

**Standards and Trade Development Facility**

**Grant Application Form**

**1. Project title**

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 170)

**2. Requesting government / agency or private body**

Ministry of Agriculture and Cooperatives (MoAC), Nepal

**3. Collaborating government(s) / agency**

Food and Agriculture Organization of the United Nations (FAO)

**4. Project objectives**

By providing support to the Ministry of Agriculture and Cooperatives (MoAC) to effectively implement SPS measures, this project will 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 are 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.

A description of the project background and rationale is attached (Annex 1).

**5. Project Activities**

This project proposes to develop and implement a training programme to support implementation of the SPS Agreement in Nepal. This programme will include essential introductory, specialized and refresher training modules and the preparation of related training materials and user guides. The training modules and supporting materials will be tailored to 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. They will be written and presented in a clear and user-friendly manner to facilitate practical, hands-on and results-

oriented training. This will require the use of examples, case studies and an explanation of “how to” perform key tasks.

The proposed training activities will focus on mid-level and junior officers. To date, most of the human resource development activities and training on the SPS Agreement and implementation of related measures have been targeted at more senior officers. As some 90 percent of senior officers are due to retire in the next two years, strengthening the capacity of mid-level and junior officers is a priority. The project’s focus on front-line officers serving at border inspection posts and quarantine stations will improve the services delivered by these posts and help to reduce the illegal cross-border movement of food, plants, animals and their products.

During the first phase of the project (6 months), international sector experts in food safety and animal and plant health will work with a core group of officials from the MoAC to:

- i) Review and finalize the content of the in-country training programme based on the modules proposed in Annex 2. Indicators to monitor the impact of the training will be incorporated.
- ii) Adapt relevant training materials, guidelines and manuals (available internally and externally) to meet national needs, and develop supplementary materials as required. Existing guidelines and manuals will be used wherever possible. These will include the new FAO Inspection Manual, the forthcoming Students Guide and Trainers Manual for Pest Risk Analysis (developed with STDF support). Curriculum development workshops (4) will be organized to assist in the review and development of training materials for food safety, animal health, plant health and agricultural trade.<sup>1</sup>
- iii) Select and train (using a Trainer of Trainers approach) a core group of master trainers in food safety, animal and plant health and agricultural trade to deliver the training programme. These master trainers will be expected to continue to serve as trainers once the project is completed thereby providing a critical mass of in-country SPS teaching expertise and contributing towards the cost-effective multiplication of the benefits of the project and future sustainability. The following criteria will be used 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. Selected master trainers, and their supervisors, should sign a statement indicating their acceptance of these criteria.
- iv) Review the needs identified for overseas training and study visits (based on the needs identified in Annex 3) to complement the in-country training, select mid-level officials involved in food safety, animal and plant health, and agricultural trade to participate, and make arrangements for this training. Officers selected to participate in overseas training should agree to be actively involved as master trainers, to be involved in curriculum development and to lead in-country training sessions.

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<sup>1</sup> The Ministry of Agriculture and Cooperatives and the Office of the FAO Representative in Nepal will collaborate with national NGOs as appropriate for the delivery of training programmes in food safety, animal and plant health and agricultural trade to take advantage of their expertise and facilitate the utilization of the resulting training materials.

Where possible, overseas training should take place in the region (e.g. India, Thailand, Malaysia, China, Singapore). This training will address specialized subjects (e.g. establishment of pest free areas, specialized skills for pest risk analysis, pest diagnosis) which are not well understood inside Nepal and officials who attend the external training will be expected to lead in-country training for junior officers on these subjects.

The second phase of the project (16 months) will focus on the organization and delivery of the training programme, and monitoring and evaluation. In particular:

- i) Selected mid-level sector experts (in food safety, animal and plant health, and agricultural trade) will attend specialized training courses abroad to complement the training provided in the national ToT workshops.
- i) Trained trainers, including officials who attended overseas training, will teach essential training courses 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.

Participants to attend the training courses will be 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; iv) agreement not to seek a job transfer into a different technical area for next 2 years at least.

Selected trainees, and their supervisors, should sign a statement indicating their acceptance of these criteria.

The Agriculture Training Centre in the MoAC, and its regional training centres, will support the organization and delivery of the various training modules. They will work closely with the relevant MoAC departments and trained trainers for this purpose.

The relevance and ability of the various training materials to achieve the training objectives will be monitored and reviewed at the end of each training course. Suggestions for revisions will be noted so that the materials can be revised and updated as needed.

- ii) The final activity will be to evaluate the entire training programme based on a survey and interviews with participating trainees and their supervisors. Recommendations for improvements will be incorporated into the training programme and, based on the training outcomes and any gaps identified, a refresher training programme will be developed for delivery by MoAC in follow-up to the project.

## **6. Private / public cooperation**

As described above, the proposed curriculum development activities will be carried out in cooperation with relevant national NGOs and academic/training institutions to take advantage of their expertise and expand the dissemination and utilization of the training materials produced under this project. For instance, the training modules and materials produced could be incorporated into academic training focused on food safety, animal and plant health.

## **7. Partner institutions involved**

FAO will serve as external implementing agency. FAO will be involved in the planning, delivery and monitoring and evaluation of this project. In particular, FAO will be responsible for:

- recruiting and supervising the work of the international consultants, and monitor the overall implementation of the project.
- identifying relevant FAO resource materials, tools and guidelines (e.g. Food Safety Inspection Manual, Biosecurity Risk Analysis Manual, Food Safety Risk Analysis Guide, Student's Guide and Trainers Manual for Pest Risk Analysis) to be used where available for the development of training manuals and other materials under the project and implementation of training.
- backstopping the project and providing any necessary advice and support on implementation.

Officials involved in the World Bank Agricultural Commercialization and Trade Project and the EC-Nepal WTO Assistance Programme (see below) will be informed and consulted about the proposed activities to ensure complementarities and synergy between these projects.

