

STDF PROJECT PREPARATION GRANT (PPG)

APPLICATION FORM

The Standards and Trade Development Facility (STDF) provides Project Preparation Grants (PPGs), up to a maximum of US\$50,000, for the following purposes (or a combination thereof):

- application of SPS-related capacity evaluation and prioritization tools;
- preparation of feasibility studies that may precede project development to assess the potential impact and economic viability of proposals in terms of their expected costs and benefits; and/or
- Preparation of projects proposals that promote compliance with international SPS requirements, for funding by the STDF or other donors.

Applications that meet the STDF's eligibility criteria are considered by the STDF Working Group, which makes the final decision on funding requests. Complete details on eligibility criteria and other requirements are available in the *Guidance Note for Applicants* on the STDF website (www.standardsfacility.org). Please read the *Guidance Note* before completing this form. Completed applications should be sent by email (as Word documents) to STDFSecretariat@wto.org.

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|--|---|
| PPG Title | Safer spices: Securing market access through improved food safety and connectivity within the spice value chain focussing on peppercorn in Vietnam, Lao PDR and Cambodia |
| Budget requested from STDF | US\$ 36,300 |
| Full name and contact details of the requesting organization(s) | Western Highlands Agriculture and Forestry Science Institute (WASI) No. 53, Nguyen Luong Bang street, Buon Ma thuot city, Dak Lak province, Vietnam |
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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?*

The purpose of this PPG is to prepare a project proposal, for consideration by STDF or other donors. The proposed project will aim to combat SPS issues related to food safety and improve the quality and traceability in the production, post-harvest, processing and trade of spices in Asia. Following consultations with a number of stakeholders, it was decided to focus on peppercorn, as the risks relating to contamination and threats to productivity have been highlighted, particularly from imports into the EU and other global markets. Vietnam's peppercorn export industry will be used to develop a proof of concept for an inclusive market model that can be rolled out to other spice supply chains. A regional approach will be taken including neighbouring countries Cambodia and Lao PDR as Vietnam imports a substantial amount of the production in these neighbouring countries. The PPG will build a common vision with the private sector, and establish priorities which will form the basis of the project.

There are 39 countries producing peppercorn, with production of 403,213 tons (IPC, 2016). Vietnam has a 38.6% share of the global production and is the world's largest exporter (95% of its output) to over 97 countries and territories in Asia, Europe, America and Africa. Vietnam's total peppercorn production in 2014 was nearly 148,000 tonnes, with a total export volume of 156,396 tonnes including imports from neighbouring countries such as Cambodia and Lao PDR, which is re-exported as Vietnamese product.

Cambodia and Laos export is small compared to Vietnam, although Cambodia is the 6th largest producer and 4th largest exporter. Most black pepper production from Cambodia and Lao PDR is exported to Vietnam through regions of central highlands including Kon Tum, Gia Lai and Dak Lak provinces along borders of Vietnam with Cambodia and Lao PDR. Cambodia exports peaked in 2014 reaching a value of US\$ 7.48 million¹. Approximately 64% of Cambodia's pepper is exported to Vietnam and 30% to Thailand. The local authorities are keen to expand the production of Kampot pepper, which is renowned globally as the best peppercorn and has geographic indicator status. Export of pepper from Lao PDR is low (US\$0.02 million in 2015) but investors in Sekong province plan to increase production and exports, with a particular interest in exporting 90% of their production to Vietnam (250 tons by 2018).

It has been estimated that production costs of peppercorn is costing the farmers between USD 2.5 and 3.0/kg, but the selling price has been at least 3 times higher than this for many years. Therefore the farmers' financial position has been strengthening and so has their holding power. Peppercorn is cultivated largely by smallholders and so the development of the market

¹ Data from UN Comtrade (<https://comtrade.un.org>)

is helping farmers to improve their economic status, contributing to reducing poverty. The rate of farmers shifting from other crops to grow peppercorn in the hope of getting high profit is increasing. In spite of the significant growth in exports, the price of pepper achieved by Vietnam on global markets is still low relative to other significant exporters.

