

MTF/NEP/060/STF
Terminal Report

**Strengthening the capacity of government officials responsible for
food safety, animal and plant health, and agricultural trade in
Nepal to effectively implement SPS measures and related trade
obligations**

STDF/PPG/170

Nepal

PROJECT FINDINGS AND RECOMMENDATIONS

Report prepared for
the Government of Nepal

By
the Food and Agriculture Organization of the United Nations

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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LIST OF ABBREVIATIONS

ABPSD:	Agri Business Promotion and Statistics Division
ACTP:	Agriculture Commercialization and Trade Project
AEC:	Agro Enterprise Centre
AHD:	Animal Health Directorate
CAC:	Codex Alimentarius Commission
DAT:	Directorate of Agriculture Training
DFTQC:	Department of Food Technology and Quality Control
DLS:	Department of Livestock Services
DOA:	Department of Agriculture
FAO:	Food and Agriculture Organization of the United Nations
FNCCI:	Federation of Nepalese Chambers of Commerce and Industries
FIF:	Enhanced Integrated Framework
GAP:	Good Agricultural Practices
GDP:	Gross Domestic Product
GHP:	Good Hygiene Practices
GLP:	Good Laboratory Practice
GMP:	Good Manufacturing Practices
HACCP:	Hazard Analysis and Critical Control Point
MOAC:	Ministry of Agriculture and Cooperatives
MOCS:	Ministry of Commerce and Supply
NARC:	Nepal Agriculture Research Council
NGO:	Non-Governmental Organization
NPC:	National Planning Commission
NPQP:	Nepal Plant Quarantine Program
NTIS:	Nepal Trade Integration Strategy 2010
PSC:	Project Steering Committee
SAARC:	South Asian Association for Regional Cooperation
SPS:	Sanitary and Phytosanitary Measures
STDF:	Standards and Trade Development Facility
TBT Agreement:	Agreement on the Technical Barriers to Trade
TOT:	Training of Trainers
WTO:	World Trade Organization

1. Introduction

1.1 Background of the project

In Nepal, agriculture provides a livelihood for over 74 percent of the population of Nepal and accounts for 32 percent of the GDP. Therefore, any effort made for agriculture sector development not only helps for economic growth but also contributes to poverty reduction. There is potential to expand exports of food and agricultural products through transforming subsistence agriculture into commercial agriculture. However, these opportunities are severely restricted by the weak Sanitary and Phytosanitary (SPS) regime in the country. SPS measures, trade and development are increasingly interconnected. The inadequate capacity of the SPS control regime in Nepal has the potential to severely damage the domestic economy, as well as human health, and animal and plant health, and life.

Agricultural exports are facing problems in meeting the stringent SPS requirements imposed by importing countries due to poor capability of the government to implement risk based monitoring and control system as well as private sector entrepreneurs to address the SPS needs. At the same time, large quantities of food and agricultural products continue to enter Nepal from China and India with limited inspection and control. Given the limited capacity for inspection, control and testing, there are likely to be many cases where low quality products cross the border into Nepal and enter the local market.

Controlling the import and export of agricultural inputs, plants and animals represents a real challenge, made greater by the limited capacity of frontline officers involved in the implementation of the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement). Addressing these capacity constraints is essential to facilitate exports of high-value agricultural food products, and at the same time enhance the safety and quality of food in the domestic market and promote agricultural productivity.

Following years of negotiation, Nepal became the 147th member of the WTO on 23 April 2004. As one of the least developed countries in the WTO, Nepal was granted a transition period until 1 January 2007 to implement certain WTO Agreements including the SPS Agreement. However, in spite of progress made during this period in some areas, capacity to implement and demonstrate compliance with the requirements of the SPS Agreement remains weak. Upon the request of the Ministry of Agriculture and Cooperatives, Government of Nepal, the Standards and Trade Development Facility (STDF) approved a

project preparation grant (PPG) for a study on human resource needs to implement sanitary and phytosanitary measures in Nepal (STDF/PPG/88). The government therefore requested FAO's assistance to provide technical support for the preparation of project document under STDF/PPG/88. In follow-up, the WTO requested FAO to provide Implementation Services for STDF/PG/170.

The project document was prepared focusing mainly in the capacity building of the government front line officers responsible for inspection, quarantine and certification of agricultural and food products at checkpoints, in follow up to the FAO mission. This project proposed to develop and implement a training programme with various modules to support implementation of the SPS Agreement in Nepal. Various SPS training modules in the areas of food safety, animal health and plant health were developed based on a training needs assessment carried out in December 2006 by the FAO technical officer in collaboration with officials within the Department of Food Technology and Quality Control (DFTQC), Department of Livestock Services (DLS) and the Department of Agriculture (DOA) of the MoAC.

1.2 Outline of official arrangements

The project document was signed by FAO on 11 March 2008 and the WTO on 3 April 2008. The project became operational from June 2008 after the project inception in May 2008. Originally the project was scheduled to last for 24 months with a total value of the project USD 382,950, of which the STDF contribution was USD 347,900 and the Government in-kind contribution was USD 35,050. As a result of subsequent project revision, the project duration was extended to a total 28 months and the project terminated on 31 July 2010.

The project servicing costs (overhead costs) incurred by FAO up to 12% of the total amount of STDF funding (USD 41,748) were also funded by STDF. The STDF also allocated USD 10,000 for an independent ex-post evaluation of the project.

FAO was designated as the executing/external implementing agency. The Agribusiness Promotion and Statistics Division (APSD) of the Ministry of Agriculture and Cooperatives, the beneficiary, also supported project implementation. A project steering committee, chaired by the Joint Secretary, APSD/MoAC with representatives from the relevant sector departments (DFTQC, DLS, DOA) and FAO, was established. This committee met regularly (at least every 3 months) to plan, review and discuss implementation

of project activities. Decisions concerning project implementation were taken jointly by FAO and the Agribusiness Promotion and Statistics Division (ABPSD) of MoAC.

1.3 Objectives of the project

The overall objective of the project was to reduce food safety risks for domestic consumers in Nepal, enhance the protection of animals and plants, and promote economic development through increased food and agricultural exports that meet international SPS requirements. The specific objectives were to:

- Equip frontline officers responsible for monitoring and enforcing SPS measures on the ground with the knowledge and practical skills to effectively carry out testing, inspection, certification and approval procedures, and quarantine treatments.
- Enhance the technical and scientific knowledge and skills of selected mid-level officers to perform specialized tasks necessary for the implementation of SPS measures (e.g. risk assessment, determining appropriate levels of protection, product recall and appeal, setting and monitoring pesticide residue levels, etc.).
- Improve the ability of the SPS Enquiry Point and Notification Authority to proactively and effectively carry out their roles and responsibilities

2. Results and Conclusions

2.1 Summary of the project achievements

The project made substantial progress in achieving its objectives. The main focus of the project was on providing practical hands-on and result oriented training to the selected mid-level and junior officers responsible for monitoring and enforcing SPS measures. This has included essential introductory, specialized and refresher training modules and the preparation of related training materials and user guides. The course curriculum and supporting training materials for each module were developed based on the specific needs of particular target groups including food inspectors, veterinary inspectors and quality control officers, animal quarantine officers, plant protection and quarantine officers, and staff of the SPS Enquiry Point and Notification Authority.

All the planned training activities were conducted successfully. International consultants in food safety and animal and plant health developed course content for the ToT programme and implemented the trainings in each of the SPS sectors. A total of 51 master trainers (food safety-15, plant health-16, and animal health-20) were trained.

Furthermore, needs for overseas training were identified and 12 master trainers were equipped with specialized skills, which were not well understood in Nepal during ToT training, through overseas training. Subsequently, the in-country trainings were carried out in various modules and altogether 606 mid-level officers and field technicians from the Government of Nepal (food safety-212, plant health- 192, and animal health-202) were trained.

An evaluation of entire training programme, based on a survey and interviews with participating trainees and their supervisors, was carried out by the independent evaluators of the MoAC, who were not participants in the training programme. More than 75% participants believed that they had observed changes in their working after participating in the training. About 37% of the participants said that they had imparted the same type of training to others. About half of the respondents believed that they had noticed improvement in border inspection system to some extent after the training. As many as 74% supervisors reported that their trained staff had been serving as resource persons (RPs) to train their field-based technical personnel. Participants also expressed that they needed regular refresher training to update them with latest developments in the related fields.

Participants were found facing a number of problems and constraints for applying learnt knowledge and skill through the training. Major problems and constraints mentioned by the participants includes: inadequate physical facilities and equipments, increasing trend of informal trade, no single door service system, poor state of power delegation by the higher authority, frequent transfer of trained staff, inadequate manpower in quarantine check posts, poor staff motivation etc.

Based on the gaps identified and recommendations made on the evaluation report, a refresher training programme was designed and implemented for 15 selected master trainers of the three departments.

Key training materials were developed, produced, and disseminated to the concerned stakeholders. Selected training materials on food safety, animal and plant health were translated into Nepali language and in total 18 types of booklets published and distributed. Materials provided by the international and national consultants during training compiled and published Master Trainers' Resource Guide on plant health, food safety and animal health. Numbers of PSC and technical group meetings were organized in order to review the project progress as well as to provide advice and guidance for the implementation of the project.

Expendable and non-expendable equipment (Laptop computers, digital camera, and multimedia projector) were procured and delivered to the government as per the project document.

Though the project was successful in building capacity of the mid-level Government officials involved in the implementation of SPS measures in the country, there are lots of areas to be considered by the Government of Nepal for the overall improvement in implementation of SPS measures. Some major areas include upgrading and accreditation of laboratories, capacity building of the related staff, strengthening institutional capacity, involvement of private sector in implementing SPS measures, improving law and order situation, and staff motivation.

2.2 Project activities

Consistent with the objectives of the project, the following major activities were completed and results were achieved by the end of the project period:

2.2.1 Workshops:

2.2.1.1 Inception workshop

From 23 to 29 May 2008, the Lead Technical Officer (LTO) from FAO RAP carried out an inception mission to Nepal with the purpose of participating and presenting the overall project programme at the inception workshop. During the mission, he discussed the next steps to be taken in order to start the implementation of the project with the various national stakeholders involved in the implementation of the project including the Project Steering Committee (PSC). The workshop was organized on 26 May 2008 with the assistance from FAO technical backstopping officer and in consultation with various national concerned stakeholders. In the inception workshop, a detailed project implementation and management framework as well as a set of training activities by modules were reviewed and endorsed by them with some suggestions and minor adjustments. Also, all the national stakeholders were very committed to contributing to the implementation of the project.

2.2.1.2 Curriculum development workshop

A total of three curriculum workshops were organized separately by the three respective departments in November 2008. These workshops contributed to the review and development of training materials/curriculum for food safety, animal health, plant health and agricultural trade respectively. Curriculum for each module was developed and adopted by

the three line departments. These draft curricula were prepared by a core group of officials from the respective line departments with the guidance of international sector experts¹, and the drafts were further reviewed, finalized and endorsed by the workshop with minor adjustments.

2.2.1.3 WTO-SPS measures implementation strategy workshop

The STDF-170 project was implemented to contribute to develop the capacity of mid-level government officials to enforce SPS measures. More importantly, it was also realized that capacity development of the private sector such as the producers, processors, exporters and importers are also equally important for effective implementation of the SPS measures. Therefore, a workshop was organized on 13 March, 2010 with the aim of identifying outstanding needs of technical assistance for both sectors (private and public). Based on the issues identified by the workshop that need to be urgently addressed, a project concept note was developed by the government of Nepal in consultation with representatives of AEC/Federation of Nepalese Chambers of Commerce and Industries, EIF/NTIS focal point/MoCS, and private sector entrepreneurs to avail STDF project development support from the WTO.

2.2.1.4 Final sharing workshop

On the verge of project completion, as the final project activity a half-day workshop was organized on 26th July 2010 with the objective of sharing overall progress of the project and identifying the areas for way forward for the application of SPS Measures in Nepal in the days to come. The workshop was attended by the senior and mid-level officials from the line ministries, representative from National Planning Commission (NPC), Agro Enterprise Centre (AEC)/FNCCI, Ministry of Commerce and Supply (MOCS), and national level NGOs, including officers from FAO Nepal and Technical backstopping Officer from FAO Bangkok.

During the workshop, a common understanding was reached on the way forward vis-à-vis strengthening the country's capacity in implementing SPS measures and trade obligations although discussion were held on various issues among the participants.