### **Project management and decision-making structure**

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

The Agribusiness Promotion and Statistics Division in the MoAC will be the focal point in the MoAC for all activities related to project implementation. It will establish a project steering committee, chaired by the Joint Secretary, Agribusiness Promotion and Statistics Division, MoAC with representatives from the relevant sector departments (DFTQC, DLS, DOA). This committee should meet regularly (at least every 3 months) to plan, review and discuss implementation of project activities. Representatives from concerned agencies in MoAC, as well as the FAO Representation in Nepal and other related projects, including the World Bank ACTP and EC-Nepal WTO Assistance Programme, should be invited to these meetings as appropriate.

The names, roles and responsibilities of the FAO and MOAC staff that will play a leading role in the planning, management, coordination and supervision of the project are provided in Annex 4.

### **Project review, reporting, monitoring and evaluation**

FAO will report to the STDF Secretariat on the implementation of the project activities every six months. The first report will be submitted six months after the start of the project (project inception report). Follow-up progress reports will be submitted at the end of the first year and six months before the termination of the project, as well as at the end of the project. These reports should describe progress made in implementation of project activities and identify areas in which difficulties have been faced or which require additional attention.

The following indicators will be applied during the review process:

1. Number of food inspectors, plant protection and quarantine officers, veterinary inspectors and quality control officers, animal quarantine officers and junior technicians (male and female) with new technical skills and knowledge relevant to their work.
2. Use of modern techniques in day-to-day operations related to inspection, quarantine, certification, etc.
3. Development and dissemination of manuals, guidelines and standard operating procedures for inspection and quarantine.
4. Knowledge and use of manuals, guidelines and standard operating procedures by officers at check points.
5. Use of manuals, guidelines, etc. by stakeholders involved in related projects in Nepal (e.g. EC-Nepal programme, ACTP).
6. Development and use of performance criteria (e.g. shorter response time to requests for services, reduction in turn-around time for services provided, reduction in number of samples sent for inappropriate diagnostic analysis, improved record-keeping) for inspection and quarantine at check points.
7. Improvement in outputs provided by the SPS Enquiry Point and Notification Authority.

An independent evaluation of the project will be carried out within six months of the end of the project by an evaluator who will be identified by the STDF Secretariat.

## **8. Project outputs**

The main outputs of the project include the following:

- A comprehensive SPS training programme that can be used to train all newly recruited inspection and quarantine staff working in food safety and animal and plant health, and for refresher training / continuous learning.
- A package of SPS training materials, user guidelines and manuals covering food safety, animal and plant health and life that can be used for future training in Nepal and on-the-job guidance and reference.
- A core group of SPS master trainers (approx. 20 persons) addressing covering food safety, animal and plant health and life, and agricultural trade.
- Serving food inspectors, veterinary inspectors and quality control officers, animal quarantine officers, plant protection and quarantine officers (more than 200 persons in total) have improved knowledge about SPS measures and new skills to implement SPS measures.
- Border inspection posts have improved capacity following staff training.
- Staff of the SPS Enquiry Point and Notification Authority have new knowledge and skills.
- A model training programme and supporting materials that can be used for practical training on SPS implementation in other developing countries. These training materials will be disseminated on the STDF web site. Efforts will also be made by FAO to ensure their dissemination via other FAO and STDF projects as appropriate.

## 9. Project impact

Strengthening the government capacity to implement SPS measures will help to safeguard public health by providing safer food to consumers and controlling pests and disease risks. It will protect animals and plants from risks, and protect agricultural resources and the environment by minimizing the importation and spread of harmful contaminants, pests and diseases. By raising the level of animal and plant health, and demonstrating the country's ability to comply with the requirements of trading partners, it will enhance market access and expand exports contributing to poverty reduction, economic diversification and increased foreign exchange earnings. Taken together, the expected outputs of the project will have a positive impact on consumers, farmers, producers, suppliers, industries and traders.

The overall benefits and impact of the project can be measured in terms of:

- Improved quality and safety of domestically produced and imported food and agricultural products (measured through inspection and food-borne disease surveillance data).
- Reduction in the number of rejections and detention of food and agricultural exports by importing countries (measured through trade data).
- Reduction in the number of food and agricultural products illegally crossing the Nepal-India border.
- Number of products for which certification systems for food and agricultural exports have been developed or strengthened (measured through government data).
- Increased awareness about SPS measures among traders (measured by surveys and interviews at border check points).

The project will complement recently completed, ongoing and pipeline projects in the country as indicated below:

- Under a FAO project from 2001 to 2004 a review of agricultural policy and legislation was carried out and amendments proposed to food safety, veterinary and pesticide legislation. The revised legislation is currently at the final stages of approval. However, government officials responsible for enforcement have limited understanding about agricultural legislation. Through training, this proposed STDF project will increase awareness about relevant laws and regulations and strengthen enforcement.
- Another recently completed two-year FAO project assisted in strengthening the Plant Protection Department through the provision of testing equipment to border check posts and the development of a national phytosanitary database and electronic certification system. However, officers at checkpoints lack the knowledge and skills to use the new testing equipment. By providing training on these areas, this proposed STDF project will build on these recently completed activities, and enhance sustainability.
- A Japanese-funded project is currently providing assistance for the renovation and construction of a Central Food Laboratory building. Funds for laboratory equipment and training are likely to be made available once the construction has been completed. By strengthening food inspection, this project will complement and support the results achieved by laboratory diagnosis.
- The proposed STDF project complements the planned World Bank Agricultural Commercialization and Trade Project (ACTP), expected to commence in the second half of 2007, which aims to promote commercialization of the agricultural sector, exploit trade opportunities and take full advantage of membership in the WTO. These objectives will be

achieved in part through a rapid and substantial programme of investment in physical and institutional infrastructure (including laboratories), information and awareness activities focused on the private sector and farmers, mobilization of new forms of producers groups and market-oriented collaboration, and activities to improve university education for food inspectors, quarantine officers, etc. By improving the capacity of front-line officers responsible for inspection, quarantine and certification, the proposed STDF project will strengthen the foundations for the delivery of related activities under World Bank project. In addition, the various training materials and guidelines to be developed under this STDF project could be used for training to be carried out under the World Bank project. Efforts will be made to ensure close linkages between this project and the ACTP. The WTO Section of the MoAC will regularly share information (including project documents and reports) with staff of the ACTP and involve them periodically in discussions related to this project.