Consumer demand for peppercorn is increasing with demand currently outstripping supply. In the last few years, production fell marginally short of consumption. The stock ratio in 2014 decreased to worryingly low levels - some 30% or 16 weeks of demand². It is expected that production levels will decline further with unfavourable weather conditions in light of the El Niño and La Niña effects; the increase in cost of input materials (fertiliser, pesticides, labour, water etc.); land availability; a yield return with a three year lag period; spread of devastating diseases such as wilt, influence the management of the crop. Dantri International News recently reported that the farmers in Dak Nong Province, Vietnam, are bearing major losses as hundreds of pepper trees suddenly died just before they were harvested as a result of quick wilt (*Phytophthora capsici* Leonian) and slow wilt (caused mainly by nematodes) diseases. Some farmers are losing as much as 50% of their crop³.

The region is facing production risks from a number of factors including a shift towards intensive farming systems that cause land degradation, pollution and erosion, resulting in food safety concerns due to limited knowledge of best practice. Monoculture systems are more susceptible to pest and disease attack, and limited capacity and skills is leading to overuse and misuse of pesticides. In addition, limited access to cleaning and processing technologies and knowledge of best practices leads to contamination issues. In a recent meeting on ‘Pepper Production, Processing and Consumption’ it was highlighted that these issues are threatening the sustainability of the industry.

The proposed project entitled “Safer spices: Securing market access through improved food safety and connectivity within the spice value chain in South East Asia” is targeted at peppercorn supply destined for markets where there is increasing consumer concern. Improving the capacity of producers and traders to produce quality safe peppercorn that ultimately meets food safety and hygiene standards can help to boost exports and improve competitiveness and safe-guard the industry’s future.

² Nedspice (2014) Pepper Crop Report

³ <http://dtinews.vn/en/news/018/49711/farmers-stricken-as-pepper-trees-die-before-harvest.html>

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.

SPS problems to be addressed

Southeast Asia (SEA) is the largest supplier of pepper to the EU, accounting for 62% of the total imported volume in 2014⁴. European countries account for 40% of the Indochina region's market share of peppercorn. Food safety is a key issue in European food legislation. However, some traders state that currently, 75% of the peppercorn production does not meet EU standards concerning pesticide levels. In addition, to guarantee food safety and allow appropriate action in case of unsafe food, food products must be traceable throughout the entire supply chain and risks of contamination must be limited.

In 2010, rejections of herbs and spices into Europe was equivalent to 9.4% of the total import value⁵ while the EU Rapid Alert system for food and feed products (RASFF) notification reported seven border rejection notifications for Vietnamese pepper within the last two years (see below).

| Date | Country | Reason for rejection |
|------------|-------------|--|
| 21/01/2016 | Malta | unauthorised substance carbendazim (1.1 mg/kg - ppm) in black peppercorn |
| 27/11/2015 | Poland | stones (1.2 %) in white pepper husk |
| 12/10/2015 | Italy | metalaxyl (0.33 mg/kg - ppm) in black pepper seeds |
| 25/09/2015 | Croatia | ochratoxin A (155.1 µg/kg - ppb) in ground black pepper |
| 24/09/2015 | Spain | excessive humidity of black pepper from Vietnam infested with moulds |
| 07/09/2015 | Spain | black pepper grains from Vietnam infested with moulds |
| 15/07/2015 | Netherlands | ethylene oxide (2.5 mg/kg - ppm) in black pepper |

Recently it was reported, in an online Vietnamese newspaper, that Spain has warned that Vietnamese black peppercorn contains a higher-than-permitted residue of Carbendazim fungicide. This European country has taken measures to mitigate this; instead of suspending its import, forcing Vietnamese exporters to reduce prices⁶, impacting on farmers' livelihoods.

In 2016, a significant amount of black peppercorn was rejected overseas because of non-compliance to pesticide MRLs (see Table 1). Excess use of fungicides is an increasing concern for importing markets and the recent threat from wilt diseases will only increase the risks of overuse of fungicides.