Please refer appendix 4 for the details of final sharing workshop

¹ Dr. Obbineni Ramalinga Reddy, plant health expert (25 August to 21 September 2008)
Dr. Narayanan Amma Anandvally, food safety expert (11 September to 1st October 2008)
Dr. Daniel Beltron, animal health expert (30 August to 22 September 2008)
Dr. Stephen Page, risk analysis expert- risk assessment, communication and management (7-11 June 2009 and 3-9 January 2010).

2.2.2 Capacity building

2.2.2.1 Master trainer development

Participants for the master trainers in food safety, animal and plant health and agricultural trade in were selected by the three respective departments. The following criteria were exercised to select master trainers: i) officer of DFTQC, DOA and DLS with relevant technical knowledge and qualifications; ii) good communication and interpersonal skills; iii) willingness to be actively involved in subsequent training courses; iv) willingness and availability to participate in all sessions of the curriculum development workshops and training of master trainers; and v) agreement not to seek a job transfer into a different technical area for next 2 years. Three ToTs were organized in 2008 by the three departments for a total duration of more than fifteen days with the support of International sector experts on food safety, animal and plant health. A total of 51 master trainers (food safety-15, plant health-16, and animal health-20) were developed.

2.2.2.2 Exposure visit and training

A Terms of Reference (ToR) for the specialized overseas training and study visits was prepared by the FAO technical officer in consultation with the three departments and International Consultants involved in delivering the national ToT workshops, which was further endorsed by the PSC. From among the Master Trainers, a total of 12 officials participated in the overseas training programme, which was organized on 15-26 February 2009 at the Kasetsart University, Bangkok and equipped with specialized skills and knowledge, which were not well understood in Nepal during ToT training. Risk analysis, animal quarantine, animal health surveillance, GAP, GLP, GMP, HACCP implementation in food industries, import and export inspection and certification, notification procedures and mechanism of international trade facilitation etc were covered in the Thai Training. These trained experts were actively involved as master trainers leading the in-country training sessions.

These master trainers, including officials who attended overseas training courses have been serving as trainers and involved in the implementation of the in-country trainings tailored to the specific needs of front-line officers from line departments including food and veterinary inspectors, plant protection and quarantine officers, veterinary inspectors, animal quarantine officers, junior technicians in food safety and animal and plant health, etc.

The overseas training provided an opportunity for the participants to observe activities and institutional set-up related to implementation of SPS measures in the areas of plant health,

food safety, animal health and agricultural trade in Thailand. Finally, the training provided a good opportunity to strengthen communication and exchange of information among government officials from Nepal and Thailand on SPS related issues.

2.2.2.3 In-country training

Subsequently, the in-country trainings were delivered by the master trainers on various modules. In total, 606 mid-level officers and field technicians (food safety-212, plant health-192, and animal health-202) were trained on various aspects of SPS measures. In-country trainings were implemented through 19 modules (plant health-8, animal health-6, and food safety-5). Participants to attend the training courses were selected on the basis of the following criteria: i) staff of DFTQC, DOA /NARC and DLS with day-to-day responsibility for tasks to be covered during training session; ii) willingness and availability to participate in the training sessions; iii) interest to learn new skills and apply new knowledge and skills obtained. Trainings were fruitful to enhance the awareness and build technical knowledge and practical skills on various SPS related issues in the areas of food safety, animal health, plant health and agricultural trade related obligations that meet international requirements.

Please refer appendix 2 for the details of training evaluation

2.2.2.4 Refresher training for master trainers

Further, a refresher training of trainers on SPS measures was organized for two days for the 15 master trainers of the three departments particularly focusing in the fulfilling the training gaps of SPS identified during entire training evaluation. This training has contributed in fulfilling gaps identified in the area such as risk analysis and its application in the field situation, export-import inspection and certification system; up-to-date provisions of WTO-SPS, transparency and harmonization; organic certification and application of GVP,GAP,GHP,GMP, HACCP; field survey, surveillance, pest diagnosis; and role of Codex Alimentarius Commission (CAC) in standard development and WTO-non-tariff Agreements.

2.2.3 Overall coordination of technical aspects of the project

The FAO Lead technical officer successfully coordinated technical aspects of the project activities and their effective implementation. Basically, the FAO technical officer was involved in identifying the international consultants and supervising their work; identifying relevant FAO resource materials, tools and guidelines to be used for the development of

training manuals/resource guides; and backstopping the project and providing any necessary advice and support on implementation. During project implementation, the project programme and its related issues were discussed in the regular Project Steering Committee (PSC) meetings, the Project Task Force meetings, and the Technical Team meetings of the representatives from three national institutions involved in the project implementation. Discussions also took place with donors (EC and World Bank) involved in related activities through the individual meetings by the Lead Technical Officer of the project. They never attended PSC meeting although they were invited. Special attention was also given to maintaining collaboration and coordination with the World Bank's Agricultural Commercialization and Trade Project (ACTP) and providing information about how the ACTP can follow-up on the capacity building activities carried out under this project and how ACTP can contribute to cover the gap between needs for capacity building and training provided under this project. PACT project has been utilizing the training materials and human resources produced by the STDF project as and when necessary. The FAO Technical Support Officers provided continued technical support and guidance as appropriate to the project. The close and regular contacts between the lead FAO technical officer and three departments of the MoAC as well as FAO Representation were maintained. Beside these, FAO technical officer was involved.

2.2.4 Project reporting, monitoring and evaluation

FAO has submitted periodic progress reports to the STDF Secretariat on the implementation of the project activities following the reporting schedules as envisaged in the project document. Altogether, four six-monthly project progress and one inception report were submitted to the STDF. These reports described the progress made in implementation of project activities against the work and delivery plan, and discussed problems encountered problems which required additional attention during the implementation.

The PSC was actively involved in the planning, delivery, management and supervision of the project activities. Altogether, five PSC and several technical group meetings were organized on a periodic basis and when actually needed basis respectively. These meetings have substantially contributed to make appropriate and timely decisions on the project implementation issues and guidance for the smooth implementation of the project. The ability of trainers, and the relevance of the training materials for the specific training courses, was monitored randomly by members of the PSC who provided suitable feedback to the master trainers for further improvements.

An evaluation of the entire training programme, based on a survey and interviews with participating trainees and their supervisors, was completed by independent training experts of the MoAC. Based on findings of the evaluation and conclusions drawn thereof, several recommendations have been made to effectively implement SPS measures in Nepal. A refresher training programme for the master trainers was designed, developed and implemented focusing especially on the identified knowledge gaps by the evaluators.

Please refer appendix 3 for the details of training evaluation

2.3 Conclusions

A wide range of activities were successfully concluded under the project, and the training programme. The project was effective in developing awareness, knowledge and skills of the mid-level government officials responsible for enforcing SPS measure and thereby contributing to the positive change in their on-the-job performance and attitude in respect to implementation of the SPS Agreement.

A package of SPS training programmes and materials, user guidelines, and manuals covering food safety, animal and plant health and life, and agricultural trade have been developed to meet national needs, which can be used by the public and private sectors as required for the purpose of training, job guidance and reference.

Master trainers that have been developed by the project in the area of food safety, plant and animal health can be utilized to deliver the further SPS related trainings and will be expected to continue to serve as trainers once the project is completed thereby contributing towards the cost-effective multiplication of the benefits of the project and future sustainability.

This project has also been productive in contributing to the better coordination among three departments under the Ministry of Agriculture and Cooperatives (MoAC) and SPS enquiry point and SPS coordinating committee having representatives from various sectors including private sector, which are responsible to implement the SPS Agreement in Nepal as the coordination between three departments of the MoAC for the implementation of SPS measures seems not adequate.

Although, the training provided by the project to the government staff was effective in raising the awareness and level of skills in a variety of areas related to SPS measures, capacity building needs of the private sector were not covered by this project. Given the major role of the private sector in the implementation of SPS measures, alongside the government's role of enabler and facilitator, additional attention is required to strengthen private sector capacity in this respect. A follow up project to enhance capacity of value chain actors is recommended in this regard.

The project has contributed to develop a basic framework and strategic directions for further capacity development of the private sector. However, the significant challenges lie ahead for the Government to further manage the considerable assistance from multiple donors for the new project to effectively implement the SPS measures as laid out by WTO by strengthening the capacity of the private sector entrepreneurs together with the government officials that control food quality, plant quarantine and animal quarantine (domestic, imports and exports).

3. Recommendations

3.1 Recommendation to the Government

Followings were the identified areas to be accomplished by the government sectors:

- In general, the training provided by the Project to government staff was effective in raising the awareness and level of skills in a variety of areas related to SPS measures, although follow up is required to ensure that the skills are applied on the job;
- Government should internalize the capacity and capability building programmes on SPS measures to trickle down the skills and knowledge through the regular programme and to sustain the achievements made by the project STDF-170 and to address the emerging issues in SPS measures implementation;
- Amendment of prevailing Acts, Regulations and SOPs as per international requirements and based on training imparted ;
- Standards need to be continuously reviewed with the aim of aligning these with international norms. Less stringent standards would expose the country to dumping of goods of low quality;
- Keep pace with global development both at international level and other trading partners so as to prepare offer changes;

- Incorporate SPS and TBT related issues in educational curricula in various university degrees and diploma programmes;
- Address issues such as traceability, food safety emergency response planning in line with international guideline documents;
- Emphasis on developing recognition / equivalence agreements so as to benefit the country through use of pooled resources effectively;
- Clear- cut demarcation in cross-cutting issues among the departments;
- Policy to retain the trained personnel in the related job/office;
- Policy level guidelines for the implementation of the SPS measures.
- Develop regulations, national standards, code of practices, procedures, processes in the related fields;
- Needs of one – door Quarantine management system;
- Upgrade lab. and quarantine facilities and provide necessary logistic support;
- Address the regulatory and logistic needs of the related govt. agencies in order to effectively implement SPS agreements;
- Maintain good co-ordination among the personnel involved in animal health, plant health and food safety, local administration and custom office;
- Permanent Training Institute on SPS measure especially in the areas of inspection, testing and certifications;
- Labs of all line departments to be covered under systems implementation as per ISO 17025 and to be got accredited;
- Developing infrastructure for effective implementation of SPS measures at field level ;
- Development of the information management system and information networking
- Internalizing WTO-SPS related trainings within government training system in the concerned Departments;
- Formation of Risk Analysis Group in the MOAC;
- Application of GAP, GLP, GVP, GMP, GHP, HACCP in the related fields;
- Strengthening SPS Enquiry Point and Notification Authority structurally and financially;
- Improve public awareness on quality so that they demand a higher quality product which would automatically raise the levels of domestic standards;

- Enhance capability of private sector entrepreneurs of entire food chain to address the SPS needs of the importing countries (such as internal quality system, grading, packaging and storage, GAP, GVP, GHP, GMP, HACCP etc.)

It is recommended that the Government should consider providing additional resources either through their regular budget or soliciting resources for the new projects to follow up the above mentioned activities. The project prepared a number of valuable training materials, ToT toolkits and manuals/resource guides, and developed human resources. The government as well as other like minded projects should make proper and maximum use of these materials and human resources.

