assignment of tasks among the International Advisory Group to develop specific sections of the curriculum. Members of the Group deliver the materials.	Complete educational material for the food inspection course is ready for design and diagram.	Members of the International Advisory Group must agree to develop and deliver the assigned sections of the educational material necessary to complete the curriculum for food inspectors. The educational materials must be delivered on time.
	2.4 Design and diagram of class materials.	Class materials are available in proper design for online adaptation. The material has also been placed in proper diagram form.	Complete educational material for the food inspection course is available in final form, ready to be installed in the school's virtual platform.	Design and diagram of materials completed on time.
	2.5 Design of the virtual platform.	Virtual platform designed and ready to install.	Design of platform available.	None in particular.
	2.6 Installation of the virtual platform.	Virtual platform installed and operational.	School's webpage.	None in particular.

	Project description	Measurable indicators/targets	Sources of verification	Assumptions and risks
	2.7 Installation of material in platform and copies on CD – pilot testing.	Course online and on CDs. Pilot testing completed.	School's webpage and CDs.	None in particular.
	2.8 Procurement and installation of videoconference equipment at each participating university and pilot testing.	Selection and purchase of videoconference equipment for all academic institutions completed, installed and tested	Purchase orders for equipment and installation schedules.	Academic institutions facilitate installation and provide assurances of priority use of equipment by the school.
	2.9 Nomination of the first 50 - 100 inspectors per country.	List of candidates per country available.	List of candidates from every country.	Ministries of Agriculture, Public Health and other food safety control institutions deliver their list of candidates on time.
	2.10 Initiation of classes for food safety inspectors.	The school is open and the first students are registered and taking the course on food inspection.	Roster of registered students.	None in particular.
	2.11 Evaluation of the food inspection course by graduates.	Evaluation questionnaire developed, sent to graduates, and responses received and processed.	Evaluation report from Secretariat.	Graduates respond to questionnaire on time.
	2.12 Modification or adjustment of curriculum and training and operating procedures, as needed.	Evaluation results used to adjust curriculum and/or school procedures.	Curriculum and/or school procedures adjustment plan.	N/A
	2.13 Dissemination of news about the course among private sector organizations and invitation to participate – promotion visits to 8 countries.	Dissemination material (brochures) developed and available. Eight promotional events for the private sector conducted (one in each participating country).	Secretariat; list of events and participating institutions in each country.	The private sector must be receptive to the idea of training managers, plant shift heads and other operators – a good promotional approach will be essential.
	2.14. Operation of the school on non-project funds.	The school is functioning on funds coming from student registrations.	School's budget statements.	The public and private sectors and individuals continue to have

	Project description	Measurable indicators/targets	Sources of verification	Assumptions and risks
				interest in the school and register students
Expected result # 3	Virtual course for food safety auditors in place	Virtual course for food safety auditors available	School's webpage and CDs.	
	3.1 Videoconference lectures on four or more topics of interest.	At least four distance lectures have been offered on food safety topics of interest to students by individuals from such agencies as CFIA, U.S. FDA, etc.	Number and title of lectures.	Support institutions willing to contribute lecturers.
	3.2 Design of level-2 curriculum (food safety auditor course) by the school's International Advisory Group.	Draft of level 2 curriculum (for food safety auditors) developed.	Draft of the curriculum food safety auditors sent electronically to the Technical Consulting Group.	International Advisory Group delivers draft curriculum on time.
	3.3 Submission of the planned curriculum for food safety auditors for comments by the school's Technical Consulting Group – confirmation of the course fee (30-day comment period).	Comments received.	Messages received from members of the Technical Consulting Group and corresponding comments.	Technical Consulting Group members must respond on time or their comments will not be taken into account.
	3.4 Preparation of course material for food safety auditors by the International Advisory Group.	Agreement reached on assignment of tasks among the International Advisory Group to develop specific sections of the curriculum. Members of the Group deliver the materials.	Complete educational material for the food inspection course is ready for design and diagram.	Members of the International Advisory Group must agree to develop and deliver the assigned sections of the educational material necessary to complete the curriculum for food auditors. The educational materials must be delivered on time.

	Project description	Measurable indicators/targets	Sources of verification	Assumptions and risks
	3.5 Design, diagram and installation of the food safety auditing course (level 2).	Class materials are available in proper design for online adaptation. The material has also been placed in proper diagram form.	Complete educational material for the food safety auditor course is available in final form, ready to be installed in the school's virtual platform.	Design, diagram and installation are completed on time.