⁴ CBI Product Factsheet: Pepper from Southeast Asia in Europe - https://www.cbi.eu/sites/default/files/market_information/researches/product-factsheet-europe-pepper-southeast-asia-2015.pdf

⁵ UNIDO (2013) Analysis of rejections of Asian agri-food exports to global markets

⁶ <http://www.vietnambreakingnews.com/2016/03/ppper-prices-decline-sharply/>

Table 1 PESTICIDES RESULT- SPS in 2016: BLACK PEPPERCORN 550G/L CLEAN

| Lot.No - on Label | Buyer Lot.ref | Result | Carbendazim | Metalaxyl | Cypermethrin | Imidacloprid | Propamocarb |
|------------------------------------|---------------|--------|-------------|-----------|--------------|--------------|-------------|
| Lot 1-31(Lot 1-4/2/2016) | Lot 1-31 | Reject | | | 0.11/0.1 | | |
| Lot 1-12B ref Lot Vi 12(23/2/2016) | Lot 2-31 | Reject | 0.16/0.1 | | | 0.058/0.05 | |
| Lot 2-12B Eurofins 27/2/2016 | | Reject | 0.23/0.1 | 0.12/0.1 | 0.16/0.1 | | |
| Lot 3-12B - 02 Mar 16 | Lot 3-31 | Reject | 0.6/0.1 | 0.12/0.1 | 0.25/0.1 | 0.067/0.05 | |
| Lot 4-12B - 02 Mar 16 | Lot 4-31 | Reject | 0.42/0.1 | | | 0.086/0.05 | |
| Lot 5-12B - 09 Mar 16 | Lot 5-31 | Pass | 0.046/0.1 | 0.038/0.1 | | 0.021/0.05 | |
| Lot 6-14B - 11 Mar 16 | Lot 6-31 | Pass | 0.091/0.1 | 0.051/0.1 | | 0.016/0.05 | |
| Lot 7-12B -14 Mar 16 | Lot 7-31 | Reject | 0.36/0.1 | | 0.18/0.1 | | |
| Lot V2-11.7-14 Mar 16 | Lot 8-31 | Reject | 0.16/0.1 | | 0.11/0.1 | | |
| Lot 8-12B -16 Mar 16 | Lot 9-31 | Reject | 0.2/0.1 | | 0.13/0.1 | 0.063/0.05 | |
| Lot V11.8 -16 Mar 16 | Lot 10-31 | Pass | 0.099/0.1 | 0.028/0.1 | 0.049/0.1 | 0.032/0.05 | |
| Lot 9-12B -22 Mar 16 | Lot 1.1-31 | Reject | 0.46/0.1 | | 0.13/0.1 | 0.076/0.05 | 0.052/0.05 |
| Lot 10-12B -29 Mar 16 | Lot 1.2-31 | Reject | 0.2/0.1 | | 0.14/0.1 | 0.052/0.05 | 0.088/0.05 |
| Lot 11-12B -31 Mar 16 | Lot 1.4-31 | Reject | 0.036/0.1 | | 0.14/0.1 | | |
| Lot 12-12B -12 April 16 | Lot 1.5-31 | Reject | 0.75/0.1 | 0.13/0.1 | 0.21/0.1 | 0.13/0.05 | |
| Lot 13-12B -13 April 16 | Lot 1.6-31 | Reject | 0.26/0.1 | | 0.12/0.1 | 0.11/0.05 | 0.094/0.05 |

The origin of SPS problems in peppercorn supply chains are not always obvious, as the supply chains are complex and involve numerous intermediaries. An added complexity is that Vietnam exports include product produced in Cambodia and Lao PDR which is sometimes illegally traded. The interrelationship between actors within the supply chain in the different countries is not clearly defined making traceability and accountability a challenge.