3.2 Recommendation to the private sector

Followings were the identified areas to be supported by the private sectors:

- Invest more for the production of safe foods
- Application of GAP, GLP, GVP, GMP, GHP, HACCP in the related fields
- Establishment of accredited Laboratory in the private sector
- Go hand-in-hand with the government sector to creating awareness on the private and public sectors and providing SPS training to the commercial farmers, traders, processors, etc

Appendix -1

Project Management Team

The following persons from FAO and MoAC served on the Project Steering Committee (PSC) and were actively involved in the planning, delivery, management and supervision of the project activities as described below:

SN	Function	Name	Designation	Organization name
1	FAO Project Coordinator	Mr. Arjun Singh Thapa	Programme Officer	FAO-Nepal
2	Chairperson	Mr. Fulgen Pradhan	Joint Secretary	Agri-Business and Statistics Division (ABPSD), MoAC
3	MOAC Project Manager / PSC Secretary	Mr. Kishna Prasad Pant, Section, (ABPSD), MOAC	Officiating Chief, WTO section	Agri-Business and Statistics Division (ABPSD), MoAC
4	Food Safety Support (Training Coordination)	Mr. Ganesh Dawadi,	Focal Point Officer	Department of Food Technology and Quality Control
5	Animal Health Support (Training Coordination)	Dr. Damodar Sedai	Focal Point Officer	Department of Livestock Services
6	Plant Health Support (Training Coordination)	Dr. Ishwor Rijal	Focal Point Officer	Department of Agriculture
6	MoAC (project coordination)	Mr. Mandip Rai	Desk officer	Planning Division, MOAC
7	FAO Technical Support	Mr. Peter Sousa Hoejskov Ms. Shashi Sareen	Food Safety Officer Senior Food Safety and Nutrition Officer	FAO Regional Office for Asia and the Pacific, Bangkok

Appendix-2

Status of in-country training programme (by modules)

1. Training Status of Animal Health

S.N.	Module	Topics	Venue	Duration	Part. No.	Participants	Status
1	I	TOT for master Trainers in Veterinary Inspection and Quarantine	Kathmandu	4 -18 Sept., 2008	20	Mid-level officers	Completed
2		Workshop on in-country training Curricula development and Implementation	Kathmandu	2-3 Nov,2008	24	Various level officers of DLS, research councils and other line Ministries	Completed
3	II	Training on essential and specialized skills of Veterinary Inspection and Quarantine	Kathmandu	10- 19 Dec, 2008	20	Field Vet officer, Quarantine officers and private Vets	Completed
4	II	Training on essential and specialized skills of Veterinary Inspection and Quarantine	Kathmandu	4 -13 Jan, 2009	20	Veterinary Field Technicians	Completed
Total Participants in Module II					40		
5	III	Training on Good Practice in the area of Veterinary Control	Kathmandu	15- 24 Dec. 2008	21	Veterinary Field Technicians	Completed
6	III	Training on Good Practice in the area of Veterinary Control	Kathmandu	11- 20 Jan, 2009	21	Vet QC Officer, Field Vets, Livestock Officers with Vet degree	Completed
Total Participants in Module III					42		
8	IV	Training on Import Export certification of animals and animal products	Nepalgunj	19-24 Mar, 2009	20	Veterinary technicians	Completed

9	IV	Training on Import Export certification of animals and animal products	,Nepalgunj	8-13 Apr, 2009	20	Vet Inspectors and Quarantine Officers	Completed
		Total Participants in Module IV			40		
10	V	Training on Enforcement and compliance	Pokhara	1- 3 Mar, 2009	20	Vet inspectors, Quarantine Officer, Custom officer and local police officer, Livestock officer	Completed
11	V	Training on Enforcement and compliance	Pokhara	5-7 Mar, 2009	20	Field Technicians	Completed
		Total Participants in Module V			40		
12	VI	Animal health risk analysis	Kathmandu	7-14 June 2009	20	Senior and mid-level officers	Completed
		Total Participants in Module VI			20		
		<i>Total Number of Participants in Module I -VI (202)</i>			202		

2. Training Status of Plant Health

S.N.	Module	Topics	Venue	Duration	Participant No.	Participants	Status
1	I	TOT/specialized training master Trainers in plant health	Kathmandu	1-19 Sept., 08	16	National plant quarantine, Plant protection directorate, regional plant protection laboratory, DADO, NARC, Plant quarantine check posts	Completed
2		Workshop on in-country training Curricula development and Implementation	Kathmandu	2-3 Nov., 08	26	NARC and Department of Agriculture, IAAS campus	Completed
3	II	Training on Methyl Bromide Fumigation	Lalitpur	14-16 Sept. 2008	16	Plant Protection/Quarantine Officers/ Research officers/Agri. Dev officer	Completed
4	II	Training on Methyl Bromide Fumigation	Bhairhawa	18-23 Dec., 08	16	Plant protection/ Plant Quarantine Junior technicians	Completed
Total Participants in Module II					32		
5	III	Training on Plant Health Inspection & Quarantine Procedures	Lalitpur & Nepalgunj	1-9 Feb., 09	16	Plant protection/ Plant Quarantine officers	Completed
6	III	Training on Plant Health Inspection & Quarantine Procedures	Lalitpur & Birgunj	7-15 Dec., 08	16	Plant protection/ Plant Quarantine Junior technicians	Completed
Total Participants in Module III					32		
7	IV	Training on specializes skills for Pest Risk Analysis	Lalitpur	12-21 Mar., 09	16	Plant Protection/Quarantine Officers/ Research officers	Completed
		Total Participants in Module IV			16		
8	V	Training on establishment for pest free area: importance & scopes in international trade	Lalitpur	29 March to 02 April 2009	16	Senior PP officers/ Agri. officers/ Senior scientists/policy makers/Officials of private organizations	Completed
Total Participants in module V					16		

9	VI	Training on Pest survey, surveillance & monitoring	Lalitpur	1- 8 Mar.,09	15	Plant protection and quarantine officers	Completed
10	VI	Training on Pest survey, surveillance & monitoring	RPPL	23-30 Mar., 09	15	Plant protection and quarantine officers	Completed
11	VI	Training on Pest survey, surveillance & monitoring	Lalitpur	18-25 Nov., 09	15	Plant protection and quarantine officers	Completed
Total Participants in Module VI					45		
12	VII	Training on Pest diagnosis & handling	Lalitpur	11-20 Feb., 09	16	Plant protection & Quarantine officers	Completed
Total Participants in Module VII					16		
13	VIII	Training on Phytosanitary certification & administrative procedures	Lalitpur	30 November to 5 December 2008	19	Plant protection & Quarantine officers	Completed
Total Participants in Module VIII					19		
<i>Total Number of Participants in Module I-VIII (192)</i>					192		

3. Training Status of Food Safety

S.N.	Module	Topics	Venue	Duration	Participants No.	Participants	Status
1	I	TOT for master Trainers in Food inspection and certification	Kathmandu	16-28 Sept.,08	15 (2F&13M)	Central, regional, and customs officers of DFTQC	Completed
2		Workshop on in-country training Curricula development and Implementation	Kathmandu	6-7 Nov., 08	23 (3F&20M)	MoAC, NPQ programme, Veterinary and drugs quality management office, NFT association, and DFTQC officers	Completed
3	II	Training on Food Inspection and Certification	Kathmandu	16-26 Dec.,08	20 (7F&13M)	Food inspectors/ food research officers	Completed
4	II	Training on Food Inspection and Certification	Dhangadhi	18-25 Jan.,09	20 (3F&17M)	Food inspectors/ food research officers	Completed
5	II	Training on Food Inspection and Certification	Biratnagar	22 Feb-1 Mar.,09	25 (1F&24M)	Food inspectors/ food research officers	Completed
Total Participants in Module II					65		
6	III	Training on Assurance of Food Safety and Quality in Food Industries	Kathmandu	4-9 Jan.,09	20 (2F&18M)	Q.C. officers of food industries	Completed
7	III	Training on Assurance of Food Safety and Quality in Food Industries	Hetauda	27 Mar-1 Apr.,09	17 (1F&16M)	Q.C. officers of food industries	Completed
8	III	Training on Assurance of Food Safety and Quality in Food Industries	Biratnagar	03-08 May 2009	13 (13 M)	Q.C. officers of food industries	Completed
9	III	Training on Assurance of Food Safety and Quality in Food Industries	Nepalgunj	30 Aug- 4 Sept.,09	20 (2F&18M)	Q.C. officers of food industries	Completed
Total Participants in Module III					70		
10	IV	Training on Food Import and Export Inspection and Certification	Kathmandu	9-14 Aug.,09	21 (1F&20M)	Food inspectors/ food research officers	Completed
Total Participants in Module IV					21		
11	V	Training workshop on Basic Food Safety and Quality Standards	Dhulikhel	18-20 Nov.,09	41 (5F&36M)	District attorneys and representatives from municipalities/ district administration offices/ consumer forum/ DFTQC	Completed
Total Participants in Module V					41		
Total Number of Participants in Module I-V (212)					212 (24 F & 188 M)		

Appendix-3

Report on Post -Training Evaluation of the Training Programs

1. Background

The project entitled "Strengthening the capacity of government officials responsible for food safety, animal and plant health, and agricultural trade in Nepal to effectively implement SPS measures and related trade obligations" implemented under Standard and Trade Development Facility (STDF) powered by WTO is on the verge of completion. The main objective of the project was to enhance capacity of government officials of the three departments namely Department of Agriculture (DOA), Department of Livestock Services (DLS) and the Department of Food Technology and Quality Control (DFTQC) on the implementation of SPS measures as obligation of WTO member countries, mainly through the training programs.

Training on seven modules was imparted to the related staff of DOA, DOLS and DFTQC with some participants being exposed to one or more modules. The training was also provided to industry personnel on relevant modules. A total of 606 participants were trained during 2008 September to 2010 January. The project steering committee meeting held on 11 March 2010 decided to carryout evaluation of various training courses conducted under the project. Accordingly, a meeting of concerned key stakeholders held on 17 March 2010 under the chairmanship of Mr. Fulgen Pradhan, Joint Secretary of MOAC, formed a three-member-independent team from the MOAC to carryout the evaluation.

2. Objective

The general objective of the evaluation was to assess the overall effectiveness of the training programs conducted under the project. However, following were the specific objectives of the evaluation:

- to assess the relevance of the training course to the job situation of the trainees,
- to assess on-the-job application of the knowledge and skills acquired by the trainees through the training course,
- to examine the trainees' work situation and constraints to effectively translate learning into their job situation, and

to identify areas of intervention for the effective utilization of the trained manpower

3. Methodology

Trainees, who participated in one of the training modules on food safety, plant health and animal health, formed the universe for drawing sample respondents to be interviewed. Respondents were classified into three groups, namely, Inspector, Supervisor of the inspector, and Industry personnel. Separate questionnaires were administered for each group (Annex 1a, 1b and 1c). About Twenty percent of the trained participants (130 people) from each group were randomly selected for the interview. The name of the persons interviewed is given in Annex 2. The number of persons interviewed remained a little short of total sample size as some of the selected sample respondents could not be contacted/traced for various reasons. Focus group discussion was also

carried out to have in-depth information on the specific areas and issues. A structured questionnaire was administered to get the response from the respondents through personal interviews. On-the-spot observations of trainees' performance, work situation etc. were also made.

A three-member-independent team formed by the Ministry carried out the field survey during April-May YEAR?. The team was supported by three senior officials; one each from the Department of Agriculture (DOA), Department of Livestock Services (DLS) and Department of Food Technology and Quality Control (DFTQC). Data was compiled and was analyzed using simple statistical tools. Qualitative information received through the interview and from the focus group discussion was summarized descriptively.

4. Findings

4.1 Inspectors

4.1.1 Relevancy and usefulness of the training course

About half of the respondents (51%) replied that the training provided to them was highly relevant, whereas for 40% respondents the training was moderately relevant to them. Upon asking which were the areas taught in the training not useful for them, the responses varied. Almost two-third (65%) of the respondents found all the contents covered in the training to be useful for them. About 10% trainees were of the view that only few areas were useful for them and few of them found risk analysis concept not useful for them due to the differences in the nature of their jobs. Some of the major areas mentioned as useful were International Standard for Phytosanitary Measures (ISPM), chicken egg production, meat inspection, and veterinary inspection, SPS measures in plant, dispute settlement, food inspection, plant quarantine, animal quarantine, good veterinary practice and laboratory analysis. About 13% of the respondents said that the knowledge and skill acquired through the training were not useful for them either due to their transfer after the training or due to their present placement in their respective institutions.

4.1.2 Available national guidelines, Acts, Rules, manuals, standard operating procedures (SOP) and international standards and guidelines for use in their daily works

Most of the respondents (91%) were having with them at least one international standard/guideline document. Guidelines and standards possessed by more number of respondents were Codex, OIE, ISPM and ISO. Some other guidelines and standards available with the participants were WTO-SPS, IPPC, HACCP, Pest- free- area (PFA), GMP, standard. Regarding the daily use of those guidelines and standards, Codex and OIE were found to be used by maximum number of participants. Some other guidelines and standards they were using were ISO, certification related, PFA, ISPM, SPS, IPPC, HACCP, GAP and good laboratory practice (GLP). About one-fifth of the participants were found not using any guidelines or standards in their day-to-day work as they did not specifically mention the name of any guidelines or standards.