The proposed STDF project will be carried out in collaboration with the EC-Nepal WTO Assistance Programme (ASIE/2006/18408), which was approved by the EC in November 2006 and is currently in the process of being approved by the Government of Nepal. The overall objective of this project (budget €2,197 000) is to increase economic development and reduce poverty through assisting Nepal's integration into the international trade system. Given the common goals and objectives, it will be essential to ensure active dialogue and collaboration between both projects in order to avoid duplication and enhance synergies between them. This will be achieved through regular information exchange and meetings in Kathmandu with representatives from the EC programme.

While much broader in scope than the food and agricultural sector, the EC programme has components related to SPS/TBT compliance and WTO training. Some of the proposed activities that are relevant will address: i) accreditation and certification capability, ii) operation of the SPS Enquiry Point (study visit, procurement of equipment); iii) development of human resources in risk analysis, quarantine, food inspection, harmonization of standards; and iv) capacity of WTO Sections in the Ministry of Industry, Commerce and Supplies and MOAC. However, details about the nature of these activities are not yet available (work plans for activities will be developed during the first six months of implementation). Discussions with Nepalese officials involved in the formulation of the EC programme indicate that the type of training envisaged under this programme is quite narrow and will not involve the front-line officers responsible for inspection, quarantine, certification, etc. to be targeted under the proposed STDF project. By actively sharing information among officials involved in these two projects it will be possible to avoid activities that duplicate each other.

## 10. Project inputs

Item		Budget (US\$)
International experts (food safety, animal health, plant health) 3 persons, 28 days each	$3 \times 28 \times 300 = 25,200$	25,200
Travel and DSA 3 persons, 28 days each	$3 \times 28 \times 100 = 8,400$ $3 \times 3000 = 9,000$	17,400
Curriculum development and workshops (4) to review, adapt and finalize curriculum, materials, user guidelines, manuals etc. for in-country training		16,000
Study visits and specialized training abroad (India, Thailand, China, Malaysia, Singapore) for selected mid-level sector officers from DFTQC, DOA, DLS, the Notification Authority of SPS and SPS Enquiry Points (see proposed training in Annex 3)	Average 2,500 per person per week Average of 20 person weeks	50,000
Delivery of in-country training: Up to \$60,000 per sector for training of master trainers and delivery of sector-based training (see proposed training modules in Annex 2)		180,000
Training equipment, materials and supplies		10,000
Translation		5,000
Printing of training materials, etc.		5,000
FAO support <ul style="list-style-type: none"> <li>• Technical backstopping support (food safety officer, FAO RAP, Bangkok)</li> <li>• Project coordination (FAO Nepal)</li> </ul>	7,500 15,000	22,500
FAO backstopping missions (4 missions for 10 days each, technical officer from Regional Office for Asia)	DSA $10 \times 100 \times 4 = 4,000$ Travel $700 \times 4 = 2,800$	6,800
General operating expenses (telecommunications, fuel, vehicle hire, etc.)		10,000
<b>Sub-total</b>		<b>347,900</b>



<b>In-kind contribution<sup>2</sup></b>		
• Training rooms	US\$ 100/day for 227 days	22,700
• Use of equipment for training		6,500
• Meeting room space for project steering committee		5,850
<b>Total (in-kind contribution)</b>		<b>35,050</b>
Independent ex-post evaluation		10,000
<b>Total STDF contribution for project</b>		<b>357,900</b>
Total project value (including in-kind contribution)		<b>392,950</b>

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<sup>2</sup> The Government of Nepal will provide training hall, existing equipments and meeting room space for in-country training for 227 days during the project implementation period of 16 months. The training halls are available in Department of Food Technology and Quality Control (DFTQC), Department of Agriculture (DOA) and Department of Livestock Services (DLS) in Kathmandu and in all the five development regions.



## 11. Proposed Timetable

Output - Activity	Year 1												Year 2												Y 3
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1
<b>Phase 1</b>																									
First Backstopping mission																									
Inception report																									
Select master trainers																									
Missions of international sector experts (3)																									
Review and finalise in-country training programme (international sector experts in collaboration with selected trainers)																									
Adapt existing training materials, guidelines, manuals, etc.																									
Organize workshops to train master trainers																									
Overseas training for selected mid-level officials (including staff of SPS Enquiry Point and Notification Authority)																									
Second Backstopping mission (after 6 months)																									
Project progress report No. 1																									
<b>Phase 2</b>																									
Organize and deliver in-country training programme, and monitor results																									

Output - Activity	Year 1												Year 2												Y 3
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1
Third Backstopping mission (after 12 months)																									
Project progress report No. 2																									
Fourth backstopping mission (after 18 months)																									
Project progress report No. 3 (after 18 months of implementation)																									
Incorporate changes into training programme based on review and finalise content and programme for refresher training to be carried out by MoAC as a follow-up to the project																									
Final report on project																									
Independent ex-post evaluation																									

### Project background

Following years of negotiation, Nepal became the 147<sup>th</sup> 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.

In 2005 the Standards and Trade Development Facility (STDF) approved a project preparation grant, submitted by the WTO Section of the Nepalese Ministry of Agriculture and Cooperatives (MoAC), for a study on human resource needs to implement sanitary and phytosanitary measures in Nepal (STDF 88). The mission for this grant was carried out in December 2006 with the support of an international FAO consultant. This project proposal has been compiled in follow-up to this mission. It focuses on training frontline officers who are responsible for inspection, quarantine and certification of agricultural and food products at checkpoints.