Supply chain complexity thus makes it difficult to identify the critical points where contamination can occur, although there is evidence that contamination can occur at any point in the supply chain if proper practices are not followed. The distribution and processing chain for peppercorn is also highly complex and can span long periods of time and include a wide range of establishments. Underlying problems include:

- Farmers have limited knowledge about best practices in cultivation, leading to the overuse of pesticides and fertilisers; and lack awareness of the existence of standards (grading and processing practices) and certification that are required in export markets
- Increase threat from pest and diseases such as quick and slow wilt
- Collectors and primary processors have limited access to cleaning and processing technologies
- Limited domestic enforcement mechanisms including the regulation of inputs and lack of standardisation of procedures such as cleaning and processing
- Limited infrastructure for testing and monitoring products
- Limited food safety management system: As food safety is a top priority in all EU food sectors. Many EU buyers (e.g. traders, food processors, retailers) require the implementation of a (HACCP-based) food safety management system. The most important food safety management system in the EU are BRC, IFS, FSSC22000 and SQF. All the mentioned management systems are recognized by the Global Food Safety Initiative (GFSI), which means are accepted by major retailers. However, these standards are not enforced on a National level and product is aggregated making traceability of non-compliance very difficult.

Importance of issues

Smallholder farmers face big challenges when applying new technology to produce in a sustainable manner. Controlling quality and hygiene is very difficult due to various limitations.

The overuse of fertilizers and pesticides by farmers has weakened peppercorn plants and as a result they have become even more susceptible to disease, leading to further excessive use of pesticides; and is negatively affecting sustainability of the industry. Lack of knowledge on disease such as wilt (*Phytophthora sp*) often leads to heavy crop losses and inappropriate spray application and overdosing. Pesticides, particularly fungicides are also used in

peppercorn storage and the chemicals used during processing and cultivation often contribute to product contamination and hence, rejection.

The EU has set maximum residue levels (MRLs) for pesticides in and on food products. Detection above permitted levels is an important issue and threatens access to these markets. Some traders state that in 2015 around 75% of Vietnamese peppercorn production did not meet EU requirements concerning pesticide MRLs⁷. A major reason for this is the fact that much peppercorn is grown as an intensive monoculture system, which is more susceptible to the multiplication of pests and diseases. Pesticides are less of an issue for countries like Indonesia where peppercorn is grown in less intensive systems.

Amended EU pesticide Regulation 396/2005 sets revised limits for pesticides found in peppercorn. It also introduces a new limit for anthraquinone. This substance is not generally used as a pesticide in cultivation but residues may be found in peppercorn as a result of artificial drying with fire. The smoke contains anthraquinone which can end up in the product (if precautionary measures are not taken). In addition to smoking, widespread use of steam treatment of the spice prior to exportation as a means of reducing microbiological contamination and meeting hygiene requirements in export markets not only degrades the quality of the pepper and precludes efforts to build value, but also is the cause of mould in the final product that has been one of the cause of rejections in export markets.

Contamination with mycotoxins (aflatoxin, ochratoxin and others) is another risk for pepper production. Specific requirements are laid down in Regulation (EC) No. 1881/2006 (Annex 2.1.9. and 2.2.11). For peppercorn, maximum level of aflatoxin is between 5.0 µg/kg (aflatoxin B1) and 10 µg/kg (total aflatoxin content B1, B2, G1 and G2). For ochratoxin the maximum limit is 15 µg/kg. Aflatoxins are becoming a serious issue in a number of stored products globally and pose a real threat to the peppercorn industry.

Salmonella can occur at all stages including growing, harvesting, processing, storage, packaging, and sale. The maintenance of good manufacturing and hygiene practices, together with appliance of HACCP principles, is therefore of great importance during growing, harvesting, and processing. The reason for the most rejections of peppercorn by EU SPS authorities is the presence of Salmonella (whole, crushed and ground). There are no specific Salmonella requirements defined in EU legislation for spices and herbs as there are for other products. However, according to Article 11 of the General Food Law, food products placed on the EU market must be safe. Therefore peppercorn is banned from the market if Salmonella is found.

Relevance to findings of SPS-related capacity evaluations, national poverty reduction strategies, sector development strategies or policies

A diagnostic trade integration study (DTIS) has not been undertaken in Vietnam, but has been completed for Cambodia and Lao PDR. In Cambodia's 2014 – 18 Trade Integration Strategy pepper is included in the list of export potential products and geographical indicators have been established for Kampot black pepper⁸. Whilst pepper is not mentioned specifically,

⁷ CBI Product Factsheet: Pepper from Southeast Asia in Europe

⁸ Cambodia Trade Integration Strategy 2014-2018.

the National Export Strategy for Lao PDR includes encouraging the production of medicinal plants and spices for export⁹.

