



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*. The completed application should be submitted through the [STDF online application system](#).

PPG Title	Assessing SPS risks in selected spices in Ghana.
Budget requested from STDF	\$48,950.00
Full name and contact details of the requesting organization(s)	Ghana Standards Authority P. O. Box MB245 Accra - Ghana Tel: (+233-302) 506991-5 / 500065/6
Full name and contact details of contact person for follow-up	Maame Efua Brameah Awuni maame.awuni@gsa.gov.gh Ruth Mma Alando Berrick ruth.alando@gsa.gov.gh

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?

Ghana's spice export industry faces challenges in meeting Sanitary and Phytosanitary (SPS) requirements, as shown by the 2015 chili export ban to the EU¹. Prioritizing food safety through safe crop production, phytosanitary compliance, and proper post-harvest

¹ Pullman, N. (2016). *EU extends ban on Ghana imports*. <https://www.fruitnet.com/fresh-produce-journal/eu-extends-ban-on-ghana-imports/170314.article>

management is crucial for success. While Ghana exports spices to neighbouring countries, most regional trades are informal, with limited data due to underreporting and weak enforcement of trade regulations at the border. Top destinations for Ghana's spices include Togo, Benin, Sierra Leone, the USA, Liberia, Burkina Faso, Côte d'Ivoire, the United Kingdom, Italy, and Nigeria according to the trend economy website.

The purpose of this Project Preparatory Grant (PPG) is to design a project proposal to combat SPS issues such as microbial, pesticides and mycotoxin contamination, in the production, post-harvest, processing and trading of chilli pepper and ginger, in Ghana by identifying and evaluating associated risks by using the FAO food safety capacity evaluation tools.

The preparatory grant will identify and address risks and SPS issues in the pepper and ginger value chain to develop a proposal to improve stakeholder adherence to related national, ISO and CODEX standards such as GS ISO 1003 : 2014 Spices and Condiments - Ginger, Whole, in Pieces, or Ground – Specification (ISO 1003:2008); GS ISO 927 :2015 Spices and Condiments - Determination of Extraneous Matter Content and Foreign Matter Content (ISO 927:2012); GS ISO 22000: 2018 Food safety management systems – Requirements for any organization in the food chain (ISO 22000:2018) and GS ISO/TS 22002-1 : 2010 Published by ISO in 2009 Prerequisite Programmes on Food Safety - Part 1: Food Manufacturing, etc. Interventions such as capacity building, technical assistance, and awareness raising will be tailored to address specific issues and stakeholder needs.

The final proposal for project grant (PG) will be presented to the STDF and other potential funders for consideration. The proposed project is expected to lead to improved value chain actor's adherence to standards and regulations, which will in turn lead to improved microbial safety and reduced negative impact of harmful substances in the Ghanaian spice industry and enhance market access for Ghanaian spices.

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 spice and condiment sub-sectors in Ghana have the potential to create job opportunities and diversify the country's agricultural exports beyond cocoa and cashew. However, there are key sanitary and phytosanitary (SPS) issues that need to be addressed for this potential to be realized. SPS requirements in the spice sector relate to food safety and quality, and include issues such as microbial safety, pesticide residues, and mycotoxin contamination.

SPS issues to be addressed.

Although there is potential for growth in the spice industry, the current situation appears to be less than optimal. According to data from Trend Economy, pepper exports have not experienced significant growth since 2011. (See Figure 1).