On the other hand, most of the trainees (94%) were found possessing guidelines, acts, rules, manuals, standard operating procedures (SOP) relating to SPS measures issued by their respective departments and relevant to their area of work. Some of the major such documents included laboratory manuals, food act and regulation, animal health act and regulation, standard for animal transportation, guidelines for export/import, various SOPs, plant protection act and

regulation, plant quarantine act, quarantine guidelines, guideline for inspection and sampling, food inspection format, bird flu order, code of conduct for food industry, food standards, feed act, drug act, seed Act, Nepal veterinary act, pesticide act and regulation and different mandatory standards. When asked if there were any changes in those documents after the training, 60% of the respondents believed that there were no changes to those documents. But 22% believed that there were some changes. Rest of the respondents either replied that they did not have any idea about the same or did not give any specific answer. Some of the documents mentioned as amended after the training were animal health regulation, plant protection regulation, bird flu order, milk and biscuit standards and some SOPs issued by the Department of Food Technology and Quality Control.

4.1.3 Impact/ change in the working behaviour of the participants after the training

More than 75% participants believed that they had observed changes in their working after participating in the training. The changes related to fields like inspection and certification, sampling, application of HACCP, GMP, GLP, working in the laboratory, implementing pertinent regulations, food safety and quality monitoring, cleanliness, internal quarantine, quality improvement in vaccine production, industry inspection, instruction to traders, public awareness, use of PFA and Codex in export/import of food items, survey and surveillance, notification and reporting. Many of them said that their state of knowledge and skills in the pertinent areas had improved after the training. About 10% of the respondents believed that they had not observed any change in their working mainly due to their placement now in different jobs. It was noticed that some of the policy level staff had also participated in the training and therefore they did not have any specific activities related to the implementation of competencies acquired through the training. Rests of the participants were not specific in their responses.

4.1.4 Imparting training

About 37% of the participants said that they had imparted the same type of training to others. Subject of training imparted, among others included food inspection, animal health risk analysis, food safety and quality control, SPS training, national TOT on WTO-SPS measures, food safety and quality control training to industry people. Almost equal number of participants (38%) was found not imparting such training owing to various reasons. However, they said that they had discussed the contents of the training with respective stakeholders. Moreover, they had shared the knowledge gained through the training with peers and subordinates, in various workshops and seminars. Likewise, they had played the role of resource person in the pertinent areas in the farmers' training. Interestingly, 19% replied that they had either no opportunity to apply the learnt knowledge and skill in their respective field due to different nature of present job or were denied the opportunities to impart the knowledge and skill within the organization. Rests of the participants were not specific in their answers.

4.1.5 Sufficiency of the reading materials provided in the training and need for the refresher training?

Participants were asked whether reading materials such as copy of power point presentation slides and pertinent literatures and documents provided in the training were enough. More than half (55%) of the participants responded that the materials were enough for them. Whereas for about three percent of the respondents, the materials provided were moderately sufficient. Substantial fractions (42%) of the respondents were of the view that reading materials provided

in the training were not sufficient. Many participants cited more theoretical materials given as the reason for insufficiency of the reading materials provided. On the other hand, for some respondents, the materials were not sufficient due to continuous changes and new developments. They expressed that materials provided were not sufficient to cope with the changing situation. A few participants had also objection to the materials being printed in English.

Almost all participants were of the view that they needed refresher trainings. Some of the areas pointed out for the refresher training were risk analysis, GVP, HACCP, GMP, GAP, GLP, WTO-SPS measures, export/import of food, monitoring technique and laboratory related skills. Participants expressed that they needed regular refresher training to update them with latest developments in the related fields. They, however, were of the view that only refresher training would not be effective and needed to be accompanied by improvements in working condition and staff motivation with necessary incentive packages.

4.1.6 Communication with SPS inquiry point and SPS notification authority after the training

A sizable fraction (16%) of the respondents gave wrong answer to the question about institutional location of the SPS inquiry point. Further, about five percent of the respondents replied that they had no idea about. About two-third (65%) of the respondents who rightly answered regarding the location of the SPS inquiry point i.e. DFTQC, had communicated with the same after the training. The major subjects of communication were certification, bird flu order, SPS measures and food safety related.

Likewise, only 47% participants were found having a correct idea about the location of the SPS notification authority which is in MOAC. Rest of the participants either gave wrong answer or replied that they had no idea about the same. About 55% respondents who were aware of the location of SPS notification authority had communication with the authority at least once after the training. The communication was about export/import of food, livestock standards documents, bird flu, SPS related matters, Codex, drug residue in meat and milk, melamine in milk and disease of livestock in Africa. Some of the reasons for not communicating were either that they were facing no problem or had no need of contacting the same due to their nature of job.

4.1.7 Day-to-day use of modern techniques learnt through the training in the field of inspection and certification system

Only 35% respondents were found making day-to-day use of modern techniques, which they had learnt in the training. According to them, major areas of using modern techniques were in certification, sampling and testing of inputs, raw materials, feeds and animal products, regulatory activities, labelling, bird flu surveillance, and implementing ISPM, Codex, PFA, OIE, IPPC transportation standard, and export/import guidelines, laboratory diagnosis, food inspection systems and animal quarantine. Participants who said they were not using the modern techniques gave various reasons for being unable to do so. Some of the reasons given were lack of facilities and incentives for the staff involved, transfer of trained staff, resource constraint, and being in a position not authorized to make use of those techniques. A substantial proportion (12%) of the respondents replied that they were unable to use the modern techniques as they were not directly involved by their position or placement in their organization in using those techniques.

4.1.7 Change in border inspection system, rejections of consignments of food / agricultural products, informal trade of food and agricultural products in the border

About half of the respondents believed that they had noticed improvement in border inspection system to some extent after the training. They, however, pointed out the prevailing malpractices in the custom point as an issue for being unable to fully regulate border inspection system. They responded that they had poor access to custom process and that if one wanted to abide by the existing laws, he would even receive life threats from miscreants. For some 26% respondents, there were no changes in the border inspection system even after receiving training. For them, the reasons for no improvement were, among others, lack of infrastructure and transfer of trained staff to other places. Interestingly, 25% respondents were not related to the border inspection activities. One obvious reason would be that the participation drawn in the training was from various fields including laboratories and district and central based offices.

Only 15% respondents said that there was reduction in the cases of consignment rejection by the importing countries. Some of the reported cases included those in the export of rice and livestock products. Contradicting with that view, 30% respondents believed that there was no such drop down. Rest of the respondents either did not know about such cases or they simply had no idea about the matter as they were not related to quarantine services.

Likewise, 28% respondents believed that informal trade from the custom point had reduced after the training as some of them had seen positive impact of school awareness program against the illegal trading, increased frequency of regular border monitoring and coordination with security forces, and fear of people to be potentially languished behind the bar if caught in any wrong doing. But the large fraction (40%) of the participants did not believe that there was any reduction in the informal trade. The participants, who believed that there was no reduction in informal trade, cited various reasons for the same. Major reasons were procedural hassles and high custom fee structure that did not favour small traders and therefore such small traders were attracted to illegal trade. Added to that, some six percent respondents expressed that there were, in fact, increased cases of breaching custom rules and regulations by means of illegal trade mainly due to prevailing poor state of law and order situation. Rest of the respondents had no idea about that matter as they were not related to quarantine services.

4.1.8 Areas of improvements to strengthen the current inspection and certification system

Participants were asked about what sort of improvements they would like to see in their field in order to improve inspection and certification system for export/import of agriculture products. They were also asked to suggest the areas of improvement needed based on international standards and current state-of-affairs back home. Various areas of improvement they suggested can be listed as follows:

- spot testing facilities
- improvement in laboratory system
- use of HACCP, GMP, GLP
- establishment of inspection unit
- need of more number of inspectors at district
- upgrading physical facilities in laboratory for better inspection and certification
- one-door system of quarantine needed

- veterinary quarantine laboratory needed
- need of electronic certification system
- reference materials for pest diagnosis needed
- need of observation tour for the knowledge of Pest Risk Analysis (PRA)
- authority to same person for inspection and certification required
- need of plenty space in quarantine offices
- Amendment of pertinent laws to cater the need of changing situation in the related field warranted
- need of establishing accredited laboratories
- training to stakeholders about inspection and certification in the context of the implementation of WTO-SPS measures
- public awareness needed on SPS measures
- building of holding yard for animals in quarantine check posts
- use of English label on food items
- proper incentives for quarantine staff needed
- harmonization of inspection and certification system
- treatment of packaging materials before dispatching the consignment
- refresher training for quarantine staff
- participatory approach in drafting laws
- quarantine structure to be expanded
- uniformity in food product standards
- formulation of national standards on food items
- quarantine volunteers to be introduced deploying youths
- enhanced career development opportunities for staff
- formulation of food safety policy required
- SOPs for animal disease control and, export and import of animals to be developed
- internal quarantine to be strengthened
- quality control during import of veterinary vaccines to be ensured
- identification of Pest Free Area (PFA) to be done
- monitoring system to be strengthened

4.1.9 Problems and constraints faced by the participants in applying knowledge and skills acquired through the training

Participants were found facing a number of problems and constraints for applying learnt knowledge and skill through the training. Problems and constraints they mentioned covered wide areas ranging from those arising out of the current political situation and governance issue to very specific technical ones. Problems and constraints mentioned by the participants can be summarized in bullets as given below:

- inadequate physical facilities and equipments
- security threats to the staff
- monopoly in industry
- delay in amendments of laws/standards
- increasing trend of informal trade
- no cooperation from industry persons

- no single-door service system
- inadequate support and coordination from local administration
- lack of vehicles in the field
- no idea about PRA
- poor state of power delegation by the higher authority
- no clear-cut policy on the inspection and certification/policy confusion (e.g. no quarantine provision in food act)
- frequent transfer of trained staff
- inadequate manpower in quarantine check posts
- widespread resource constraints in offices for implementing effective inspection and certification
- long porous border with India making the task of quarantine more difficult
- problems in introducing GAP
- poor staff motivation
- lack of public awareness about quality control in various stages from production to distribution
- massive use of veterinary drugs by non-professionals
- no implementation of reward and punishment system
- poor access of quarantine staff in custom procedure
- same inspection fee irrespective of volume of consignment
- import by the small traders using non-sealed consignment
- no provision of work shift in quarantine check post
- different institutions dealing with the same field of quarantine
- lack of effective communication system in SPS enquiry point
- inadequate number of skilled manpower and no provision of regular refresher training
- political crisis in the country

lack of sophisticated information and communication technology and facilities at quarantine offices

4.2 Supervisors

4.2.1 Change in working behaviour after training

In response to the question whether there had been any change in working behaviour of the staff after training, most of the supervisors (92%) expressed that they had experienced positive change. Among them, a few (12%) had experienced only a little but positive change. Only four percent supervisors found no difference in working before and after training as a result of lack of required resources. Another four percent respondents from the District Agriculture Development Office (DADO) however, expressed ignorance due to non inclusion of their relevant staff in the training.

Those responding positive changes in work pointed out major improvements in: use of international and national standards and guidelines (16%), record keeping (16%), inspection including birds and avian products' import regulation (12%) and better work motivation (8%). Likewise, four percent respondents (in each area) indicated that training learning/knowledge was used in their work, client service improved, hygiene improved, cleaning and surveillance management increased and Industrial Inspection SOP developed.

4.2.2 Served as Resource Person to train field personnel

As many as 74% supervisors reported that their trained staff had been serving as resource persons (RPs) to train their field-based technical personnel. Issues on SPS, OIE had been given to industry personnel and field staff while imparting training on cattle, poultry and goat husbandry. Moreover, it was also reported that the Directorate of Training and Extension of the DOLS had developed and was implementing a training package for their field staff.

About 13% supervisors reported that their trained sub-ordinates had no opportunity to serve as RP due to lack of program in their organizations' annual program target while other 13% said that their staff did not serve as training resource person but in other ways. Some of the respondents expressed that there was some interactions in various meetings, workshops, and technical discussions regarding the WTO-SPS measures. Few examples were cited as having interaction with livestock and meat traders and technicians, such as Community Veterinary Workers.

4.2.3 Job Performance Improvement

Regarding improvement in the job performance of inspectors after training, almost 91% supervisors responded positively while only one respondent failed to give a clear response and another one supervisor from a DADO expressed that there does not exist proper opportunity to help to improve the trainees' job performance in that organization due to nature of his job function there. Among those who responded positively, about 5% claimed the level of job performance being very much improved; over 59% found it moderately improved; 23% felt it fairly improved while 5% supervisors had experienced just slight improvement in their concerned subordinates' job performance after having the said training. Interestingly, none of the respondents said that there was no improvement in the job performance after the training.