A study carried out in 2013 titled: Using Multi Criteria Decision Analysis to Identify and Prioritise Export-Related Sanitary and Phytosanitary Capacity-Building Options in Vietnam identified hygiene controls for spice exports as one of the 10 capacity-building option priorities and specifically highlighted exports of black pepper (and also some other spices) as having records of high levels of microbiological contamination, for example in the EU and US. A need for the widespread application of hazard analysis and critical control point (HACCP) or ISO 22000:2005 in the spice processing sector was also identified¹⁰.

As part of the Vietnam Sustainable Development Strategy for 2011-2020, the government seeks to: develop quality agricultural products; combine production with local and foreign market in order to lift the efficiency of using natural resources (land, water, forests, labour and capital); heighten income per hectare of cultivated land and per working day; improve farmers' living standards; speed up the application of scientific and technological advances in production, processing, storage, particularly the application of biotechnology in creating crop plants and domestic animals varieties and production process that yield high productivity and quality; and to gradually formulate the system for management and control of food hygiene and safety so as to protect consumers' health and interests". Food safety of primary products falls under the Ministry of Agriculture and Rural Development in Vietnam. A legislative framework includes an Ordinance on Food safety but does not commit to the application of specific principles such as HACCP or ISO 22000:2005, a need identified in the 2013 MCDA referred to above.

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 the result of many discussions and consultations by WASI, MARD and the other national and international stakeholders listed below. As part of the stakeholder analysis which will be undertaken during the PPG, a comprehensive section in the project document will identify the exact roles, responsibilities, and assistance required by the regulators and value chain actors to effectively address SPS compliance challenges of production and marketing of peppercorn.

The PPG request is supported by the following institutions and organisations:

Ministry of Agriculture and Rural Development, Vietnam: Under Article 63 of the Vietnam Food Safety Law, MARD is mandated to manage food safety for primary production, collection, processing of export, import and trading of agricultural products such as pepper, coffee and cocoa. The MARD in discussion with the Vietnam Academy of Agricultural Sciences (VAAS), an umbrella organization of 18 research institutes, and the Plant Protection Department (PPD), the focal point for SPS, approached WASI and CABI to resolve the problem of rejection of peppercorn by the EU as a result of injudicious pesticide use. A similar concern and interest was also underscored by the Department of Crop Production which is under MARD. VAAS, in collaboration with CABI, organized a peppercorn stakeholder workshop in mid-December, 2016 to assess the problem. The key

⁹ Diagnostic Trade Integration Study (2012) Ministry of Industry and Commerce Lao PDR

¹⁰ Cuong TV *et.al* (2013) Using Multi Criteria Decision Analysis to Identify and Prioritise Export-Related Sanitary and Phytosanitary Capacity-Building Options in Viet Nam.

output of the workshop was to seek funding for a thorough assessment of the current spice value chain focusing on the quality and safety aspects of peppercorn for better market access.

Vietnam Peppercorn Association (VPA; web:www.peppervietnam.com): this is a key non-governmental organization, representative for enterprises belonging to all economic sectors, organizations and individuals of Vietnam related to Peppercorn Industry, who agree with its regulations, optionally joint and are in the approval of the VPA Executive Board. The VPA was established on December 20th, 2001 by the approval of the Government Officials Organizing Board. The association organizes and combines enterprises and units of production and trade, and other organizations related to the peppercorn industry aiming at creating a general power for stable and effective development and for enhanced competition of the peppercorn industry in local and in the world.

General Directorate of Agriculture (GDA), Cambodia: is a key organization under the Ministry of Agriculture, Forestry and Fisheries (MAFF), Cambodia which includes the Department of Plant Protection, Sanitary and Phytosanitary (PPSPSD). The PPSPSD is strongly linked to extension, research and policy related actors for the plant quarantine work, diagnostic and other work related with plant protection. The also process certificates of origin, import permit and the other documents, in respect of the consignments which are checked for genuineness and proper entries.