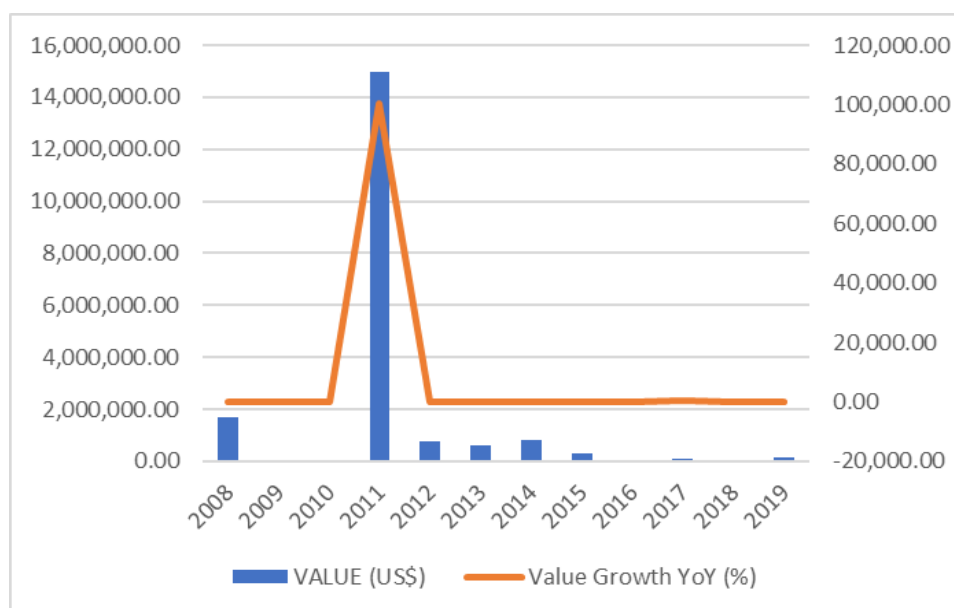


Figure 1 Export volumes of Pepper from 2008-2019

Source: Trend Economy (2022). Ghana | Imports and Exports | World | Pepper of the genus Piper | Value (US\$) and Value Growth, YoY (%) | 2008 - 2019 <https://trendeconomy.com/data/h2/Ghana/0904>

The Ghana Exports Promotion Authority (GEPA) classifies spices as Non-Traditional Export (NTE). Overall revenue from spice exportation has seen a decline in 2021 compared to 2020 according to GEPA's 2021 analysis of non-traditional exports see Table 1.

Table 1 Spices exports from Jan 2020- Dec 2021.

Product: Spices	Weight: Kgs		Value: US \$		Value: GH¢	
	2020	2021	2020	2021	2020	2021
Spices	1,053,897	508,697	1,088,626	667,973	6,325,309	3,870,254
Dried pepper	391,131	177,757	161,795	245,220	923,179	1,416,803
Ginger	85,182	54,600	40,195	28,114	228,024	163,033
Cloves	965	2,191	486	1,953	2,750	11,329
Vanilla	2,000	259	1,635	1,308	9,343	7,669
Turmeric	164	9,314	181	832	1,032	4,804
Nutmeg	365	240	26	98	148	573
Cinnamon	10	28	2	13	11	78
TOTAL	1,533,714	753,086	1,292,946	945,511	7,489,796	5,474,543

Source: Excerpt from Ghana: Non-traditional Exports by Product. (GEPA (2022). NTE Annual Report 2021: Analysis of 2021 non-traditional export statistics. <https://www.gepaghana.org/export-statistic/n-te-annual-report-2021-full>)

African countries have preferential market access to the European Union (EU), but they must meet all Sanitary and Phytosanitary Regulations. However, spices exported from Ghana often fail to meet these requirements, leading to rejections by the EU. In 2020 and 2021, Ghana received alert notifications from the EU through the Rapid Alert System for Food and Feed (RASFF) on pepper consignments that were rejected due to high levels of

aflatoxin, Salmonella contamination, and unauthorized colour^{2,3,4}. A recent study conducted in December 2022 by the GSA mycotoxin and histamine laboratory revealed significant aflatoxin and ochratoxin A contamination in whole dried chilli, dried ground chilli, and dried ground ginger from 23 different markets covering 12 regions in Ghana