4.2.4 Constraints in application of knowledge and skills

The respondents had revealed a long list of constraints in application of acquired knowledge and skills in their organizational programs and that of their trained staffs' day-to-day activities. Constraints that were more frequently pointed out included lack of or poor state of resources, logistics and facilities (26% response), inadequate infrastructures such as lack of holding yard, equipment and machineries (13%), and poor motivation in staff due to lack of incentives for additional responsibilities and extra hour work (13%). Weak coordination and cooperation among concerned stakeholders was indicated as another major constraint (13%). Likewise, other major constraints identified were:

- weak enforcement of law and order/security in work (9%)
- inadequate and ineffective rules and regulations (9%)
- frequent transfer of trained staff in other organizations/offices with no or less relevant programs functions (9%)
- non-compliance of rules and illegal trading practices by traders, especially Indian exporters (9%)
- lack of job specific trainings (according to specific job roles/responsibilities). There had been inadequate training slots, and content details was required for specific job functions.
- lack of various national standards

- due to specific nature of program and role of organization, there was limited scope of application of the knowledge and skill in day-to-day activities.
- lack of specific programs
- due to porous Indo-Nepal border, regulatory functions were less effective.
- prevalence of old/conventional practices among the value chain actors
- lack of field visits/practical experiences
- inadequate border inspection staff.
- weak enforcement of acts and rules, e.g. meat inspection acts and rules not enforced.

4.3 Industry personnel

4.3.1 Relevancy and usefulness of the training course

About 75% of the respondents (from among the trained people) replied that the training provided to them was highly relevant, whereas for 15 % respondents the training was moderately relevant. Rest of the respondents expressed their view as fairly relevant. Upon asking which were the areas taught in the training not useful for them, they responded variously. Almost 80 % of the respondents found all the contents covered in the training to be useful for them. About 20% respondents did not express their views clearly on the usefulness of the training owing to different job nature of the respondents

4.3.2 Awareness generated and its impact on working style

About 60% of the respondents expressed the training as highly effective, 15% as fairly effective, 5 % as slightly effective and 20% as moderately effective.

About 40 % of the respondents mentioned that the training had brought about positive change in the working style where as, 50% of the respondents specifically mentioned the areas of positive impact as production, cleaning of premises, dress, raw material stocking, in-process control, finished product including sharing of knowledge to subordinates. Rest of the respondents (10%) mentioned about no change in working style.

4.3.3 Implementation of good practices (GMP, HACCP) and Development of documents thereof

About 15 % of the respondents mentioned that their industries were having GMP/ HACCP certification. Other 35% of the respondents indicated that some efforts had been generated towards certification system but substantial work was needed to be done to complete the process.

The remaining 40% of the respondents mentioned that their industries had not implemented GMP/HACCP certification yet. Rest of the 10% respondents was found having no idea about GMP/ HACCP certification.

Regarding the development of documents, 35% of the respondents clearly said as yes, without specifying the type of the documents developed whereas, 10% respondents mentioned that the process for the preparation of document was going on. Additionally, 10% of the respondents had slightly specified the area of documentation for which the process had been initiated. About 25% of the respondents responded that no effort had been made towards the development of documentation. Rest of the 20% respondents said that they had no idea about development of any such documents

4.3.4 Improvement on overall hygiene and sanitation

As reflected by the responses, 20% of the respondents simply mentioned that the processes of improvement regarding hygiene and sanitation had been initiated. While responding to the same question, 65% of the respondents listed the areas of improvements in hygiene and sanitation as cleaning, dress change, toilets, hand/foot washing, putting the instrument in place, good house keeping, use of gloves, sanitary procedure, sanitation of production area including surrounding area and documentation. It was learnt that 5% respondents had made slight improvement in hygiene and sanitation. Additionally, 5% mentioned about future improvement to be made, whereas 5% mentioned no improvement whatsoever had been made.

Impact of training on industry's export (reduction in rejection of export consignment):

Regarding the impact on export, 40% mentioned that the question was not applicable to their industries' context, whereas 15% believed that there was slight improvement. While, for 15% respondents there was no improvement, other 5% respondents said that number of internal rejection had been reduced significantly. Five percent respondents mentioned that the export was in limited quantity and indirectly. Rest of the respondents said that they had no idea about the reduction in rejection of export consignment.

4.3.5 Trainee's proactive role for improvement

Regarding actions (proactive role by trainees) taken for implementing SPS measures (GMP/HACCP system) in the respective industries, 40% of the respondents mentioned about their proactive role for improvements. Some of them mentioned that the process of creating awareness to the staff on personal hygiene and packaging had been initiated. On the other hand, 10% mentioned that there was no such initiation. While responding to the same question, 30% of the respondents specifically mentioned the areas where the initiation for improvement had taken place. The areas mentioned were personal hygiene, importance of packaging, maintenance of documentation and reduction of physical hazards. Another 20% of the respondents mentioned that the initiation was taken by sharing the knowledge and providing training on general principles of food hygiene.

4.3.6 Appropriateness of provided training materials and expectation for further training

Regarding the appropriateness of the training materials provided during training, 20% of the respondents expressed that the training materials should have been provided in Nepali language. And 40% of the respondents simply expressed that the training materials were helpful. Similarly, 20% of the respondents responded by mentioning simply that the training materials were sufficient, where as, 10% mentioned that materials were not fully sufficient or insufficient. Other (5%) respondents mentioned that information was insufficient on HACCP. Rest participants had to say nothing about the appropriateness of the materials provided. With regard to the expectation of further refresher training, 100% of the respondents showed desire for the same.

4.3.7 Suggestion on the product quality improvement and areas to be addressed by government agencies based on the international standards.

With regard to the suggestions for quality improvement of the product, respondents offered various suggestions as follows:

- there should be arrangement of regular training
- need of organized animal slaughter house
- need to improve the quality of products
- need of training for workers
- government agency should visit the industry frequently. There should be regular inspection from government authority and experts
- there should be uniformity in participants in a particular set of training. The training should be practical oriented and should be organized at comfortable season
- primary producers, traders, suppliers, manufactures, consumers should be coordinated by the government
- training should be given on house keeping, sanitation and other useful training

With regard to areas to be addressed by government agencies, respondents pointed out the following areas:

- focus on livestock raising and agriculture to provide self employment to youths so as to check the tendency of youths going abroad in labour market as unskilled labour
- need of training and guidance
- issues of industrial security and labour law to be addressed
- need to focus on the production of meat animals (buffaloes, goat) so as to assure the supply of quality animals for meat industries
- need of accredited labs
- government should take lead role in providing awareness on international standards
- HACCP should be mandatory
- sufficient program budget and facilities to employee
- regulation of safety and quality of food industries based on HACCP principles
- modern laboratories to be set up in required numbers
- accredited laboratories with public private participation to be set up
- massive awareness campaigns to be launched on WTO-SPS measures.

4.3.8 The contact points for the sources of information

Regarding the contact point for source of information, 65% responded by mentioning DFTQC and its regional wings to be contacted for information. Similarly, 15% mentioned both DFTQC and Nepal Bureau of Standards and Metrology (NBSM) as contact points for related information. Rest 20% of the respondents said that they were in contact with DFTQC, NBSM, Plant Quarantine, District Livestock Service Offices, Quality and Environment Management Services (QEMS) and Dairy Development Corporation (DDC) for the pertinent information.

5. Conclusion and Recommendation

5.1 Conclusion

Finding of the post-training evaluation of the training program on seven modules conducted under MTF/NEP/060/STF/STDF-170 project shows positive impact of the training in various aspects. On the whole, the following conclusions are drawn based on the findings.

- contents delivered in the training were mostly relevant to and useful for the job of the trainees. However, except two modules of Risk Analysis, remaining modules were more focused on imparting knowledge on various WTO-SPS measures than in providing handy tools and techniques.
- the training program has brought about a definite increase in the level of awareness of the participants or for that matter various stakeholders about SPS measures and their implementation.
- training has been successful in bringing about the positive change in on-the-job performance and attitudes of the participants vis-à-vis implementation of SPS measures.
- only a fraction of the participants were able to exactly apply the knowledge and skill learnt from the training in their job situation owing to various reasons such as working environment not upgraded as demanded by the newly acquired competency through the training, transfer of trained personnel to other less relevant jobs, having no opportunity whatsoever to apply the learnt knowledge and skills, resource constraints, working condition being constantly disincentive one, and so on.

There are lots of areas to be considered for the overall improvement in implementation of SPS measures. Some major areas include upgrading and accreditation of laboratories, capacity building of the related staff, strengthening institutional capacity, involvement of private sector in implementing SPS measures, improving law and order situation, and staff motivation.

5.2 Recommendations

Based on findings of the evaluation and conclusions drawn thereof, following recommendations are made:

- amendment of Regulations and SOPs as per international requirements and based on trainings imparted so that the new practices can be implemented by the field officials;
- continuously upgrading of knowledge and skill of related staff should be done through organizing refresher training, specific on-the-job training covering more practical sessions and demonstrations and study tours to gain an understanding on how specific issues are addressed;
- upgrading of existing government laboratories and setting up of well equipped laboratories are urgently needed,
- policy should be brought to make private sector investment in setting up of laboratories as per the international guidelines and standards,
- process of accreditation of laboratories of all departments should be expedited,
- one-door-service approach for quarantine related affairs should be adopted,
- public-private-partnership approach should be adopted wherever possible in implementing SPS measures,

- institutional capacity of government agencies involved in inspection and certification should be strengthened for effective enforcement of pertinent rules and regulations,
- awareness programs for raising awareness of all the relevant stakeholders, especially to the commercial farmers, traders, and processors about the SPS measures and their implementation should be carried out time-to-time;
- Improve public awareness on quality so that they demand a higher quality product which would automatically raise the levels of domestic standards;
- MOAC should mull over establishing institutional set up for trade intelligence within the Ministry to up date itself and keep pace with global developments in the food and agriculture sector both at international level and those of other trading partners so as to prepare for changes;
- Government should internalize the capacity and capability building programmes on SPS measures to trickle down the skill and knowledge through the regular programme.

Annex 1a

Evaluation Questionnaire

Post- Training Phase: MTF/ NEP/060/SDF/STDF-170

Questionnaire for Inspectors

Name of the Trainee:

Address:

Trained in (Module. No.):

Employer:

Désignation:

Contact no.

E-mail:

1. Was the training conducted of relevance to you? (Highly relevant, moderately relevant, fairly relevant, slightly relevant, not relevant)
2. Which were the areas not useful in your working?
3. Which international standards and guidelines are available with you?
4. Which of these above (at 3) are being used by you in your day-to-day activities?
5. Is there any impact/ change in your working after the trainings? Please elaborate.
6. Do you have all the guidelines, Acts, Rules, manuals, standard operating procedures (SOP) related to your area of work as issued by the Department with respect to SPS measures? If yes please list them.
7. Have any documents/ SOPs (Standard Operating Procedures), etc in your area of work been amended after the training?
8. Have you imparted any training in your organization on SPS-measures? If not, why not?
9. Is the material (power point presentation and detailed material) provided to you sufficient for your work?
10. Would you require any more refreshers training in future to keep you up to date?
11. Do you know where SPS inquiry point and notification authority are? Have you ever communicated with these? If yes, about which matter?
12. Are you using modern techniques that you learnt during training in your day-to-day inspection and certification system? Please elaborate.

13. What further improvement would you like to see/ make to improve your inspection and certification system for exporting/ importing of an agricultural product?
14. Has your border inspection system been improved after staff training related to SPS Measures?
15. Has there been any reduction in rejections of consignments of food / agricultural products by importing countries due to non compliance? Pl substantiate with figures.
16. Have you observed any reduction in the informal trading of food and agricultural products in Nepal –India border after the training?
17. Which are the areas you feel need to be improved based on the international standards and the current scenario in Nepal?
18. Name other trainings you received in the past two years?
19. In your opinion what are the constraints you are facing in applying knowledge and skills you acquired through this training.

Annex 1b

Evaluation Questionnaire

Post- Training Phase: MTF/ NEP/060/SDF/STDF-170

For Supervisors

Name:

Address:

Employer:

Designation:

Contact no.:

E-mail:

- 1) Is there any difference in the working of the official after the training? Please, elaborate.
- 2) Have you utilized the services of the official for imparting further trainings to field personnel?
- 3) To what extent do you think that your trained sub-ordinate has improved his/her on- the-job performance after receiving training? (Very much improved, moderately improved, fairly improved, slightly improved, not improved)
- 4) In your opinion what are the constraints in applying knowledge and skills acquired by your sub-ordinate through this training?