Department of Agriculture (DOA), Lao PDR is a key organization under the Ministry of Agriculture and Forestry (MAF) and have the mandate to control food safety. DOA has adopted good agricultural practice (GAP) from ASEAN and developed an import and export food safety control system to support vegetable and fruit production in Lao PDR. Lao PDR has long history for pepper production which is mostly produced for domestic consumption. Recently, due to demands of the region and international market growing, the number of commercial farms growing pepper has increased in southern part of Lao PDR (14 hectare in champak province and 167 hectare in Sekong province).

Simexco Dak Lak, Vietnam located in Buon Ma Thuot city, Dak Lak province, is export company of agricultural products, particularly coffee and peppercorn. Leader of Simexco is very interested in SPS on peppercorn because most of peppercorn exported to EU and America. Simexco would like to participate in project to have chance transfer new knowledge on SPS of peppercorn for farmers.

Chuse Peppercorn Association, Vietnam support farmers groups who cultivate peppercorn and current work with thousands of farmers. It located in Chuse District, Gia Lai province with duty of helping farmers applying new techniques to cultivate peppercorn sustainably and selling their product.

Greencore Group plc is a leading international manufacturer of convenience foods. They supply chilled, frozen and ambient foods to the key retail and food service customers in the UK and US. Spices and herbs are an integral ingredient. Vietnam is a significant source of peppercorn via UK and European based suppliers. Ongoing concerns of pesticides residues on peppercorn from Vietnam have been identified as significant risk factors to their business and the whole industry. They are therefore keen to support an initiative that explores the opportunities to solve the industry challenges.

CAB International (CABI) is an inter-governmental, not-for-profit organisation established under an international treaty registered with the United Nations. The mission and direction is

influenced by 48 member countries from around the world, including Vietnam. CABI has a long history of supporting agriculture development with a mission to improve people's lives worldwide by providing information and applying scientific expertise to solve problems in agriculture and the environment. Its staff have a range of technical skills in value chains including facilitating market access, value chain analysis, SPS measures, ICM/IPM, extension, socio-economics, knowledge management and facilitating the adoption of GAP. CABI has been working closely with WASI and VPA to establish plant clinics to help peppercorn farmers improve plant health and has recently undertaken a value chain analysis to identify other opportunities for improving access to knowledge.

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.*

The FAO project on Capacity building and policy reform for pesticide risk reduction in Viet Nam (UNJP/VIE/041/UNJ) addressed the issue of indiscriminate use of chemical inputs, both fertilizer and pesticides that put agricultural production at risk. Activities in this project that will complement the proposed project include Integrated Pest Management (IPM) and Good Agricultural Practices (GAP) farmer training programmes in tandem with development of sustainable pest and pesticide management policies, to strengthen the regulatory framework to control the distribution and use of pesticides, and to enhance capacity for implementation of these policies and enforcement of pesticide legislation. The capacity of Division of Inspection and Division of Pesticide Management, the development of community level policies on Pesticide Risk Reduction and the lessons learnt from the farmer field schools that targeted vegetable, rice and fruit farmers, will be built on for the proposed project.

The FAO project: Food safety Information, Education and Communication (UNJP/VIE/043/UNJ) will provide a good foundation for learning in the proposed project as the curriculum developed and associated media and manuals on food safety control will be very relevant resource material. The project Capacity building for the food inspection system in Vietnam (OPFMAC) - ONE UN-2 project (UNJP/VIE/042/UNJ) is also relevant particularly the development of the subsidiary legal framework for the inspectional component of Vietnam's national food control system.

In addition to FAO interventions in food safety, the proposed project will also seek to build on lessons learnt from previous initiatives such as Nedspice's two year farmers partnership programme (2013) that began to help develop a sustainable peppercorn supply chain in the Binh Phuoc province in Vietnam. The project focussed on improving farmers practices to comply with the Rainforest Alliance (SAN) standard. Also in 2013, SDC funded an initiative called Spice of Life: Leveraging the spice sector for poverty reduction amongst ethnic minority communities in Vietnam. The project focused on cardamom, cinnamon and star anise as they were spices that were both cultivated and collected from the forest.