This mission for STDF 88 found that the capacity of the MoAC and its staff to implement the SPS Agreement remains inadequate in a number of areas. Some particular constraints and weaknesses include the following:

- Inadequate knowledge and skills among front-line officers for inspection, monitoring and certification of food and agricultural products. In particular, animal quarantine is a new area in Nepal and officers in this area have limited experience. However, inspectors and quarantine officers in other areas are also reported to have limited understanding of the SPS Agreement and the meaning of quarantine.
- Limited ability to monitor, manage and report data on plant pests and animal diseases.
- Weak institutional capacity to respond to requests for information on disease and pest prevalence.
- Inability to control plant and animal pests and diseases through initiatives such as surveillance, eradication or zoning.
- Problems in securing international recognition of disease free areas of production.
- Limited knowledge about risk analysis and its application in food safety, animal health and plant health.
- Inadequate knowledge about legislation and procedures for enforcement and compliance.
- Limited knowledge and practical skills in risk analysis among officials in line departments responsible for food safety, animal health and plant health.
- Lack of institutional capacity to engage in market access negotiations, provide data for importing country risk assessments and to exercise rights and obligations under the SPS Agreement.

### Rationale

In Nepal, one of the least developed countries in the world, agriculture provides a livelihood for over 80 percent of the population of Nepal and accounts for 38 percent of the GDP. There is potential to expand exports of food and agricultural products to promote income generating activities and poverty reduction. However, these opportunities are severely restricted by the weak 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. Importing countries expect Nepalese authorities to be able to implement measures (e.g. inspection and testing, integrated pest control, buffer zones, fumigation, pesticide monitoring plans, certification, etc.) that guarantee that trade in food, animal and plant products can take place safely.

However, as recent incidents have demonstrated, capacity to develop and implement SPS measures remains inadequate. For instance, honey exports to Norway were suspended due to inadequate capacity to demonstrate compliance with requirements for a pesticide residue monitoring plan. Honey exports to South Korea were suspended given Nepalese authorities lack of capacity to produce a graynotoxin certificate, a precondition for honey imports to South Korea. In another case, a consignment of tea exports to Germany was confiscated due to the presence of tetradifon (0.24 ppm) above the permitted German MRL (MRL 10 ppb); Nepalese laboratories do not have capacity to test at ppb levels. Other cases of trade rejections have occurred in herbal medicines: i) Italy rejected *Chyavanpras* (an ayurvedic medicine) citing the presence of some steroid in *aonla* (*Embllica officinalis*); ii) the USA rejected cholesterol herbal medications on the grounds that they are “not listed and unapproved”; and iii) Sweden requested test reports (for herbal products) for GMP certification, for which Nepalese capacity is currently lacking. In another example, Nepalese exports of dairy products to China were refused due to Chinese authorities citing inadequate documentation.

Large quantities of food and agricultural products enter Nepal from China and India with limited if any inspection and control, and food and agricultural products from Nepal pass into India uncontrolled. In one recent case, Nepalese authorities rejected imports of Chinese canned (luncheon) meat after finding obvious signs of tampering on the date of manufacturing and expiry. However, 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 at checkpoints. Many inspectors, quarantine officials and others staffing border checkpoints are poorly informed about the SPS Agreement, international trade requirements, and regulations of the government of Nepal and bordering countries. Moreover, many have insufficient knowledge and skills to carry out inspection, quarantine and certification. As a result, samples are sometimes sent to the wrong laboratories, inappropriate tests are performed, plants and animals that are suspected of carrying pests or diseases are not kept separate from other consignments, etc.

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. Moreover, at a time when the country has embarked on a new course following the recent signature by the government and Maoist rebels of a peace agreement declaring an end to the ten-year civil war, the proposed STDF project will make a tangible contribution towards the goal of economic transformation by strengthening the basic foundations for trade in food and agricultural products.

**Proposed modules / content for in-country SPS training programme**

Possible modules and content for in-country SPS training in the areas of food safety, animal health and plant health are outlined below. These modules have been developed based on a training needs assessment carried out in December 2006 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. They are intended to provide an overall structure for the development of training modules in each of the SPS sectors.

A total of approximately US\$180,000 (up to US\$60,000 per sector) is budgeted for the in-country training programme in this project proposal. On approval of this project, the proposed content, number of participants, length of the training, etc. in the following tables (Tables 1, 2 and 3) would be reviewed and refined by sector experts.

**Table 1: Proposed In-country Training Programme on Food Safety in the Context of the SPS Agreement**

Participants	Module / Contents	Trainers	Implementing Agency	Duration (Days)	Estimated cost <sup>3</sup>	
					NRs	US\$
Food Inspectors (officer level) (10)	<p><b>Module: Training Master Trainers in Food Inspection and Certification</b></p> <ul style="list-style-type: none"> <li>• SPS measures and requirements</li> <li>• International food standards</li> <li>• Risk-based food inspection</li> <li>• Modern inspection techniques</li> <li>• Enforcement and compliance</li> <li>• Certification of food imports and exports</li> </ul>	<p>External Trainers  (international experts)</p>	DFTQC / DAT	12	3000 NRs / person / day	5,000
Food Inspectors (50)	<p><b>Module: Introductory training on food safety, quality and international trade</b></p> <ul style="list-style-type: none"> <li>• Introduction to the SPS Agreement, SPS measures and key terms</li> <li>• Relevant SPS measures / standards for food safety and quality</li> <li>• International food safety and quality standards</li> <li>• Role of inspection, monitoring, surveillance, enforcement in meeting international requirements</li> </ul>	<p>Trained Trainers<sup>4</sup>  (Internal)</p>	DFTQC / DAT	6	2500 NRs / person / day  750,000	10,500

<sup>3</sup> Based on an exchange rate of NRs 100 = US\$ 1.40 (IMF, 11 January 2007).

<sup>4</sup> Mid-level officials (who participated in the sectoral training of trainers workshops and training abroad on specialized subjects) would serve as trainers for the in-country training programme.