Annex 1c

Evaluation Questionnaire

Post- Training Phase: MTF/ NEP/060/SDF/STDF-170

Questions for the food industry personnel

Name of industry:

Address:

Name of the trainee:

Trained in (Module. No):

Employer:

Désignation/post:

Contact no.

E-mail:

1. Was the training conducted of relevance to you? (Highly relevant, moderately relevant, fairly relevant, slightly relevant, not relevant)
2. Which were the areas not useful in your working?
3. How does the food industry sector feel about the awareness programmes on SPS measures? (highly effective, moderately effective, fairly effective, slightly effective, ineffective)
4. Is there any impact/ change in your working after the trainings? Please give your experience.
5. Are you implementing Good Manufacturing Practice (GMP) or HACCP in your plant? Do you have any manuals/ procedures for the purpose? If yes please list them.
6. Have any documents/ SOPs (Standard Operating Procedures), etc in your area of work been amended after the training?
7. Has your hygiene and sanitation system been improved following staff training related to GMP/ HACCP? List down the areas of improvement after the training.
8. Has there been reduction in number of rejections of your consignments by importing countries after the trainings and your improvements?
9. What actions did you take after you received training in implementing SPS measures/ GMP/ HACCP?
10. Is the material (power point presentation and detailed material) available with you sufficient for the purpose?
11. Would you require any more refreshers training in future to keep you up to date?

12. What further improvement would you like to suggest upgrading the safety and quality of your product?
13. Which are the areas you feel need to be addressed by the government based on the international standards and the current scenario in Nepal?
14. Where do you contact for any information you need for the improvement of the safety and quality of your product? How frequently concerning departments visit your industry to monitor your product?

Annex 2

List of Persons Interviewed

1. Inspectors

Name of the participant	Name of the organization	Designation	Contact Number
Mr. Dasharatha Ku. Burma	Food Quality Control Lab. Birgunj	Food Research Officer	9851097458
Mr. Rajendra P Acharya	Regional Food Quality Control Office, Hetauda	Sr. Food Research Officer	057-520319
Mr. Babur Jha	Regional Plant Quarantine Office, Birgunj	JT	9803278758
Mr. Arjun Adhikari	Food Quality Control Lab. Birgunj	Food Inspector	9845121068
Mr. Devendra P Pandey	Food Quality Control Lab. Birgunj	Food Inspector	9845121069
Mr. Pradip Kafle	Food Quality Control Lab. Birgunj	Food Inspector	9845022016
Dr. Ram S. Saha	Animal Quarantine Office, Birgunj	Sr. Vet Officer	9845269155
Mr. Ram Dev Mandal	Regional Food Quality Control Office, Hetauda	Food Inspector	9845104373
Mr. Mohan Mahato	Regional Plant Quarantine Office, Birgunj	JT	9806849704
Mr. Pravin Chandra Jha	District Food Inspection Unit, Bara	Food Inspector	9845249874
Mr. Ram Ku. Chaudhari	Food Quality Control Lab. Birgunj	Food Research Officer	9845028002
Mr. Arun Ku. Sinha	Animal Quarantine Office, Birgunj	Vet Officer	9855021233
Mr. Chet Narayan Kharel	DLSO, Hetauda	Vet Officer	9845099335
Mr. Kaushal Ojha	Regional Food Quality Control Office, Hetauda	TA Food Inspector	9840230528
Mr. Rhishi Raj Koirala	Poultry Dev. Farm, Khajura	Liv. Service	

		Technician	
Mr. Dr. P.P. Shrestha	DLSO, Banke	Sr. Vet Officer	9848063540
Mr. Ram Lochan Saha	Animal Quarantine CP, Banke	Vet Assistant	9804520665
Mr. Bhesh B Thapa	DF Inspection Unit, Surkhet	Food Inspector	9848024873
Mr. Shyam Sundar Singh	Regional Plant Quarantine Office, Banke	Plant Quarantine Officer	081-520323
Mr. Ram Shankar Dubedi	Regional Plant Quarantine Office, Banke	Plant Quarantine Officer	9848027864
Mr. Dr. Mod Nath Gautam	Animal Quarantine Office, Banke	Vet Officer	9848034927
Mr. Vijaya Mani Dahal	NFC/ Modern Rice Mills, Rajapur, Bardiya	Food Inspector	9848046875
Mr. Bed Nath Gautam	Regional Food Quality Control Office, Banke	Food Research Officer	9848057173
Mr. Netra Bogati	Regional Food Quality Control Office, Banke		9848045299
Mr. Binod Ku. Srivastava	Regional Food Quality Control Office, Banke		9848022712
Dr. Prativa Shrestha	Kohalpur Tr. School	Vet Officer	9841487336
Mr. Eak Raj Budhathoki	Regional Food Quality Control Office, Banke	Food Inspector	9848033544
Mr. Bharat Raj Gautam	DLSO, Banke	Liv Dev. Officer	9846222629
Mr. Hem Raj Pokharel	RPPlab , Khajura	Plant Protection Officer	081-521785
Mr. Janak Raj Bhandari	DLSO, Banke	Vet Officer	9848020964
Mr. Nabin Deuja	DFI Unit, Chitawan	Food Inspector	9845047877
Mr. Ramesh Ghimire	DLSO, Kankadvitta Jhapa	Asst. Animal Health technician	9842634630
Mr. Bharat B. Puri	Food Quality Control Lab, Kankadvitta	TA	9842032202
Mr. Sailendra Jha	Animal Quarantine Office, Kankadvitta	AAH Technician	9842606176
Mr. Shiv P Bhandari	Food Quality Control Lab, Kankadvitta	TA	023-562965
Mr. Arun Ku. Ghimire	Regional Plant Quarantine Office, Kankadvitta	Plant Quarantine Officer	9842027840
Mr. Prakash P. Acharya	Regional Food Quality Control Office, Biratnagar	Food Research. Officer	9842071800
Mr. Ananda Dangol	Regional Food Quality Control Office, Biratnagar	Food Inspector	021-470221
Mr. Shiv P. Bajgain	Regional Food Quality Control Office, Biratnagar	Food Inspector	021-212221

Mr. Bimal Bhattarai	DF Inspection Unit, Siraha	Food Inspector	9842030979
Mr. Ratna Kanta Jha	Regional Food Quality Control Office, Biratnagar	Food Research Officer	9804362101
Mr. Puspa B Budhathoki	DLSO, Sankhuwasava	Vet Officer	9842010333
Mr. Bhanu Bhakta Mainali	Regional Plant Protection Lab, Biratnagar	Plant Protection Officer	9842028151
Mr. Kashi Nath Ghimire	Regional Food Quality Control Office, Biratnagar	Food Inspector	9842031118
Mr. Prabesh Pokharel	Regional Food Quality Control Office, Biratnagar	Food Inspector	9842042321
Mr. Suk Dev Mainali	DAD Office, Okhaldhunga	Plant Protection Officer	9842032654
Mr. Puspa Lal Rai	DFI Unit, Sunasari	Food Inspector	9842051529
Mr. Kumar Singh Khatri	Regional Liv. Dev. Office, Biratnagar	Vet Technician	9852021420
Mr. Suleshwar Mandal	Animal quarantine Office, Birganj	Vet Technician	9842023501
Mr. Suresh Ku. Singh	DFI Unit, Saptari	Food Inspector	9743000556
Mr. Ramesh Dahal	DFI Unit, Jhapa	Food Inspector	9842045350
Mr. Ghatta Raj Katel	DLSO, Dhanakuta	Vet officer	9842186980
Mr. Kamal Ku. Pokharel	Regional Plant Quarantine Office, Kankadvitta	Plant quarantine Officer	023-562057
Mr. Keshev Ku Singh	Central Animal Quarantine Office, Kathmandu	Vet Officer	9803394397
Dr. Bala Ram Thapa	Regional Liv. Service Directorate, Harihar Bhawan	Regional Officer	9851067824
Dr. Sulochana Shrestha	Central Biological Lab, Tripureswor, Kathmandu	Sr. Vet Officer	9841284927
Dr. Sharmila Chapagain	Central Veterinary Laboratory	Sr, Vet Officer	
Dr K .P Shanki	Himali Project	Director	9841365701
Ms Sabitri Baral	National Plant Quarantine Office	Sr. Plant Quarantine Officer	9841355908
Mr. Shashidhar Sedai	Vet Standards and Drug Admin .Office, Tripureshwor	Vet Technician	9841238933
Mr. Binaya P. Shrestha	DFTQC	Sr. Food Research. Officer	9841552160
Mr. Mohan Krishna Maharjan	DFTQC	Sr. Food Research. Officer	9841339911
Mr. Rupendra Rawal	DFTQC	Food Research. Officer	9841275256
Mr. Karna B. Chand	DFTQC	Food Research. Officer	9841216229
Dr. B. M. Khaling	Directorate of Liv. Service Tr. and Extension	Sr. Training Officer	9841052300
Mr. Shyam P Paudel	Directorate of Liv. Service Tr.	Program	9841365913

	and Extension	Director	
Dr. Nara B. Rajwar	Dept. Of Livestock Services	DDG	9841339292
Dr. Vijaya Kanta Jha	Central Animal Quarantine Office, kathmandu	Chief Vet Officer	9721458198
Dr. Kishan Chand Thakuri	Vet. Epidemiological Center	Sr. Vet Officer	9841453272
Dr. N. P Basel	Dept. Of Livestock Services	Sr. Vet Officer	9851084480
Mr. Iswor P Rijal	National Plant Quarantine Office, Harihar Bhawan	Chief National Plant Quarantine Officer	9841574505
Dr. Tank P Prasai	DLSO, Kathmandu	Sr. Vet Officer	9841359548
Mr. Ganesh Dawadi	DFTQC	Sr. Food Research. Officer	9841364722
Dr. Barun Ku. Sharma	Directorate of Animal Health, Tripureshwor	Vet Officer	9841538782
Dr. Surendra Karki	Vet. Epidemiological Center	Vet Officer	9841380803
Dr. Bol Raj Acharya	MOAC	Sr. Vet Officer	9841240418
Dr. Damayanti Shrestha	Directorate of Live. Production	Sr. Liv. Dev. Officer	5522031
Ms Helen Shrestha	DFTQC	Food Research. Officer	9841403325
Ms. Huma Bakhim	DFTQC	Sr. Food Resea. Officer	9841509925
Ms Chandra Shakya	DFTQC	Food Research. Officer	
Mr. Sanjaya Bhandari	DFTQC	Food Research. Officer	9841491458
Ms. Bimala Neupane	DFTQC	Food Research. Officer	9841731003
Ms. Keshari Laxmi Bajuchafi	DFTQC	Food Research. Officer	9841555867
Dr. Sri Ram Adhikari	Enquiry Point, DFTQC	Vet Officer	9841204876
Mr. Sajaya B.Ka	Nepal Agriculture Research Council	Sr. Entomologist	9841213917
Mr. Gopal Chandra Ghimire	Directorate Of Crop Protection	JT	5521597
Dr. Keshev P Premy	DLMP	Program Director	5554110
Dr. Damodar Sedai	Central Veterinary Lab, Tripureshwor	Chief Vet Officer	9841736702
Mr. Keshev Raj Kafle	Directorate of Crop Protection, Harihar Bhawan	Crop Protection Officer	9841412583
Mr. Pramod Ku. Bhandari	Plant Quarantine CP, Airport	Plant Quarantine Officer	9841143155
Mr. Parasu Ram Adhikari	SPS Enquiry Point, DFTQC	Plant	9841564804

		Quarantine Officer	
Dr. Mohan Dev Lekhak	MOAC	SR. Vet Officer	9841530537
Mr. Ratna Nidhi Silawal	DFTQC		9841919797
Mr. Gopal Chaturbedi	DFTQC	Food Research Officer	9841558826
Mr. Gopal Sigdel	DFTQC	Food Inspector	9841051340

Note: DFTQC: Department of Food Technology and Quality control

MOAC: Ministry of Agriculture and Cooperatives

CP: Check Point.

DLMP: Directorate of Livestock Market Promotion.

DADO: District Agriculture Development Office.

DFI: District Food Inspection Unit.

DLSO: District Livestock Service Office.

RPP Lab: Regional Plant Protection Laboratory.

