

Terms of Reference

Capacity building and knowledge sharing to address SPS issues in spices

STDF Project Preparation Grant (STDF/PPG/517)

Background

1. In India, the spice sector is important for the livelihoods of a large numbers of farmers and rural households, as well as foreign exchange earnings. India produces about approximately 3 million metric tons of spices and exports annually nearly 0.8 million tons worldwide, directly to over 100 countries and indirectly to other destinations. During April 2015 - June 2016, a total of 435,300 tons of spices and spice products valued at US \$1200 million were exported from the country.¹ Over 60 different spices are grown in the country and about 200 different forms of value added products are manufactured from these spices. India is also one of the largest domestic consumers of spices.
2. Spices are cultivated across the country generally by medium and small holder farmers. The agricultural practices and timing of application of inputs vary from farmer to farmer and from region to region. The spice sector faces a number of critical and distinct food safety challenges, which influence the ability to access export markets. While these problems vary, not only in the symptoms and possible causes, but also in view of the geographical differences in production areas, in general they encompass the following key issues:
 - i. Microbial contamination: contamination by bacteria such as *Salmonella* and *E.coli* pose major health issues to consumers. These issues are currently the most important cause for rejection of spices exported from India;
 - ii. Pesticide residues: a major portion of spices produced in India originate from small holdings, where the producers are unaware of Good Agricultural Practices (GAP) with respect to application of pesticides. This results in undue amounts of pesticide residue in the final produce, which constitutes a significant health risk. This is also a reason for rejection of Indian spices;
 - iii. Mycotoxin contamination: spices are commodities that develop their characteristic properties upon drying. Improper drying and storage conditions can develop mould in the products which can result in the formation of mycotoxins, typically aflatoxins and ochratoxins (a toxic fungal metabolite classified as a possible human carcinogen); and
 - iv. Other food safety issues, which affect both spice production along the value chain, including lack of capacity to apply GAP, filth, insect fragments, extraneous matter, etc.
3. Spices from India are exported to a number of different export markets. Key markets include USA, European Union, Japan, Middle East and East Asia. Between 2013 and 2015, the United States Food and Drug Administration (USFDA) rejected approximately 1000 consignments of spices on account of contamination by aflatoxins and salmonella. The European Union recorded about 100 rejections.
4. Given the large number of small holder farmers involved in cultivation of spices, the sector is important for national development and poverty alleviation. The government and development partners (including the USFDA – see below) are providing support to develop

¹ See:

<http://indianspices.com/sites/default/files/monthly%20estimated%20export%20of%20spices%202016.pdf>

the spices value chains, including to increase production and build the capacity of small-scale farmers and others involved in these value chains. While some of these programmes and projects may address some aspects of food safety capacity building, in general they do not systematically or comprehensively address food safety challenges that affect spices exports, including specific post-harvest food safety problems (like aflatoxin and ochratoxin contamination). Similarly, there has not been a comprehensive and systematic approach to improve food safety capacity in the spices value chain, based on international standards and individual market requirements.

Objective of the PPG

5. This Project Preparation Grant (PPG), requested by the Spices Board India and approved by the STDF Working Group in March 2016, responds to the above-mentioned needs. It will be used to:
 - i. take stock of the SPS elements of ongoing and planned projects supporting the spices value chain, and of ongoing Codex Alimentarius work on spices (including work in relevant committees), and identify critical SPS capacity building needs, gaps and possible synergies with other ongoing/planned activities; and
 - ii. develop a comprehensive project proposal to address SPS capacity building needs in the supply chain (production, post-harvesting, processing and trading of six key spices (chillies, peppers, coriander, cumin, fennel and nutmeg) to promote export growth.
6. The STDF will engage an International Consultant to implement the PPG in close collaboration with the Spices Board India, as well as other relevant public and private sector stakeholders involved in the spices value chain. The STDF will enter into a separate contract with the Spices Board for the local expenses and logistical arrangements related to implementation of this PPG.