Food Inspectors (50)	<p><b>Module: Risk-based food inspection and modern inspection techniques</b></p> <ul style="list-style-type: none"> <li>• Setting priorities</li> <li>• Sampling and food analysis</li> <li>• Frequency of inspection</li> <li>• Procedures and guidelines for: i) different types of inspection (primary production, food processing, retail, markets, catering facilities, etc.) and ii) specific foods.</li> <li>• Quality assurance</li> <li>• Reporting and record keeping</li> </ul>	Trained Trainers (Internal)	DFTQC / DAT	10	2500 NRs / person / day  1,250,000	17,500
Food Inspectors (40)  Officers : SPS Enquiry Points and National Notification Authority of SPS (5).	<p><b>Module: Enforcement of food legislation</b></p> <ul style="list-style-type: none"> <li>• National food law and regulations</li> <li>• Legal obligations under SPS Agreement</li> <li>• Procedures and guidelines for compliance and enforcement:</li> <li>• Compliance verification and response to non-compliance</li> <li>• Cross-border food trade (formal and informal/illegal)</li> <li>• Enforcement actions and appeals process</li> <li>• Product recall, etc.</li> </ul>	Trained Trainers (Internal)	FTQC / DAT	6	2500 NRs / person / day  750,000	14,100
Food Inspectors (50)	<p><b>Module: Certification of food imports / exports</b></p> <ul style="list-style-type: none"> <li>• Procedures for export / import certification</li> <li>• Requirements (including documentation)</li> </ul>	Trained Trainers (Internal)	DFTQC / DAT	6	2500 NRs / person / day  750,000	10,500
<b>Total</b>						<b>57,600</b>

**Table 2: Proposed In-country Training Programme on Plant Health in the Context of the SPS Agreement**

Participants	Modules / Content	Trainers	Implementing Agency	Duration (Days)	Estimated cost <sup>5</sup>	
					NRs	US\$
<ul style="list-style-type: none"> <li>Plant protection and quarantine officers (officer level) (10)</li> </ul>	<p><b>Module: ToT / Specialized Training Master Trainers in Plant Health</b></p> <ul style="list-style-type: none"> <li>SPS measures and requirements</li> <li>International phytosanitary standards</li> <li>Plant health inspection and quarantine</li> <li>Phytosanitary certification</li> <li>Enforcement and compliance</li> <li>Specialized skills for phytosanitary inspection and quarantine</li> <li>Establishment of pest-free areas</li> <li>Pest diagnosis and handling</li> </ul>	<p>External Trainers  (international experts)</p>	NPQP	12	3000 NRs / person / day	5,000
<ul style="list-style-type: none"> <li>Plant protection and quarantine officers (supervisors) (25)</li> <li>Junior technicians / operators (25)</li> </ul>	<p><b>Module: Methyl Bromide (MB) Fumigation</b></p> <ul style="list-style-type: none"> <li>Theoretical understanding of the principles of fumigation.</li> <li>Health effects of MB and First Aid and Emergency medical management.</li> <li>Safe exposure standards for MB and Safety precautions</li> <li>Pre-fumigation procedures and checks</li> <li>Proper use of fumigation equipment</li> <li>Maintaining required gas concentrations and monitoring activities</li> <li>Evaluating a successful fumigation</li> <li>Post fumigation and aeration procedures</li> <li>Record management, etc</li> </ul>	<p>Trained trainers (Internal)</p>	NPQP	6	2500 NRs / person / day  750,000	10,500

<sup>5</sup> Based on an exchange rate of NRs 100 = US\$ 1.40 (IMF, 11 January 2007).

Participants	Modules / Content	Trainers	Implementing Agency	Duration (Days)	Estimated cost <sup>5</sup>	
					NRs	US\$
Plant protection and quarantine officers (supervisors) (25)  Junior Technicians (25)	<b>Module: Plant Health Inspection and Quarantine</b> <ul style="list-style-type: none"> <li>• SPS measures and requirements</li> <li>• Sampling regimes for inspection</li> <li>• Inspection procedures and methods</li> <li>• Use of detection system and seed inspection techniques</li> <li>• Phytosanitary action and measures</li> <li>• Post-entry quarantine</li> <li>• Cross-border trade (formal and informal/illegal)</li> </ul>	Trained trainers (internal)	NPQP	6	2500 NRs / person / day  750,000	10,500
Technical officers, plant quarantine officials, scientists (20)	<b>Module: Specialized skills for Pest Risk Analysis</b> <ul style="list-style-type: none"> <li>• Concept of PRA</li> <li>• Steps of PRA</li> <li>• Use of PRA (Setting Commodity Specific Import Requirements of a Country)</li> <li>• SPS Agreement &amp; ALOP</li> <li>• Undertaking PRA</li> </ul>	Trained trainers (internal)	NPQP / Nepal Agri Research Council (NARC)	8	2500 NRs / person / day  400,000	5,600
Technical officers, plant quarantine officials, scientists (20)	<b>Module: Specialized skills for establishment of Pest Free Area</b> <ul style="list-style-type: none"> <li>• Concept of PFA</li> <li>• Conducting delimiting surveys</li> <li>• Pest Free Place or site of production</li> <li>• Yearly action to establish pest free freedom</li> <li>• System to maintain pest freedom</li> </ul>	Trained trainers (internal)	NPQP / Nepal Agri Research Council (NARC)	15	2500 NRs / person / day  750,000	10,500