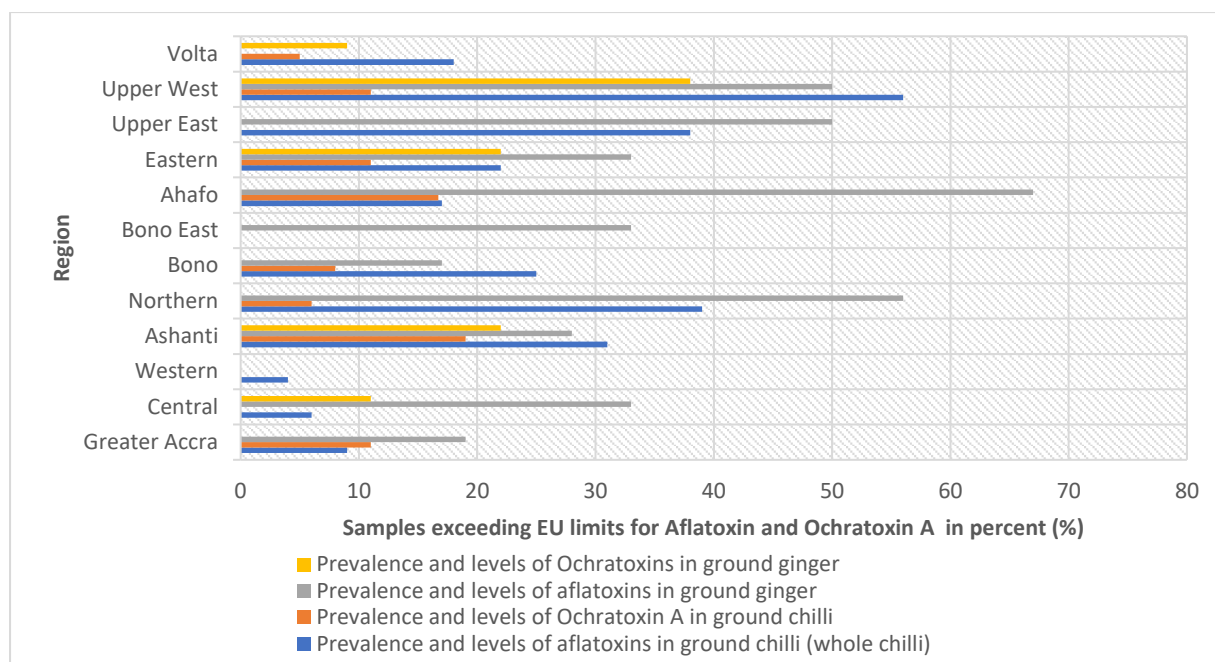


Figure 2.2 Graph of Percent of samples exceeding the EU regulation (EC) no 1881/2006 for Total Aflatoxin with limit of 10 µg/kg; n (%) and regulation (EC) no 1881/2006 for OTA with limit of 15 µg/kg; n (%). See Appendix 3 for detailed results.

KEY SPS ISSUES

Identifying SPS issues that affect market access is a crucial first step in controlling the hazards connected to the export of food and agricultural goods internationally. Previous studies have identified several challenges facing farmers face various challenges such as pests and diseases, seasonal production, lack of irrigation, accessing credit, misuse of pesticides, price fluctuations, contamination, mold growth, inconsistent moisture levels, poor quality, etc. These challenges reduce productivity and profitability.⁵ A risk assessment is necessary to make sure that the right risk management measures are implemented to address these issues in a way that is scientifically sound and efficient. This will allow stakeholders to understand the likelihood and severity of potential risks and develop management strategies that are proportionate to the level of risk.

² RASFF Window (2020). Notification 2020.1233 Excessive Aflatoxins. <https://webgate.ec.europa.eu/rasff-window/screen/notification/424836>

³ RASFF Window (2021). NOTIFICATION 2021.0356 Salmonella spp. in melegueta pepper from Ghana. <https://webgate.ec.europa.eu/rasff-window/screen/notification/462246>

⁴ RASFF Window (2021). NOTIFICATION 2021.4526 Unauthorized colour Orange II in chili pepper (powder) from Ghana with destination Germany. <https://webgate.ec.europa.eu/rasff-window/screen/notification/497880>

⁵ Teye, N. K. (2018). Production and Marketing prospects of Chili pepper in the Upper Manya District, Ghana [Master thesis, University for Development Studies]. <http://udsspace.uds.edu.gh/bitstream/123456789/2171/1/PRODUCTION%20AND%20MARKETING%20PROSPECTS%20OF%20CHILLI%20PEPPER%20IN%20THE%20UPPER%20MANYA%20DISTRICT%2C%20GHANA.pdf>

Opportunities

The PPG will give the opportunity to identify the associated risks and SPS issues in the pepper and ginger value chain relating to regulations, compliance, infrastructure, capacity building, awareness raising, trade facilitation and technical assistance in an effective and efficient manner. To do this, the FAO/WHO food safety assessment capacity tool will be employed to ensure that SPS issues identified are based on sound scientific evidence and are consistent with international standards.

In the context of the spice and condiments sub-sector in Ghana, using the appropriate food safety capacity evaluation tools will help in identifying SPS-related constraints that are impeding market access for Ghanaian producers. As these evaluations will assess the country's current capacity to meet microbial safety, pesticides residue and mycotoxin requirements and make recommendations for improvement. It would also recommend actions to address these constraints and take advantage of opportunities. These actions are important for the development of the spice and condiments sub-sector in Ghana as they can help to increase market access and improve the ability of Ghanaian producers to sell their products at a premium price, which can lead to increased income and improved living standards for farmers and other workers in the industry.

Overall, addressing SPS issues through a prioritized action plan and increasing market access can help to increase income for farmers and other industry workers, create more job opportunities, and promote inclusive economic growth and poverty reduction.