2. Supervisors

Name of the participant	Name of the organization / Office	Designation	Contact Number
Mr. Ram Ku. Chaudhari	Food Quality Lab., Parsa	Chief	9845028002
Mr. Min P. Budhathoki	DA Office, Makawan pur	DADO	9855067964
Mr. Madav P Aryal	DLSO Makawanpur	Sr. Livestock Dev Officer	057-520728
Mr. Rejendra P. Acharya	RMTQC Office, Hetauda	Sr. Food Research Officer	057-520319
Mr. R.S. Sah	Animal Quarantine Office, Parsa	Sr. Vet Officer	9845269155
Mr. Dinesh Chandra Yadav	Plant Quarantine Office	PQ Officer	051-522996
Mr. Baiju Lal Gupta	DLSO Parsa	Vet Officer	98452157557
Mr. Ganesh Chandra Dhakal	Regional Plant Quarantine Office, Rupandehi	Sr. PQ Officer	9847281540
Mr. Bhim P. Pulami	Regional Food Quality Control Office, Rupandehi	Food Research Officer	9847065004
Dr. Mani Lal Cha	DLSO, Rupandehi	Sr. Vet Officer	071-520206
Mr. Nengendra Thapa	Salt Trading Corporation, Banke	Chief	9858021327
Mr. Shyam Sundar Singh	Regional Plant Quarantine Office, Banke	Sr. Food Research Officer	081-520313
Bed Nath Gautam	Regional Plant Quarantine Office, Banke	Food Research Officer	9848057173
Dr. Puspa P. Shrestha	DLSO, Banke	Sr. Vet Officer	9848063540
Mr. Kanak Lal Sahu	DLSO, Dhanakuta	Sr. Livestock Officer	9842255759
Mr. Rajendra Upreti	DAD Office, Okhaldhunga	Sr. Agri Dev.	037520130

		Officer	
Mr.Upendra Ray	Regional Food Quality Control Office, Biratnagar	Chief	021-470221

3. Food Industry Personnel

Name of the participant	Name of the organization / Industry	Designation	Contact Number
Mr. Narayan P. Thapalia	Narayani Oil Refinery	Chief of Industry	9845409860
Mr. Daroga P. Kurmi	Probiotic Industries Pvt. Ltd	Quality Control	9804201455
Mr.Nirajan Ku. Basnet	Birgunj Pure Drinking Water Udyog. Parsa		9845035331
Mr. Keshev Ghimire	Supreme Mineral Water & Bev Industry	Director	056521920
Mr. Jeet B. Shrestha	Quality Dry Meat Products, Dev Daha,Rupandehi		9847093931
Mr. Bharat Dhakal	Pavitra Dairy Udyog, Butawal- 8		9806962213
Mr. Rishi Raj Koirala	Poultry Farm , Khajura, Banke		9848033442
Mr. Vijaya Mani Dahal	NFC Modern Rice Mill,Rajapur Bardia	Food technologist	9848046875
Mr. Lalman Ghimire	CristiloWater Industry,Ind. Estate, Nepalgunj	Manager	9848023206
Mr.Rajendra P Adhikari	Nepalgujj Milk Supply Scheme, Kohalpur, Banke	Project Manager	081-540083
Mr. Man B. Katuwal	Vikash Flour Mills Pvt. Ltd., Nepalgunj, Banke	Food Technologist	9848059973
Mr. Ghana Shyam Chauhan	Star Aqua Pure Drinking Water, Krishna Nagar- 6	Manager	9847133171
Mr. Ganesh Kumar Yadav	Biratnagar Milk Supply Scheme, Biratnagar, Kanchan Bari		9852022299
Mr. Uchit Lal Chaudhari	Biratnagar Milk Supply Scheme, Biratnagar, Kanchan Bari		9842122769
Mr.Madav P.Ghimire	Asian Thai Foods Pvt. Ltd.	Shift In-charge	9842081771
Mr. Pratik Shrestha	Nobel Dairy Products Pvt. Ltd.	Production Manager	021-528944
Mr.Ganesh B. Khandka	Purwanchal Nirmal Jal Udyog, Biratnagar-2	Supervisor	021-527310
Mr. Danda B. Khandka	Kamdhenu Dairy, Tarahara, Sunasari	Factory Manager	9842026015
Mr.Khagendra P.Dhungana	Rijaltashi Industry, Itahari, Sunasari	Senior Food Technologist	9842122386
Mr. Khageshwor Upadhaya	Swastik Oil Industries, Hatimudha, Morang	Quality Control Manager	9842034575

Appendix-4

Report on Final Project Terminal (Sharing) Workshop

Workshop Date: 26 July 2010

Workshop Venue: MOAC Hall

Workshop Coordinator: Dr. Damodar Sedai, Focal Point Officer, Department of Livestock Services

1. Background

The project entitled "Strengthening the capacity of government officials responsible for food safety, animal and plant health, and agricultural trade in Nepal to effectively implement SPS measures and related trade obligations" implemented through FAO under the Standard and Trade Development Facility (STDF) of WTO is on the verge of completion. As the final project activity a half-day workshop was organized in MOAC hall on 26th July **2010** (Shravan 10, 2067) with the objective of sharing with the project stakeholders the achievements made by the project and deriving the way forward.

2. Workshop Proceedings

The workshop was started with Mr. Nathu Prasad Chaudhary, Secretary at MOAC taking the seat of Chairperson. Prof. Subodh Narayan Jha, member of National Planning Commission (NPC) was the attending the workshop in the capacity of Special Guest. The workshop was also attended by the senior officials from the line ministries, Director General, Deputy Director Generals from Department of Agriculture (DoA), Department of Livestock Services (DLS) and Department of Food Technology and Quality Control (DFTQC), senior officers from the Ministry and Departments, representative from AEC/FNCCI. Also present in the workshop were Ms. Sashi Sareen from FAO Regional Office, Bangkok, Mr. Lakshman Kumar Gautam, Assistant Representative of FAO Nepal and Mr. Arjun Thapa, Program Officer of FAO Nepal.

2.1 Welcome Speech and Objective of the Workshop

Dr. Damodar Sedai, Focal Point Officer for DLS and Workshop Coordinator delivered the welcome speech. He also highlighted background and objective of workshop. Main points of his speech included:

- The project organized eight modules on WTO-SPS related trainings and workshops during the project life.
- An understanding was developed to develop Project Concept Note (PCN) for follow-up project of STDF-170 during workshop held in Bangkok in September 2009. Likewise, a stakeholder workshop was organized to identify the key areas to be addressed while developing PCN. The draft of PCN has been prepared.

The final sharing workshop aimed at discussing and making some common understanding on way forward vis-à-vis strengthening country's capacity in implementing SPS measures and trade obligations

2.2 Objectives of the workshop:

Broad long term objectives:

- To trickle-down the practical information related to WTO-SPS measures to the different stakeholders to produce safe foods
- Agriculture Trade promotion from primary production to marketing of the agriculture products/ Commodities.

Short term objectives:

- to present overall progress of the First Phase of the STDF- 170 Project achieved by three Departments of MOAC
- identify the areas for way forward for the application of SPS Measures in Nepal in the days to come

2.3 Workshop details:

Dr. Sedai's welcome speech was followed by a self-introduction session in which all the guests and participants present in the hall introduced themselves.

The workshop which was attended by more than 50 persons, mostly high level officials of Government of Nepal representing various government departments and national level NGOs related to SPS. FAO was represented by Assistant FAOR, FAO Programme Officer, and Lead Technical Officer.

2.4 Paper Presentation

A total of four papers were presented in the paper presentation session. The session aimed at highlighting project activities, outputs produced and lesson learnt from the perspective of MOAC and the three Departments, which were involved in direct implementation of the project activities.

Paper Presenters Involved:

Name	Designation
Mr. Fulgen Pradhan	Joint Secretary, MOAC
Mr. Ishwor P. Rijal	Chief, Plant Quarantine Officer, DOA
Mr. Ganesh Dawadi	Sr. Food Research Officer, DFTQC
Dr. Damodar Sedai	Chief, CVL Tripureswor, DLS

2.3.1 Paper Presentation by Mr. Fulgen Pradhan, Joint Secretary, MOAC and the Focal Point of MOAC for STDF-170

Mr. Pradhan highlighted the project objectives and its cost. He also provided an account of achievements made under the seven outputs as foreseen by the project. He also highlighted the major accomplishments of the project. More importantly he presented the lesson learnt from the project and the way forward as highlighted below:

Lessons learnt

- continuously upgrading of knowledge and skill of related staff should be done through organizing refresher training, specific on-the-job training and study tour,
- upgrading of existing government laboratories and setting up of well equipped laboratories are urgently needed,
- policy should be brought to make private sector investment in setting up of laboratories as per the international guidelines and standards,
- process of accreditation of laboratories of three departments should be expedited

2.5.1 Paper Presentation by Mr. Fulgen Pradhan, Focal Point Officer of DoA

The Way Forwards as per Mr. Fulgen Pradhan's paper were:

- enhance the capacity of private sector vis-a-vis SPS measures implementation,
- Upgrade lab. facilities and provide necessary logistic support
- develop standards, procedures, processes and schemes for effective execution of SPS,TBT related requirements
- strengthen existing technical capacity of the government in implementing SPS agreements
- address the regulatory and logistic needs of the related govt. agencies in order to effectively implement SPS agreements

2.5.2 Paper Presentation by Mr. Ishwor Prasad Rijal, Focal Point Officer of DoA

The Way Forwards as per Mr. Ishwor Prasad Rijal's paper were:

- need to reduce the gap in trade deficit of the country enhancing the capacity and capability of the farmers, private sector/ trader and entrepreneurs and field staff in meeting the trade obligations and quality standards of the exportable agriculture commodities.
- urgent need of good coordination between custom office and quarantine offices

2.5.3 Paper Presentation by Mr. Ganesh Dawadi, Focal Point Officer of DFTQC

The Way Forwards as per Mr. Ganesh Dawad's, paper were:

- Knowledge and skills on the part of farmers, industrial personnel and workers.
 - capacity vis-à-vis SPS measures and trade obligations
- Permanent Training Institute on SPS measure especially in the areas of inspection, testing and certifications
- Establishment of slaughterhouse, milk processing house
- There should be clear delineation of the roles of government bodies involved in quarantine affairs. Quarantine

- Lab accreditation: Food lab, Central Vet Lab and Plant
- Developing infrastructure for effective implementation of SPS measures at field level
- Information networking
- Exposure and exchange visits in South- East Asian country
- Address the regulatory and logistic needs of the related government agencies.
- Development of the management information system

2.5.4 Paper Presentation by Dr. Damodar Sedai, Focal Point Officer of DLS

The Way Forwards as per Dr. Damodar Sedai's paper were:

- WTO-SPS training to common farmers, traders, processors and field level technicians
- Formation of Risk Analysis Group in the MOAC
- Strengthening SPS Enquiry Point and Notification Authority structurally and financially
- Creating public awareness on WTO-SPS measures
- Sufficient reading materials in Nepali language be available for the use of technicians, farmers, entrepreneurs and traders
- Internalizing WTO-SPS related trainings within government training system in the concerned Departments
- Application of GAP, GVP, GMP, GHP, HACCP in the related fields
- Policy to retain the trained personnel in the related job/office

2.6 Open Discussion Session

In the open discussion session participants put their queries and comments on the presentations. Altogether, 11 participants took part in the discussion. Followings were the opinions / comments made by them: The details of it is given in the report of rapporteur

Dr. Prabhakar Pathak, DG, DLS

- International experts were invited for curriculum development and as resource persons in training of two of the modules. Their inputs were valuable as they translated related knowledge and skill to the Nepali officials.
- Risk analysis in itself is a very complicated procedure. We don't have own national standards on it. We haven't harmonized with international standards. We should be very careful while doing risk analysis.
- There is poor inter-ministerial coordination in SPS related matters. Officials from Geneva based Nepal Mission take part in the annual meetings. These officials are not technical persons and therefore do not possess technical expertise on SPS related matters. They also don't possess any ideas about what's going on in Nepal in this area. It is, therefore, imperative to make provision of concerned officials from Nepal to participate in the annual meeting.
- Animal health issues are major issues to be addressed in WTO-SPS regime.
- Follow-up project is necessary to sustain the achievements made by the STDF-170 and to address the emerging issues in SPS measures implementation

Dr. Ram Krishna Khatiwada, Programme Director, Directorate of Animal Health

- Poor infrastructure facilities in animal quarantine check posts. No holding yard.
- Lack of manpower in check posts due to frequent transfer of the staff and staff on the study leave
- Live animals are coming from India without quarantine certificate
- Lab. facilities to be improved and quarantine facilities to be upgraded

Mr. Ishwor Prasad Rijal, Programme chief, National Plant Quarantine Programme

- IPPC has published 34 standards. We are unable to develop even a single standard.
- There is a problem of resources and manpower in the field of quarantine and certification. Staffs remain busy with their regular jobs.
- So, three Departments (DoA, DLS and DFTQC) should have a separate Directorate to deal with the quarantine related affairs
- In DoA, there are four Directorates under the same Plant Protection faculty. There is tendency of languishing the untrained the less competent staffs in National Plant Quarantine Program
- Therefore, separate faculty for quarantine affairs is necessary for each of three areas of plant quarantine, animal quarantine and food quarantine
- Export is shrinking specially in pulses as they need fumigation. But we don't have sufficient fumigation chamber in quarantine check posts. Moreover, there is problem of transfer of staffs trained on fumigation

Mr. Gopal Shrestha, Program Director, Vegetable Development Directorate

- Whether after having trained manpower through the project, we are now able to follow the international standards?
- How we can make best use of those trained staffs and what are gaps that still need to bridge?
- What facilities we have so far developed for necessary testing and certification for export and import?