Participants	Modules / Content	Trainers	Implementing Agency	Duration (Days)	Estimated cost <sup>5</sup>	
					NRs	US\$
Technical Officers, Plant Protection and quarantine officers, government scientists (50)	<b>Module: Pest Surveillance and Monitoring</b> <ul style="list-style-type: none"> <li>• Concept of Survey and Monitoring System</li> <li>• Types of Survey and Pest Documentation</li> <li>• Surveillance Procedures (General)</li> <li>• Pests/ host Specific Survey Procedure</li> </ul>	Trained trainers (internal)	NPQP / Nepal Agri Research Council (NARC)	6	2500 NRs / person / day  750,000	10,500
Plant protection and quarantine officers (supervisors) (25)	<b>Module: Pest diagnosis and handling</b> <ul style="list-style-type: none"> <li>• Recognizing the signs and symptoms and presence of pests associated with regulated articles</li> <li>• Use of diagnostic tools for primary identification</li> <li>• Collection and submission of specimen</li> <li>• Recognizing weed seed contamination</li> </ul>	Trained trainers (internal)	NPQP / Nepal Agri Research Council (NARC)	10	2500 NRs / person / day  625,000	8,800
Plant Protection and quarantine officers (20)	<b>Module: Phytosanitary Certification and administrative procedures</b> <ul style="list-style-type: none"> <li>• Export certification system of Nepal</li> <li>• Concept of PRA and import regulation Mechanism</li> <li>• Phytosanitary documentation</li> <li>• Liaison with stakeholders and relevant border agencies/ authority.</li> <li>• Prosecution of non-compliance and enforcement.</li> </ul>	Trained trainers (internal)	NPQP	5	2500 NRs / person / day  250,000	3,500
					<b>Total</b>	<b>64,900</b>

**Table 3: Proposed In-country Training Programme on Animal Health in the Context of the SPS Agreement**

Participants	Modules / Content	Trainers	Responsible Implementing Agency	Duration (Days)	Estimated cost <sup>6</sup>	
					NRs	US\$
Senior / mid-level veterinary officials (10)	<p><b>Module: ToT / for Master Trainers in Veterinary Inspection and quarantine</b></p> <ul style="list-style-type: none"> <li>• SPS measures and requirements</li> <li>• International standards</li> <li>• Inspection and quarantine</li> <li>• Residue and pesticide control programmes</li> <li>• Contaminants</li> <li>• Maximum residue limits in meat, milk and their products</li> <li>• Disease recognition</li> <li>• Certification</li> <li>• Enforcement and compliance</li> </ul>	External Trainers (international experts)	DLS	12	3000 NRs / person / day	5,000
Veterinary inspectors and quality control officers, animal quarantine officers (40)	<p><b>Module: Essentials of veterinary inspection and quarantine</b></p> <ul style="list-style-type: none"> <li>• Relevant SPS measures and standards for animal health</li> <li>• Inspection of veterinary drugs and biologicals</li> <li>• Sample preparation, preservation and dispatch</li> <li>• Animal quarantine</li> <li>• Disease recognition (transboundary animal diseases, major zoonosis, fish and bee diseases) and treatment of suspected animals</li> <li>• Monitoring and surveillance</li> <li>• Compliance and enforcement</li> </ul>	Trained trainers	DLS/AHD	10	2500 NRs / person / day  1,000,000	14,000

<sup>6</sup> Based on an exchange rate of NRs 100 = US\$ 1.40 (IMF, 11 January 2007).

Participants	Modules / Content	Trainers	Responsible Implementing Agency	Duration (Days)	Estimated cost <sup>6</sup>	
					NRs	US\$
Field veterinary technicians (50)	<b>Module: Animal health in production, transportation and slaughter houses</b> <ul style="list-style-type: none"> <li>• Transportation</li> <li>• Slaughter house management</li> <li>• Slaughtering and dressing</li> <li>• Preservation of meat</li> </ul>	Trained trainers	DLS	6	2500 NRs / person / day 750,000	10,500
Veterinary quality control officers and technicians, animal quarantine officers (20)	<b>Module: Specialized skills for veterinary inspection and quarantine</b> <ul style="list-style-type: none"> <li>• Establishment of pest free areas</li> <li>• Fumigation</li> <li>• Disinfection</li> <li>• Heat treatment</li> </ul>	Trained trainers (internal)	DLS	10	2500 NRs / person / day 500,000	7,000
Veterinary inspectors and quality control officers, animal quarantine officers (40)	<b>Module: Import / export certification of animals and animal products</b> <ul style="list-style-type: none"> <li>• Import risk analysis of live animals and animal products</li> <li>• Documentation requirements</li> </ul>	Trained trainers (internal)	DLS	6	2500 NRs / person / day 600,000	8,400
Veterinary inspectors and quality control officers, animal quarantine officers (40)	<b>Module: Enforcement and compliance</b> <ul style="list-style-type: none"> <li>• Animal health legislation, relevant government regulations, standards and notices</li> <li>• Enforcement actions</li> <li>• Cross border trade (formal and informal/illegal) in animals and animal products</li> <li>• Legal procedure for filing a case</li> <li>• Response to non-compliance</li> <li>• Appeals process</li> </ul>	Trained trainers (internal)	DLS	3	2500 NRs / person / day 300,000	4,200

Participants	Modules / Content	Trainers	Responsible Implementing Agency	Duration (Days)	Estimated cost <sup>6</sup>	
					NRs	US\$
Senior and mid-level veterinary officers (20)	<b>Module: Animal health risk analysis</b> <ul style="list-style-type: none"> <li>• Principles of animal health risk analysis</li> <li>• Risk assessment</li> <li>• Risk management</li> <li>• Risk communication</li> </ul>	Trained trainers (internal)	DLS	12	2500 NRs / person / day 600,000	8,400
					<b>Total</b>	<b>57,500</b>

**External training<sup>7</sup>**

Selected mid-level officers from DFTQC, DOA, DLS, the WTO Notification Authority and the SPS Enquiry Point, to be involved as master trainers in project activities, will participate in study visits and specialized training aboard. The total budget for this component is US\$50,000.

**Overseas training will address the following:**

- pesticide / veterinary residues and control programmes for pesticide / veterinary residues
- establishment of (animal / plant) pest free areas
- pest surveillance and monitoring
- international food and agricultural standards
- risk-based food inspection
- compliance with WTO SPS measures and dispute settlement mechanisms
- notification procedures and mechanism of international trade facilitation

<b>Training Needs</b>	<b>Participants</b>	<b>Budget</b>	<b>Total estimated cost (US\$)</b>
Plant health	DOA (3)	Average 2,500 per person per week Average of 20 person weeks (to be allocated among 12 persons)	50,000
Food safety	DFTQC (4)		
Agricultural trade	WTO Section (2)		
Animal health	DLS (3)		

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<sup>7</sup> Based on proposals submitted by working groups from the Department for Food Technology and Quality Control (DFTQC), Department of Livestock Services (DLS), the National Plant Quarantine Programme (NPQP) and the WTO Section.



