

STDF PROJECT PREPARATION GRANT (PPG)

APPLICATION FORM

PPG Title	Food safety remote inspection practices for improved trade
Budget requested from STDF	USD 50,000
Full name and contact details of the requesting organization(s)	United Nations Industrial Development Organization
Full name and contact details of contact person for follow-up	Ali Badarneh Chief, Sustainable Food Systems Division Department of Agri-business United Nations Industrial Development Organization E-mail: a.badarneh@unido.org

I. BACKGROUND AND RATIONALE

1. What is the purpose of this PPG? Explain whether it is requested to: (i) apply an SPS-related capacity evaluation or prioritization tool; (ii) prepare a feasibility study (prior to project development) to assess the potential impact and economic viability of proposals in terms of their expected costs and benefits; and/or (iii) prepare a project proposal for consideration by the STDF or other donors?

This PPG aims to identify **current practices applied by regulators regarding the conduct of remote inspection practices of food business operators in their jurisdiction** to ensure enforcement functions without risking human health. These types of inspection practices have received more attention due to the COVID-19 pandemic. As part of this work, the executing agency will collaborate with regulators actively participating in the Codex Committee on Food Import and Export Inspection and Certification Systems (CCFICS) to share experience and information gained through the different activities. Finally, the project preparation grant will also allow the identification of a pilot country (or countries) where best practices in applying remote food safety inspection practices could be introduced or further improved.

Since the level and type of guidance on remote inspection offered by the competent authorities might differ from country to country (if it is applied), it would be vital to consider their repercussions and, as a result, offer potential solutions for those countries which might struggle to fulfill these requirements of their export markets. As a secondary objective of this PPG, different solutions, tools, and guidelines developed by competent authorities will be investigated to identify best practices in remote inspection and formulate a pilot intervention in two identified developing countries with existing institutional, policy, and regulatory frameworks in food safety, particularly inspection.

The PPG will pursue the following outputs, as expected results, thus responding to the main challenges identified in the sector:

Output 1.1.: International best practices identified for remote inspection in food safety

Activities:

1.1.1. Conduct a systematic review of existing technologies and practices applied in remote inspection;

- 1.1.2. Develop, in coordination with the STDF and other partners a survey, for SPS Committee Members on remote food safety inspection, and collect information as well as analyze results gained from the survey;
- 1.1.3. Organize an (online) international symposium on remote inspection in food and the use of digital solutions for improved inspection practices
- 1.1.4. Share information and coordinate with CCFICS and regulators interested in the findings

Output 1.1 focuses on identifying current best practices and solutions related to remote inspection and any related regulatory requirements that would have to be considered to ensure acceptance by competent authorities in import countries. Accordingly, the PPG would first develop a survey on remote inspection investigating the current practices and regulations applied by competent authorities. The PPG will also investigate the developed technologies. The survey, developed in collaboration with STDF and other partners, would also consider how the competent authorities might apply new approaches (remote or blended inspection) in official control through technology and based on what procedures, standards, and regulations these practices are rolled out. The survey will also investigate if these new practices might serve as a potential barrier to the food trade. The survey would be circulated among Members of the SPS Committee and Codex focal points to receive a broader range of responses from regulators. The received responses will be analyzed in the form of a technical report, and the results will also be shared with CCFICS to provide additional information on the currently applied practices and possibly allow them to define better the different sections of the guideline on the use of new technologies in food control.

To present the outcomes and learn about different experiences in applying digital technologies in food inspection and regulatory decision-making, the PPG will organize an online symposium, elaborating on current trends among regulators regarding food safety inspection practices and improved or data-driven regulatory decision-making on enforcement practices. Simultaneously, the executing agency will also continuously coordinate with the regulators involved in the CCFICS work to ensure that the developed guidelines also represent the challenges that developing countries might face during the application and introduction of remote inspection practices.

The achieved results under the first output would contribute to the second output of this intervention by using the identified best practices to ensure the robustness and integrity of suggested intervention areas.