Plantwise is an initiative, led by CABI, to improve food security and the lives of the rural poor by reducing crop losses. Central to the Plantwise concept is the development of networks of plant health clinics as part of national plant health systems. These clinics aim to deliver appropriate, affordable and effective advice to smallholder farmers regarding any crop, and any plant health problem. There are currently 25 clinics and 88 trained plant doctors in Vietnam, and 30 clinics and 58 trained plant doctors in Cambodia. Recently, CABI has started working with the Vietnam Peppercorn Association, and other stakeholders, to establish a network of plant clinics specifically for the peppercorn industry.

The proposed PPG will map the supply chain to identify points of critical risk, enablers and opportunities for improvement, as the basis for the PG proposal. It is expected the full project will include: building capacity of stakeholders (producers, processors, traders, regulators) to adopt food safety management practices; improving farmer access to relevant production information; , creating a network to broker information exchange and learning throughout the supply chain; improving traceability and marketability by developing a traceability system based on existing models for similar commodities; promote branding of safer peppercorns and explore direct sourcing business opportunities. A sustainable pepper “information hub” will be established that will provide a forum for multi-country discussion.

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.*

Yes, this PPG has not yet been discussed directly with potential donors, but a concept note in response to an EC call under the SWITCH Asia program was recently submitted, but unfortunately unsuccessful. The evaluation report indicated that whilst the proposal scored high on meeting the needs of the target group and containing specific added-value elements, it was not considered to fit well with the objectives and priorities of the call.

The proposal will also enable WASI to look for funding from other development partners if a project grant cannot be secured from STDF.

6. *Briefly explain how cross-cutting issues (e.g. related to gender, the environment) are relevant for this PPG and, if appropriate, how they will be addressed.*

Men and women are equally involved in the production of peppercorn. According to the International Peppercorn Community source (<http://www.ipcnet.org/>), Vietnam has the highest Global Growth Generators Index among 11 major economies. However, the country still suffers from relatively high levels of income inequality, disparities in healthcare provision, and poor gender equality. This project will seek to examine the gender roles and provide solutions, where necessary, in the peppercorn supply chain from farm to market.

Currently there are no published studies on the impact of peppercorn on the environment, but with any crop that is intensively grown with a high use of pesticides the environmental and health risks are inevitable. The project will seek to address this by improving management of pesticide usage.

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.*

An international consultant will lead the PPG and local implementation (organisation of meetings etc) will be undertaken by WASI. STDF is requested to suggest suitable consultants.

Western Highlands Agriculture & Forestry Science Institute (WASI), a governmental scientific organization belonging to the Vietnamese Academy of Agricultural Sciences (VAAS), is responsible for research and technology transfer in the fields of agriculture, forestry, animal husbandry, biotechnology, protection of ecological environment for the development of agriculture and forestry in the Central Highlands. Research and transfer advanced technologies in agriculture, forestry and water resource to Central Highlands region as follows:

- Carry out research on breeding, selection, propagation of crops and livestock; plant protection; agronomy; agriculture & forestry systems; ecological environment protection; processing and storage of agriculture forestry products and foodstuffs for cattles to support for the agriculture forestry development of Central Highlands region
- Study on the uses and protection of land and water resources and small scale hydroelectricity.
- Research on marketing, processing and storage of agriculture and forestry products
- Assess and test fertilizers, fungicides and insecticides, new varieties; soil and water analysis; build up solutions for pest control such as IPM. Produce, commercialize products of research as well as other products for agricultural productions.
- Collaborate with local and international organizations on science research & technology transfer in the areas of agriculture, forestry and environment protection for the development of Central Highlands region

There will be three main activities under this PPG:

Activity 1: Feasibility study to determine the interrelationships within the supply chain between Vietnam, Cambodia and Lao PDR.