### Project Management

The following persons from FAO and MOAC will serve on the project steering committee (PSC) and be actively involved in the planning, delivery, management and supervision of project activities as described.

Function	Name	Responsibilities
FAO Project Coordinator	Mr Arjun Singh Thapa Assistant Programme Officer FAO-Nepal	<ul style="list-style-type: none"> <li>Attend project steering committee meetings on behalf of FAO.</li> <li>Provide support for all operational aspects of project implementation including scheduling of missions, project reporting, etc.</li> <li>Closely monitor project implementation in collaboration with other members of the PSC (including the selection of participants for training and scheduling, delivery and monitoring of all training activities).</li> <li>Ensure good communication about all aspects of the project with the FAO backstopping officer and facilitate his backstopping missions.</li> <li>Proactively identify and respond to any possible problems in a timely and efficient manner.</li> <li>Communicate and share information with representatives of other concerned projects (World Bank, EU, etc.) and invite them to attend meetings of the PSC as appropriate.</li> <li>Support the preparation of project progress reports for submission to the STDF Working Group</li> </ul>
Chairperson	Mr Dala Ram Pradhan, Joint Secretary, Agri-Business and Statistics Division (ABPSD), MOAC	<ul style="list-style-type: none"> <li>Attend and chair project steering committee meetings.</li> <li>Provide overall advice and guidance for implementation of the project.</li> </ul>
MOAC Project Manager / PSC Secretary	Mr Shree Ram Ghimire, Officianting Chief, WTO Section, (ABPSD), MOAC	<ul style="list-style-type: none"> <li>Attend project steering committee meetings.</li> <li>Ensure adequate exchange of information and coordination between all those involved in the project (especially between MOAC and FAO).</li> <li>Provide guidance and support to select participants for training (in-country and overseas).</li> <li>Closely monitor project implementation in collaboration with other members of the PSC (including the scheduling, delivery and monitoring of all training activities).</li> <li>Proactively identify and respond to any possible</li> </ul>

		<p>problems in a timely and efficient manner.</p> <ul style="list-style-type: none"> <li>• Communicate and share information with the national SPS support team in-between PSC meetings.</li> <li>• Contribute to the drafting of project progress reports.</li> </ul>
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National SPS support team		
Food safety support	Mr Ganesh Dawadi, Senior Food Research Officer, Department of Food Technology and Quality Control	<ul style="list-style-type: none"> <li>• Attend project steering committee meetings on behalf of DFTQC</li> <li>• Work closely with the international consultant carrying out specialist sector training</li> <li>• Support the review and finalization of in-country training programme related to food safety</li> <li>• Draw up list of food safety officers to attend training (master training, overseas training, in-country training) based on selection criteria.</li> <li>• Provide support to finalize the overseas training programme for food safety</li> <li>• Provide technical support for the delivery of food safety curriculum development workshops, training workshops, etc.</li> <li>• Provide any other practical assistance, advice and problem solving necessary to ensure smooth project implementation</li> <li>• Provide support to monitor training activities related to food safety</li> <li>• Contribute to project reporting</li> </ul>
Animal health support	Dr. Prabhakar Pathek, Deputy Director General, Department of Livestock Services	<ul style="list-style-type: none"> <li>• Attend project steering committee meetings on behalf of DLS</li> <li>• Work closely with the international consultant carrying out specialist sector training</li> <li>• Support the review and finalization of in-country training programme related to animal health</li> <li>• Draw up list of sector officers to attend training (master training, overseas training, in-country training) based on selection criteria.</li> <li>• Provide support to finalize the overseas training programme for animal health.</li> <li>• Provide technical support for the delivery of sector curriculum development workshops, training workshops, etc.</li> <li>• Provide any other practical assistance, advice and problem solving necessary to ensure smooth project implementation</li> </ul>

		<ul style="list-style-type: none"> <li>• Provide support to monitor training activities related to animal health</li> <li>• Contribute to project reporting</li> </ul>
	<p>Mr Mandip Rai Desk Officer, Planning Division, MOAC</p>	<ul style="list-style-type: none"> <li>• Attend project steering committee meetings on behalf of Planning Division.</li> <li>• Provide information on relevant projects and activities implemented by MOAC, other ministries and donors in Nepal, and provide support to enhance information exchange with such stakeholders as appropriate.</li> </ul>
		<ul style="list-style-type: none"> <li>•</li> </ul>

Plant health support	Mr Bharat P. Upadhyay, Deputy Director General, Department of Agriculture	<ul style="list-style-type: none"> <li>• Attend project steering committee meetings on behalf of NPQP</li> <li>• Work closely with the international consultant carrying out specialist sector training</li> <li>• Support the review and finalization of in-country training programme related to plant health</li> <li>• Draw up list of sector officers to attend training (master training, overseas training, in-country training) based on selection criteria.</li> <li>• Provide support to finalize the overseas training programme for plant health</li> <li>• Provide technical support for the delivery of sector curriculum development workshops, training workshops, etc.</li> <li>• Provide any other practical assistance, advice and problem solving necessary to ensure smooth project implementation</li> <li>• Provide support to monitor training activities related to plant health</li> <li>• Contribute to project reporting needs</li> </ul>
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In addition, technical backstopping support (four missions) will be provided by Peter Hoejskov, FAO Regional Office for Asia and the Pacific.