Output 1.2: A pilot intervention formulated based on the identified international best practices

Activities:

- 1.2.1. Consult with regulators from developing countries on piloting best practices in their jurisdiction;
- 1.2.2. Conduct brief baseline assessment on the development level of food control systems of the pre-selected country/countries to ensure possible fit for the use of remote inspection practices;
- 1.2.3. Formulate intervention and validate with the regulators from identified country/countries;

Under this output, the PPG will engage with many competent authorities that show interest during the formulation period to apply such practices in their enforcement system. After the pre-identification of a possible country(ies), a brief baseline assessment will be performed on their policy, institutional and regulatory framework, considering what possible challenges might be applied to this approach. This brief baseline assessment will also investigate if the relevant competent authorities apply risk-based food safety inspection practices and their technical and infrastructural development status. These assessments will not provide detailed analyses but aim to provide further information for the background section of the project document. The brief baseline assessment(s) might also highlight some significant risks and challenges which might serve as a bottleneck for the application of remote inspection services, and thereby, other country(ies) might be suggested for possible piloting. The developed intervention will follow the structure and requirements of STDF and

UNIDO. After finalizing the project document, UNIDO will share the developed document with the project stakeholders for further inputs and validation.

2. Explain the key SPS problems and/or opportunities to be addressed. Clarify why these issues are important, with attention to market access and poverty reduction. Describe, if relevant, how these issues relate to SPS priorities in the Enhanced Integrated Framework's Diagnostic Trade Integration Studies (DTIS), the findings of SPS-related capacity evaluations, national poverty reduction strategies, sector development strategies or policies, etc. See Qn. 7. (b) – (d) of the Guidance Note.

The COVID-19 pandemic has forced governments and their economies to either slow down or temporarily lock down their operations, encouraging them to identify new solutions with the deployment of information and communication technologies. The measure has also reduced or caused the complete absence of face-to-face interaction among regulators, food safety service providers, and food business operators. With this new phenomenon, remote inspection and audit became a possible and temporary solution to ensure that food business operators can gain the required licenses and avoid further damage in the food sector and its related value chains. At the same time, some jurisdictions have decided to switch from a paper or blended system (accepting paper-based and electronic documentation) to completely electronic documentation to facilitate the required documentation for the remote inspection. As the future of the pandemic situation remains unknown, countries would need to consider how the current remote inspection and auditing practices might impact their import and export practices. At the same time, they would need to develop best practices for regulators and auditors to ensure the integrity and acceptance of the provided documentation and, most importantly, ensure continued food safety compliance practices by food business operators. In addition, the deployment of any new technology might require specific guidelines for the practitioners to ensure their most adequate and standardized practices in this domain.

Currently, remote or blended inspection does not have a globally agreed definition, and very often, it is often considered a blended approach instead of being fully distance-based. Other agencies might consider that remote inspection occurs through certain data surveillance practices that some jurisdictions might not support due to their regulatory framework. Some jurisdictions apply remote verification practices of foreign suppliers with no defined rules, regulations, and guidelines.

The proposed intervention corresponds with outcome 1 of the STDF Strategy 2020-2024, namely *Greater access to, and use of, good practices and knowledge products at a global, regional and national level*, by aiming to analyze ongoing initiatives and identify good practices in remote inspection and auditing. The PPG also considers the strategic focus of STDF on "consolidating and building on STDF's strengths and performance to improve results. The best practices identified through this PPG will be considered in a project grant application. Furthermore, the project preparation period will also identify one or more pilot countries where some of the best practices can be initiated to ensure proper inspection practices. The PPG will also contribute to a possible work of the Codex Committee on Food Import and Export Inspection and Certification Systems (CCFICS), and the project executing agency of this project preparation grant will continuously coordinate with the regulators involved in this work as well as CCFICS.

Application of remote inspection in different parts of the world

Developed countries have introduced different temporary measures on inspection, sometimes with limited guidelines on remote inspection. Some more forward-looking agencies have already applied remote verification tools on food businesses before the COVID-19 outbreak, like in New Zealand. Even though remote inspection started to receive increased attention due to the COVID-19 pandemic, its application could go beyond that, taking into consideration import verification programs by countries or internal inspection practices for countries with unique geographical characteristics, for instance, a large number of islands or areas which cannot be easily accessed due to significant geographical distance. On existing practices for remote inspection, jurisdiction from most developed countries serve as good background knowledge and examples.