Implementation of the PPG

7. Under the overall supervision of the STDF Secretariat, and in close collaboration with the Spices Board India (whose role in the implementation of the PPG is described and elaborated in a separate contract) and other relevant stakeholders, the International Consultant will:
 - i. Identify and review relevant documents, studies and assessments focused on SPS capacity, food safety issues in spices and trade.
 - ii. Investigate and analyze key SPS issues and challenges affecting the spices value chain in India in order to understand where possible solutions to strengthen SPS capacity can make a difference and add value. This analysis should provide accurate and up-to-date information on what is currently known about the magnitude and extent of key problems facing the value chains for the six spices (including national testing for aflatoxin contamination, pesticide residues, trade rejection data, etc.). It should also examine specific SPS-related requirements in current and potential export markets for these spices from India, and capacity of relevant stakeholders in India to meet these requirements.
 - iii. Conduct broad consultations with representatives of the stakeholders and framers in India in order to incorporate their views, experiences and insights into the PPG where appropriate, to ensure that the resulting project is fully aligned with national development priorities, and to

enhance ownership for the resulting project. In particular the following national stakeholders should be consulted:

- a. Government agencies involved in agricultural development and trade and the implementation of SPS controls (including *inter alia* the Food Safety and Standards Authority of India).
 - b. The private sector including producers, exporters, spice associations (including *inter alia* Indian Pepper and Spice Trade Association and Indian Spice and Foodstuff exporters Association) and farmer organizations.
 - c. Research institutes (including *inter alia* Indian Institute of Spices Research, National Research Centre for Seed Spices) and academics working in the spice sector in India.
- iv. Hold in-depth discussions with Spices Board India, as well as representatives of relevant past/ongoing/planned projects and programmes focused on the spice value chains in India, to take stock of and understand the SPS-related capacity building components/elements included in these projects/programmes, as well as any key SPS issues, challenges, experiences or lessons learned identified under these projects/programmes. These include, but are not limited to, the following:
- a. Collaborative Training Cell (CTC): Spices Board India has taken the initiative to establish a CTC for Food Safety Supply Chain Management in spices/botanical ingredients jointly with CII/FACE (Confederation of Indian Industry – Food and Agriculture Centre of Excellence) and JIFSAN (The Joint Institute for Food Safety and Applied Nutrition). The latter institute was jointly established by the University of Maryland and USFDA. To build capacity, the CTC has conducted a series of workshop and training programs in different regions of India. In order to broaden this capacity building exercise, CTC has started a training programme for officers of various governmental horticulture departments to overall support the Government's mission for Integrated Development of Horticulture. State horticulture / agriculture departments, extension departments, State horticulture missions and the Indian Spices Industry are the most critical links in this endeavour and play a crucial role in successfully conducting the capacity building programmes. The programme was implemented in three phases. In the first phase, experts from JIFSAN and USFDA travelled to India to offer food safety training focused on spices to 50 officials from both government and private organizations. In the second phase, selected officials of the programme underwent a two week internship program at University of Maryland and University of Mississippi's National Centre for National Products Research, on various aspects of food safety. In the third phase, these officials, as trainers, organized a series of workshops/ training programmes throughout the country as an effort to widen information and knowledge dissemination; and
 - b. Codex related activities, including on-going work in the Codex Committee on Spices and Culinary Herbs (CCSCH), the Codex Committee on Contaminants in Food, etc.
- v. Identify opportunities for linkages and synergies with relevant ongoing/planned projects and programmes in order to improve SPS capacity across the spice value chains.
- vi. Actively consult international organizations, development partners and donors with an interest in value chain development and trade in India (including FAO, the World Bank, the

Global Food Safety Partnership², Asian Development Bank, etc.) to explore opportunities to leverage funds to implement all or part of the project to be developed through this PPG. Based on the outcomes of these discussions, and the likelihood to secure donor-funding, the project proposal produced may be written in the format/template of one of these potential donors (rather than the STDF project template).