This study will build on from previous studies undertaken by WASI and will be led by the consultant. The consultant, WASI and VPA staff will visit key public and private sector stakeholders in the supply chain in the three countries to determine the interrelationships, pinch points and opportunities that will be addressed in the proposal. The consultant will then compile the information into a report to be presented at a 2 day write-shop (activity 2).

Activity 2: 2 day Write shop in Vietnam to plan project, including representatives from each country.

A two day write shop will bring together key representation from each country: the Competent Authorities (see Table), value chain actors, and other national and international partners including those listed in question 3. The writeshop will be facilitated by the consultant. Following a presentation of the findings from the feasibility study, key project priorities will be identified and a framework for the proposal will be drawn up.

Table. SPS Enquiry points and food safety and plant health competent authorities in the three countries

| | Cambodia | Lao PDR | Viet Nam |
|--------------------------------|--|---|--|
| SPS Enquiry Point | Ministry of Commerce (not notified to WTO) | Department of Planning Division of Agriculture and Forestry Ministry of Agriculture and Forestry | Director, Viet Nam SPS Office, Ministry of Agriculture and Rural Development (MARD) |
| Codex Contact Point | Deputy Director General of Cambodia Import Export Inspection and Fraud Repression Directorate General of Ministry of Commerce | Director General, Food and Drug Department, Ministry of Health | Viet Nam Food Administration (VFA), Ministry of Health. (Article 63 of the Food Safety Law assigns responsibilities for food safety in agriculture to MARD) |
| IPPC Official Contact Point | Deputy Director, Department of Plant Protection Sanitary and Phytosanitary, General Directorate of Agriculture (PPSPSD, GDA) | Director, Plant Protection Center, Department of Agriculture, Ministry of Agriculture and Forestry | Director General, Plant Protection Department (PPD), Ministry of Agriculture and Rural Development |

Activity 3: Drafting of proposal based on writeshop

The consultant, with input from WASI and other participants from the workshop will draft a proposal for consideration by STDF and other donors.

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.

| Activity | | Inputs required | Unit | Qty | Unit Cost (US\$) | Total Cost (US\$) |
|------------------------|--|---|--------|-----|------------------|-------------------|
| Activity 1 | Feasibility study to determine the interrelationships within the supply chain between Vietnam, Cambodia and Lao PDR | Consultant time | days | 10 | 600 | 6,000 |
| | | Travel consultant | ticket | 1 | 1200 | 1,200 |
| | | Local travel | unit | 3 | 480 | 1,440 |
| | | DSA (Consultant, WASI, VPA) | days | 14 | 230 | 2,300 |
| Total Activity1 | | | | | | 10,940 |
| Activity 2 | 2 day Write shop in Vietnam to plan project, including representatives from each country | Consultant time | days | 5 | 600 | 3,000 |
| | | Travel for consultant | ticket | 1 | 1200 | 1,200 |
| | | Travel international participants | ticket | 1 | 1200 | 1,200 |
| | | Travel regional participants | ticket | 7 | 250 | 1,750 |
| | | Local travel | unit | 1 | 230 | 230 |
| | | DSA for write shop participants | days | 26 | 230 | 5,980 |
| | | Venue, translations and general workshop expenses | days | 2 | 3,000 | 6,000 |
| | | Fees for 3 interpreters | days | 2 | 1,500 | 3,000 |
| Total Activity2 | | | | | | 22,360 |
| Activity 3 | Drafting of proposal based on writeshop | Consultant | days | 5 | 600 | 3,000 |
| Total Activity3 | | | | | | 2,400 |
| TOTAL COST | | | | | | 36,300 |

Greencore Group Ltd will cover the costs of one representative from their company to participate in the writeshop. They will also provide their staff time in-kind to contribute to the development of the proposal.

Appendices

Appendix 1: Letters of support from each of the organizations supporting this proposal.

See letters from:

- 1 Ministry of Agriculture and Rural Development - Vietnam
2. Vietnam Pepper Association - Vietnam
3. General Directorate of Agriculture (GDA) - Cambodia
4. Department of Agriculture (DOA) - Lao PDR
5. Simexco Dak Lak - Vietnam
6. Chuse Pepper Association _ Vietnam
7. Greencore Ltd - UK
8. CAB International