FAO Technical Support	Peter Hoejskov Food Safety Officer FAO Regional Office for Asia and the Pacific	<ul style="list-style-type: none"> <li>• Carry our missions to Nepal at the start of the project and after 6, 12 and 18 months of implementation.</li> <li>• Work closely with other members of the PSC to provide technical support and advice to enhance the planning, implementation and monitoring of project activities (recruitment of international experts, training of trainers, curriculum development, training workshops, overseas training, etc.).</li> <li>• Provide guidance on internationally available sector training materials and resource documents that could be of use in project activities.</li> <li>• Prepare periodic project reports in collaboration with the FAO project coordinator and MOAC project manager</li> <li>• Provide support to disseminate information and experiences about the project's activities in the Asia Region and beyond.</li> </ul>
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## TERMS OF REFERENCE

### International Food Safety Expert

Under the overall supervision and guidance of the FAO Representative in Nepal, and under the direct technical supervision of the Lead Technical Unit (LTU), and in close collaboration with the other international consultants, the international food safety expert will carry out the following activities:

1. Review existing materials and guidelines (available inside Nepal and internationally) that could be utilized for SPS training in the area of food safety in Nepal.
2. Develop materials for use in training master food safety trainers.
3. Lead, facilitate and lecture at food safety curriculum development workshops.
4. Provide advice to adapt existing food safety training materials, guidelines and manuals for in-country training.
5. Review the topics for overseas training for master trainers in the area of food safety and make recommendations on modifications to this (as necessary) to reflect the existing knowledge and skills of master trainers and the scope of in-country training modules.
6. Train a core group of food safety master trainers and equip them with the knowledge and skills to effectively carry out the in-country training modules on food safety.
7. Prepare and submit (in electronic format) a detailed report describing activities undertaken, findings, conclusions, recommendations, etc. following the mission.

### Qualifications

An advanced university degree in food science, food technology, microbiology, food chemistry, or a related subject. He/she should have at least 10 years of responsible professional experience in the area(s) of modern food safety systems (including the use of food safety risk analysis), food inspection and quality control, food science and technology, food quality assurance, international food standards and food trade. A PhD. may substitute for two years of the required experience.

Experience in organizing and delivering training courses in developing countries and in the use of training of trainers approaches. Fluency in English is required. Prior experience in the region and knowledge of current sanitary issues relevant for SAARC countries would be beneficial.

## TERMS OF REFERENCE

### International Phytosanitary Expert

Under the overall supervision and guidance of the FAO Representative in Nepal, and under the direct technical supervision of the Lead Technical Unit (LTU), and in close collaboration with the other international consultants, the international phytosanitary expert will be responsible for the following: activities:

1. Review existing materials and guidelines (available inside Nepal and internationally) that could be utilized for SPS training in the area of plant health in Nepal.
2. Develop materials for use in training master phytosanitary trainers.
3. Lead, facilitate and lecture at phytosanitary curriculum development workshops.
4. Provide advice to adapt existing training materials, guidelines and manuals relevant to plant health for in-country training.
5. Review the topics for overseas training of master trainers in the area of plant health and make recommendations on modifications to this (as necessary) to reflect the existing knowledge and skills of master trainers and the scope of in-country training modules.
6. Train a core group of phytosanitary master trainers and equip them with the knowledge and skills to effectively carry out the in-country training modules on plant health.
7. Prepare and submit (in electronic format) a detailed report describing activities undertaken, findings, conclusions, recommendations, etc. following the mission.

### Qualifications

An advanced university degree in plant protection, quarantine or a related subject. He/she should have at least 10 years of responsible professional experience in phytosanitary procedures and systems related to plant protection, inspection and quarantine, international pest surveillance and monitoring, pest diagnosis and handling, pest risk analysis, phytosanitary standards and requirements for international trade, etc. A PhD. may substitute for two years of the required experience.

Experience in organizing and delivering training courses in developing countries and in the use of training of trainers approaches. Fluency in English is required. Prior experience in the region and knowledge of current phytosanitary issues relevant for SAARC countries would be beneficial.

## TERMS OF REFERENCE

### International Veterinary Expert

Under the overall supervision and guidance of the FAO Representative in Nepal, and under the direct technical supervision of the Lead Technical Unit (LTU), and in close collaboration with the other international consultants, the international phytosanitary expert will be responsible for the following: activities:

1. Review existing materials and guidelines (available inside Nepal and internationally) that could be utilized for SPS training in the area of veterinary inspection, quarantine, certification and compliance in Nepal.
2. Develop materials for use in training master trainers in the area of animal health.
3. Lead, facilitate and lecture at curriculum development workshops for animal health.
4. Provide advice to adapt existing training materials, guidelines and manuals relevant to animal health for in-country training.
5. Review the topics for overseas training of master trainers in the area of animal health and make recommendations on modifications to this (as necessary) to reflect the existing knowledge and skills of master trainers and the scope of in-country training modules.
6. Train a core group of master trainers in the area of animal health and equip them with the knowledge and skills to effectively carry out the in-country training modules on animal health.
7. Prepare and submit (in electronic format) a detailed report describing activities undertaken, findings, conclusions, recommendations, etc. following the mission.

### Qualifications

An advanced university degree in veterinary science or a related subject. He/she should have at least 10 years of responsible professional experience in the area(s) of animal health, veterinary inspection and quarantine, import/export certification of animals and animal products, SPS measures and requirements related to animal health and international trade, maximum residue limits in meat, milk and their products, etc. A PhD. may substitute for two years of the required experience.

Experience in organizing and delivering training courses in developing countries and in the use of training of trainers approaches. Fluency in English is required. Prior experience working in the region and knowledge of current animal health issues that are relevant for SAARC countries would be beneficial.

# Acronyms

ABPSD:	Agri business Promotion and Statistics Division
ACTP:	Agriculture Commercialization and Trade Project
AHD:	Animal Health Directorate
DLS:	Department of Livestock Services
DAT:	Directorate of Agriculture Training
DOA:	Department of Agriculture
DFTQC:	Department of Food Technology and Quality Control
MOAC:	Ministry of Agriculture and Cooperatives
NARC:	Nepal Agriculture Research Council
NPQP:	Nepal Plant Quarantine Program
SAARC:	South Asian Association for Regional Cooperation
SPS:	Sanitary and Phytosanitary Measures
STDF:	Standards and Trade Development Facility