- vii. On the basis of the aforementioned discussions and information obtained, consider the most feasible, cost-effective and sustainable approach to strengthen SPS capacity in the spices value chain, with a focus on the six selected spices, given the distinct nature of the challenges faced, different possible causes and remedial actions, and geographic differences in production areas across India.
- viii. Formulate a project proposal to address SPS challenges/issues and promote trade in spices from India. The proposal should:
 - a. Clearly identify the specific causes of the different SPS-related challenges facing the value chain of the six spices (identified above), and consider the feasibility of various approaches or solutions to address the problems faced (e.g. rolling out training on GAPs, improving food safety in processing) given the particular structure of the value chains and the large number of small holder farmers involved.
 - b. Clearly identify and map out linkages, synergies and complementarities to related activities and projects, supported by the government, donors and development partners in India, in the spices value chains.
 - c. Take account of, and build on, what has worked in SPS capacity building interventions in the spices value chain to date, and learn from other relevant experiences.
 - d. Clearly elaborate the purpose, expected outcomes, outputs and activities of the proposed project, based on a coherent logical framework. The logical framework should include indicators to measure performance, sources of verification and any key assumptions.
 - e. Clearly identify the roles and responsibilities of all concerned public and private stakeholders, and outline a practical mechanism for project implementation and management.
 - f. Include a detailed estimate of the budget required to implement the proposed project and, where possible, identify possible donors and/or private sector investors.
 - g. Consider cross-cutting issues related to gender and environmental aspects affecting the particular value chain.
 - h. Include a detailed work plan and timetable for project implementation.
 - i. Identify and assess the possible risks and challenges faced in the proposed project, as well as risk mitigation strategies to ensure its success and sustainability.
- ix. Discuss the draft project proposal for the spices value chain, with a focus on the six key spices, with relevant public and private sector stakeholders in India, including the Spices Board India, the Ministry of Agriculture, as well as concerned development partners /

² See: <http://files.constantcontact.com/d83c7c0d401/a5098ef0-1fc6-4e87-bcfc-af35fe2f3697.pdf?ver=14781007700009>

donors. On the basis of comments and suggestions received, revise the proposal as necessary.

- x. Present the draft project proposal to relevant stakeholders (public sector authorities, private sector, development partners, etc.) and make any further revisions necessary to improve each proposal.
 - xi. Participate in key meetings during implementation of the PPG, lead interviews, prepare agendas for meetings (e.g. debriefing meeting with national authorities, project validation workshops) and summaries of meetings for circulation to participants.
 - xii. Finalize the project proposal for the spices value chain, with a focus on the six spices, on the basis of all comments received on successive versions of the documents.
 - xiii. Provide a short written report on the implementation and outcomes of this PPG to the STDF within one month of its completion. This report should describe the activities implemented, the results achieved, and the key stakeholders who were actively involved and/or consulted. It should also attach copies of relevant documents produced under the PPG. Any documents related to SPS capacity building in India, identified during the work to carry out this PPG, should be provided to the STDF Secretariat for inclusion in the STDF Virtual Library.
8. The STDF will enter into a separate contract with Spices Board India for the local expenses related to implementation of this PPG. In particular, Spices Board will be responsible for providing necessary logistical and other support, as required for implementation of the PPG. The indicative tasks of Spices Board will be to:
- i. In collaboration with the international consultant, make logistical arrangements for stakeholder workshops and other meetings organized under this PPG.
 - ii. Facilitate and play a driving role in all meetings, including the international consultant's discussions and interviews with relevant government agencies, the private sector and research institutes in India during implementation of the PPG.
 - iii. Assist the international consultant in meetings with development partners and donors with an interest in value chain development and trade in India (including FAO, the World Bank, the Global Food Safety Partnership, Asian Development Bank, etc.).
 - iv. Provide inputs to the international consultant for inclusion in his/her written report on the PPG implementation and results, and review and comment on the draft project proposal drafted by the international consultant.
 - v. Coordinate letters of support for the proposed project from key public and private stakeholders. As appropriate, these letters should include a clear expression of support for the proposed project, and demonstrate clear commitment to take actions needed to ensure the success and sustainability of the project.
 - vi. Keep detailed financial records of funds disbursed by Spices Board under this PPG and provide a final invoice of disbursements to the STDF Secretariat.

Deliverables

9. The international consultant shall deliver the following key outputs:

- i. a short report of work carried out under the PPG that identifies, analyses and maps out SPS capacity building interventions in relevant existing/planned programmes, including ongoing Codex work on spices (including work in relevant committees) and a bibliography of documents consulted (with web links and/or electronic copies, where available), stakeholders met, key activities, etc.; and
- ii. a proposal for a project to improve the capacity of relevant public and private stakeholders in the spices value chain, with a focus on the six spices selected, to ensure the safety of spices for export, based on relevant international food safety standards and other particular market requirements.

Timeframe

10. The planned starting date is 19 December 2016 with an expected completion date of 31 March 2017.