Quality management practices for remote auditing

As part of the collaborative regulatory approach, the International Accreditation Forum (IAF) has recognized the possible negative implication of missing periodical audits and the inability of certification bodies to visit certain countries. Unlike the Codex Alimentarius, which has multiple guidelines for physical inspection and certification services but not for conducting those remotely, IAF has developed further guidance for remote practices related to ISO 19011:2018 (Guidelines for auditing management systems). Furthermore, remote audit methods are further defined in IAF MD 4:2018 with the title *The Use of Information and Communication Technology (ICT) for Auditing/Assessment Purposes*, applicable for its use concerning ISO/IEC 17021-1 and ISO/IEC 17065 based schemes. In addition, remote assessments are referenced in IAF ID 12:2015 Principles on Remote Assessment used for AB assessment of CABs. These also show that the collaborative regulatory approach might have to be considered for the period of the pandemic situation. However, their integrity would need to be further considered based on certain principles like it is aimed to be defined in Draft Codex Guidelines on the assessment and use of voluntary third-party assurance (vTPA) programs, thus further ensuring their trustworthiness and integrity.

Emerging technologies for remote solutions

Every crisis provides new opportunities and solutions to overcome the different types of difficulties the industry and the public sector face. Physical distancing and limitation of movement encouraged the information and communication technology (ICT) sector to develop new instruments and applications. Even though some technologies have great potential, they do not necessarily address the actual needs and challenges of food safety inspectors and certification auditors. This PPG would also support the review of current practices in the application of remote or blended inspection and highlight the different needs for integrated solutions. Furthermore, it must be remembered that access to these technologies remains limited in many developing countries, often facing custom issues and other compatibility limitations. In addition, as these technologies are being developed in an environment where high-speed telecommunication networks are in place, they might not be an option for most rural food production and manufacturing areas. Overall, the best practices need to consider the possibility of offline mode and sharing data once the devices are connected to the Internet.

3. Which government agencies, private sector, academic or other organizations support this PPG request? Letters of support from each of these organizations would be advantageous (Appendix 1). See Qn. 7. (e) of the Guidance Note.

This PPG is a result of a project grant application initially developed for Kenya and Cambodia. As per the STDF Working Group decision during its April 2021 session, a project preparation grant (PPG) was suggested to investigate further ongoing initiatives in developed countries for remote or blended inspection practices and reconsider potential pilot countries.

4. How does this PPG complement and/or build on past, ongoing and/or planned national programmes and/or donor-supported projects? See Qn. 7. (f) of the Guidance Note.

This PPG reflects the growing interest to deploy new digitalized and telecommunication-based solutions in official food safety inspection. Regulators actively participating in the CCFICS are paying increased attention to best practices to ensure the integrity of new types of inspection services.

5. Have you discussed this PPG request – or funding for the project proposal which would result from it – with any potential donors (bilateral, multilateral, Enhanced Integrated Framework, etc.)? If so, provide details below and indicate potential sources of funding for the resulting project. See Qn. 7. (g) of the Guidance Note.

As per response under question 3.

6. Briefly explain how gender and environmental issues are relevant for this PPG and, if appropriate, how they will be addressed.

Although this PPG does not aim to address gender-specific challenges, it will aim for gender parity by involving both genders as speakers and invitees during the different sessions. The social impact of applying new technologies will also be considered in the technical report, and the PPG will make sure that the recommendations will not discriminate against anyone based on social, age, religion, or gender background.

The PPG does not plan to have any adverse environmental implications. To further reduce any potential emissions related to the travel of project stakeholders, the PPG will aim to have virtual discussions and meetings throughout the development process.

II. IMPLEMENTATION & BUDGET

7. Who will take the lead in implementing this PPG? If particular national experts and/or international consultants are proposed, attach a copy of their Curriculum Vitae and record of achievements (Appendix 2). If no names are provided, the STDF will provide a shortlist of consultants if the PPG request is approved.

The project will be implemented by the United Nations Industrial Development Organization (UNIDO). UNIDO is a specialized agency of the United Nations that promotes industrial development for poverty reduction, inclusive globalization, and environmental sustainability.

The Directorate of Digitalization, Technology and Agri-Business (DTA) coordinates and mainstreams the Fourth Industrial Revolution (4IR) in its technical cooperation, strategic, normative activities aiming at fostering the inclusive and sustainable development in the era of 4IR. The Directorate creates new and innovative technical cooperation deliverables in the areas of trade, investment, technology innovation and agro-industry and agri-business. The Directorate comprises the Department of Digitalization, Technology and Innovation (DTI) and the Department of Agri-Business (AGR).