Mr. Pradeep Maharjan, Chief Executive, AEC/FNCCI

- How to make traders and entrepreneurs aware of quality, safety and international standards of the products?
- Lack of fumigation chamber at quarantine check posts. So, PACT project should be requested to install the fumigation chamber at quarantine check posts.
- Specific requirements for PRA and PFA should be mentioned in the way forward to be devised through the workshop

Dr. Suroj Pokhrel, Program Directorate, Crop Development Directorate

- Member countries are required to furnish data on certain aspects, e.g. ten years data on certain pest infestation. We lack mechanism to record such data on regular basis. So, model districts should be selected and the pertinent data should be regularly recorded.

Dr. Hari Babu Tiwari, Senior Agri. Economist, MOAC

- Lab. accreditation is urgently needed because our consignments sometimes are not accepted by the importing countries for want of quality certificate of accredited lab.
- Strengthening lab. is necessary.
- Scores of existing acts and rules are yet to make WTO-SPS agreements friendly such as food act and regulations.

Ms. Shashi Sareen, FAO Regional Office, Bangkok

- Only training manpower is not enough to change systems, there needs to be simultaneous development/revision/amendment of pertinent SOPs, guidelines etc. in related areas
- Focus on strengthening and seeking accreditation of not only one central food laboratory but also veterinary and plant quarantine labs at centre and regional levels
- Align national standards with international ones. Standards being dynamic need to be upgraded regularly
- Work on raising public awareness as it will be easier to implement SPS measures when people become aware of the measures/standards and trade obligations
- Constantly update on developments in international arena in relation to standards and quality and prepare for changes
- School curricula/ technological courses/ university programmes need to be reviewed to reflect SPS/TBT related aspects
- One way to further progress would be to list out all the activities required in respective areas vis-à-vis WTO-SPS measures then work out time-based long-term and short-term action plans for implementation

Mrs. Sashi Adhikari, Senior Plant Protection Officer, MOAC

- Project seemed focusing on training of staffs. But if we can not make producers and traders aware of the SPS measures and provide them necessary support then perhaps we would achieve only little

JC, Mr. Pradhan

- Unless we make private sector aware of SPS measures we can not fully implement SPS agreements
- There are many areas to be urgently addressed if we want to fully implement SPS agreements

3. Summary of other issues/ points raised by participants:

As mentioned above various types of points/ issues were raised by the participants during discussion. Among them followings were found directly related to the application of SPS measures in Nepal:

- Antibiotics and hormone use in animal and pesticide use in plant is in alarming stage in Nepal, so monitoring in this regard is necessary
- Mechanism for the quality monitoring and the monitoring of pesticides, hormones and antibiotics should be in place

- MOAC should be treated as equal partner of Ministry of Commerce and Supplies when dealing with WTO-SPS related matters in the international arena
- Follow up project is necessary to enhance capacity of value chain actors
- Infrastructure facility development and upgrading lab. facilities are urgently needed
- Proposed follow-up project should be the lead project accommodating all the other on-going and pipeline projects in agriculture
- Nineteen items (Seven from agriculture) have been identified as having comparative and competitive advantages for export in WTO/UNDP study. We should be, therefore, very conscious about the meeting international standards and quality of our products.
- Government and private sector should join hands in implementing SPS agreements

4. Group Exercise, Conclusions and recommendations / Way forward:

Based on the presentations and discussions following were the conclusions and recommendations:

4.1 Conclusions:

- STDF-170 has come to an end and has been successfully implemented due to very good coordination among FAO, MOAC and related departments. Objectives of the project have been achieved satisfactorily. A follow-up project is necessary to sustain the achievements made by the STDF-170 and to address the emerging issues in SPS measures implementation.
- Project has been successful in creating awareness among government staff working in food safety areas
- Infrastructure facility development and upgrading lab. facilities are urgently needed
- MOAC should be treated as equal partner of Ministry of Commerce and Supplies when dealing with WTO-SPS related matters in the international arena
- Rule based trading is must; otherwise there will be a danger of dumping
- To meet all the obligations of WTO by 2013 is very important
- Infrastructure and human resource development is must to be benefited from the membership of WTO.
- Government of Nepal has to carry on and build on the achievements made so far through the project
- Human health is a major concern. Animal and plant health are necessary components of human health. Enhancement of capacity of the staffs through the project is worth appreciating but continued utilization of trained manpower is more important.
- Nineteen items (Seven from agriculture) have been identified as having comparative and competitive advantages for export in WTO/UNDP study. We should be, therefore, very conscious about the meeting international standards and quality of our products
- Accreditation of Central Labs and Central Plant Protection Laboratory
- Government and private sector should join hands in implementing SPS agreements
- Follow up project is necessary to enhance capacity of value chain actors

4.2 Recommendations/ Way Forward:

- During the workshop various points were raised for way forward. Categorically, the workshop recommended for the following activities / programmes:

A. Follow-up program of STDF

- Follow-up project is necessary to sustain the achievements made by the STDF-170 and to address the emerging issues in SPS measures implementation.
- Enhance the capacity of private sector vis-à-vis SPS measures implementation. Further trainings to be built on more practical sessions and demonstrations including developmental activities with procedures and processes, capacity building, etc.
- To reduce the gap in trade deficit of the country there is a need to enhance the capacity of the related farmers, private sector /traders, entrepreneurs and the technical staff in meeting the trade obligations and quality standards of the exportable agriculture commodities.
- Exposure and exchange visits in South- East Asian country for both private sector and the government sectors to gain an understanding on how specific issues are addressed
- Harmonization of standards and testing methods with regional and international standards
- Creating public awareness on WTO-SPS measures
- Sufficient reading materials in Nepali language be available for the use of technicians, farmers, entrepreneurs and traders, etc
- Encourage participation from Nepal in SPS coordination committee in Geneva
- Incorporation on SPS related subject matters in academic institutions

B. Responsibilities of the government Sectors

Followings were the identified areas to be accomplished by the government sectors:

- Be prepared to meet all the obligations of WTO by 2013
- Amendment of prevailing Acts, Regulations and SOPs as per international requirements and based on training imparted.
- Standards need to be continuously reviewed with the aim of aligning these with international norms. Less stringent standards would expose the country to dumping of goods of low quality.
- Keep pace with global development both at international level and other trading partners so as to prepare for changes

- Incorporate SPS and TBT related issues in educational curricula in various university degrees and diploma programmes .
- Address issues such as traceability, food safety emergency response planning in line with international guideline documents.
- Emphasis on developing recognition / equivalence agreements so as to benefit the country through use of pooled resources effectively.
- Clear- cut demarcation in cross-cutting issues among the departments
- Policy to retain the trained personnel in the related job/office
- Policy level guidelines for the implementation of the SPS measures.
- Develop regulations, National standards, code of practices, procedures, processes in the related fields.
- Needs of one – door Quarantine management system
- Upgrade lab. and quarantine facilities and provide necessary logistic support
- Address the regulatory and logistic needs of the related govt. agencies in order to effectively implement SPS agreements
- Maintain good co-ordination among the personnel involved in animal health, plant health and food safety, local administration and custom office.
- Permanent Training Institute on SPS measure especially in the areas of inspection, testing and certifications
- Establishment of slaughterhouse, milk processing house
- Central Food lab, Central Vet Lab, Veterinary Standards and Drug Administration Lab and Central Plant Protection laboratories should be accredited as per ISO 17025:
- Developing infrastructure for effective implementation of SPS measures at field level
- Development of the management information system
- Development Information networking
- Internalizing WTO-SPS related trainings within government training system in the concerned Departments
- Formation of Risk Analysis Group in the MOAC
- Application of GAP, GLP, GVP, GMP, GHP, HACCP in the related fields
- Strengthening SPS Enquiry Point and Notification Authority structurally and financially

- Improve public awareness on quality so that they demand a higher quality product which would automatically raise the levels of domestic standards.

C. Responsibilities of the private sector

- Invest more for the production of safe foods
- Application of GAP, GLP, GVP, GMP, GHP, HACCP in the related fields
- Establishment of accredited Laboratory in the private sector
- Go hands-on –hands with the government sector to creating public awareness and providing SPS training to the commercial farmers, traders, processors, etc

Workshop programme

S.N.	Particulars	Time
1	Registration and introduction	10:15 – 10:30
2	<i>Opening Session</i> Chairperson: Mr. Nathu Prasad Chaudhary, Secretary at MOAC Chief guest: Prof. Subodh Narayan Jha, Member Planning Commission Welcome speech and objective of the workshop: Dr. Damodar Sedai Self-introduction by the participants	10:30 – 11:00
3	Tea break	11:00 – 11:20
4	<i>Technical Session (Paper presentation)</i> Mr. Fulgen Pradhan, MOAC Mr. Ishwori, P. Rijal, DOA Mr. Ganesh Dawadi, DFTQC Dr. Damodar Sedai, DLS	11:20 – 11:40 11:40 – 12:00 12:00 – 12:20 12:20 – 12:40
5	Open floor discussion	12:40 – 13:00
6	Way forward	13:00 – 13:15
7	Closing (Presentations by all dignitaries including FAO Nepal)	13:15 – 13:30

Appendix-5

Major equipment provided to the Government

Quantity	Item	Cost
3	Dell Latitude E5500 Laptop	4,350.00
1	Optoma Multimedia Projector Display type DLP ANSI Lumens 3000	1191.33
1	W-300 Sony Cyber Shot Digital Camera (13.6 Mega Pixel) with 2 GB	427.22
3	1400 VA/24V UPS	618.44

Appendix-6

Documents produced during the project

- Training Guide 1: Master Trainers' Resource Guide on Food Safety
- Training Guide 2: Master Trainers' Resource Guide on Plant Health
- Training Guide 3: Master Trainers' Resource Guide on Animal Health

Booklets produced in Nepali Language:

- Booklet 1: Introduction/Background of Plant Quarantine in Nepal (its importance, scope, and future perspective in the context of World Trade Organization (WTO))
- Booklet 2: Introduction and Importance of Pest Free Area (PFA) and Basis of its Declaration
- Booklet 3: Methyl Bromide Fumigation and its Importance in the use of Wood Packaging Material in International Trade
- Booklet 4: Introduction to World Trade Organization and Agreements on Agriculture.
- Booklet 5: Quarantine, Inspection Procedures, Veterinary Inspection and Risk Analysis
- Booklet 6: Good Practices, Traceability of Food Products and Organic Farming System
- Booklet 7: Codex Alimentarius, General Food Laws of EC, Roles of Veterinarians in Food Safety and Application of HACCP in the Slaughter House
- Booklet 8: Zoonosis and Public Health Diseases Monitoring and Surveillance, Emergency Preparedness Plan to Control Animal Diseases
- Booklet 9: Recommended code of practice on general principle of food hygiene
- Booklet 10: Hygiene guideline for dairy production, collection, processing and distribution
- Booklet 11: Hygiene guideline for honey processors
- Booklet 12: Hygiene guideline for small bakery
- Booklet 13: Hygiene guideline for processed drinking water
- Booklet 14: Directives on export import inspection and certification system in Nepal for food
- Booklet 15: Hygiene guideline for food catering services
- Booklet 16: Guideline for food labelling
- Booklet 17: Hygiene guideline for street food vendors
- Booklet 18: Fresh fruits and vegetables