The Department of Agri-Business (DTA/AGR) provides a range of technical cooperation services to assist developing countries add value to the output of their agricultural sector and generate employment opportunities in off-farm activities for rural communities, thereby contributing to increased food security and a sustainable reduction of poverty. The department provides support for the development of agri-business corridors in developing countries in collaboration with International Financial Institutions.

The Department drives the Organization's mandates of creating shared prosperity and advancing economic competitiveness. It supports initiatives to build human capital and raise total factor productivity through focused vocational training and industrial skills development activities. With its programmes, the Department addresses the root causes of migration and helps alleviate migration pressures at the origin.

The Sustainable Food Systems Division (DTA/AGR/SFS) promotes ISID through the promotion of food systems that deliver food and nutrition security without compromising economic, social, and environmental bases to generate food security and nutrition for future generations. The Division is responsible for identifying, developing and managing programmes to improve the competitiveness of the food and agribusiness sectors through access to support services, finance, markets and trade opportunities.

The SFS Division contributes to the capacity-building of food systems support institutions and skill development agencies through its advisory and convening activities.

UNIDO's food safety approach is centered around three key pillars:

1. Enabling sustainable businesses through effective food safety capacity building;
2. Enabling a favorable food safety environment through integrating food safety into the wider context of regulatory frameworks, national quality and food safety policies as well as infrastructure development;
3. Fostering food safety advocacy and partnerships by enabling the private sector's

engagement in local, regional, and global partnerships and advancing multi-stakeholder food safety dialogue and interventions.

Within UNIDO, the Department of Agri-business (AGR) is the main driver of the Organization's mandate of promoting sustainable and inclusive business opportunities through agri-business and agri-value chain development. The Sustainable Food Systems (SFS) Division in the AGR Department has the food safety approach reflected in its mandate. UNIDO's food safety approach was designed to help execute the Organization's mandate and structure its interventions. It can leverage its capacity building initiatives and advisory and convening power to support sustainable and resilient food and agri-food businesses, including food of animal origin. Therefore, it is a lever that ensures that the organization's food safety-related capacity development initiatives are effective and fully contribute to achieving inclusive and sustainable industrial development in a cohesive and holistic manner.

UNIDO has implemented a number of programs on food safety and quality infrastructure development and industrial upgrading and modernization programs on the national and regional level in North Africa, Middle East, and West, Central Africa, Asia, Eastern Europe the Caucasus and Central Asian countries. Development of food safety and quality infrastructure is a relatively niche area, with projects often requiring a highly specialized set of skills and expertise. UNIDO has a core comparative advantage in working in this field globally.

8. In the table below, briefly describe the main activities to be carried out under this PPG and specify who would be responsible. Provide an estimate of the budget required (e.g. for national/international expertise, travel and DSA of consultants, stakeholder meetings or workshops, general operating expenses, etc.).

Activity	Responsible	Budget calculation	Estimated Budget (US\$)
Conduct a systematic review of existing technologies and practices applied in remote inspection	International expertise	20 days of work for international expertise (US\$ 500 per day) for systematic review	10,000
Develop in coordination with the STDF and other partners a survey for SPS Committee Members on remote food safety inspection, and collect information as well as analyze results gained from the survey	UNIDO HQ, international expert, STDF Secretariat, other partners	14 days of work for international expertise (US\$ 500 per day)	7,000
Organize a virtual international symposium on remote inspection in food and the use of digital solutions for improved inspection practices	UNIDO HQ, STDF	Miscellaneous cost for graphic design of backdrops and reports to be shared (\$3,000). Interpretation costs (US\$ 3,000)	6,000
Develop publication and website on best practices identified through the survey and the symposium	International expertise	16 days of work for international expertise (US\$ 500 per day) to summarize international best practices US\$ 4,000 for the design of publication and corresponding site	12,000

Share information and coordinate with CCFICS and regulators interested in the findings	UNIDO HQ and STDF		0
Hold virtual consultation with regulators from developing country(ies) on piloting best practices in their jurisdiction	UNIDO HQ & international expert		0
Conduct brief baseline assessment on the development level of food control systems of the pre-selected country(ies) to ensure possible fit for the use of remote inspection practices	International expert	20 days of work for international expertise (US\$500 per day)	10,000
Formulate intervention and validate with the regulators from identified country(ies)	UNIDO HQ and international expert	10 days of work for international expertise (US\$500 per day)	5,000
Total budget			USD 50,000