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.

Preliminary engagement and consultations have been held with the following key stakeholders, who are supportive of the proposed project. The proposal has received elicited inputs, suggestions and feedback from all organizations listed below.

Government Agencies:

- The Plant Protection and Regulatory Services Directorate (PPRSD) of the Ministry of Food and Agriculture (MoFA)
- Ghana Export Promotion Authority (GEPA)

Academia:

- Council for Scientific and Industrial Research -Food Research Institute (CSIR-FRI)
- University of Ghana (UG)
- Kwame Nkrumah University of Science and Technology (KNUST)

Private Sector:

- Farmers Organization Network of Ghana (FONG)
- Ecumenical Association for sustainable Agricultural and Rural Development (ECASARD)
- Food Chain Bureau

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 Ghana Standards Authority (GSA) being a National Standards Body is the statutory body with the overall responsibility for the country's quality infrastructure embracing Standards, Metrology and Conformity Assessment (Inspection, Product Testing and Certification) in Ghana. It is one of the six (6) Agencies under the Ministry of Trade and Industry (MOTI). GSA's operations are aimed at protecting consumers and facilitating trade.

This PPG will complement the authority's activities as it can provide additional funding for the GSA to continue and expand its existing activities. This can include providing resources for the GSA to conduct more SPS-related capacity evaluations, or to implement recommendations from previous evaluations. It can also support the GSA in developing new initiatives and activities to address SPS issues and increase market access. This can include funding for the GSA to conduct research on new technologies or best practices, or to develop new programs or partnerships to promote the development of the spice and condiments sub-sector in Ghana.

Overall, the PPG will build on the work of the GSA by providing additional resources, technical support and new initiatives to support the Ghana Standards Authority in addressing SPS issues and increasing market access of the spice and condiments sub-sector in Ghana. The GSA has undertaken the following previous and ongoing donor-funded initiatives:

	Project	Donor
1	<p><u>Trade Capacity Building Project (UNIDO)</u></p> <p>The main object of the project is to strengthen the capacity of conformity assessment institutions in Ghana to comply with international quality standards by ensuring that goods and services emanating from or traded in Ghana are designed, manufactured and supplied in a sustainable manner that match the needs, expectations and requirements of regulatory authorities and consumers.</p>	Swiss Confederation through the State Secretariat for Economic Affairs (SECO)
2	<p><u>PTB Project Enhancement of Quality Infrastructure Services for Innovation in Agriculture and Food Sector</u></p> <p>This project is to enhance agricultural exports by promoting Quality Assurance of Agricultural Products through Metrological and Testing services. Its objective is to ensure that services of Metrology and Testing Laboratories will enjoy international recognition through accreditation.</p>	Physikalisch-Technische Bundessanstalt (PTB)
3	<p><u>National Aflatoxin Sensitization and Management Project</u></p>	Bill & Melinda Gates Foundation, the Rockerfeller Foundation,

	To sensitize the stakeholders and the public on Aflatoxins and its management. In recent times there has been a knowledge gap with respect to aflatoxin management in Ghana. This results in farmers as well as value chain actors producing products with high levels of aflatoxins. This hinders trade since such products do not conform to international standards and therefore are not marketable internationally.	USAID and UKAID through Alliance for a Green Revolution in Africa (AGRA)
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The PPG will focus on identifying the needs and priorities of the spice industry in Ghana and developing a proposal for a project that addresses those needs. While the other projects focus on specific issues related to quality assurance, conformity assessment, and aflatoxin management, the PPG may take a broader approach to address multiple issues related to trade capacity building in Ghana. It will focus on identifying and addressing various barriers to trade, such as infrastructure gaps, regulatory issues, and market access challenges, and developing a comprehensive strategy to address those issues.

Finally, the PPG will involve collaboration with multiple stakeholders, including government agencies, private sector organizations, and international development partners, to ensure that the proposed project is aligned with national priorities and has broad support from key stakeholders. The PPG will also focus on identifying potential sources of funding for the proposed project and developing a sustainability plan to ensure the long-term impact of the project.

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.

GSA has not discussed yet any other source of funding for the said proposal. The intention is to request under the PPG formal assistance in drafting a full project proposal and request the said proposal funding from Project Preparatory Grant of STDF. The GSA wishes to request assistance from STDF in identifying other funding institutions where we could request financial support should the funding from STDF under PPG not go through.

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

The size of Ghana’s labor force involved in Agriculture is 52% with 39% of that labor force being women and contributing to about 60% of Agriculture growth in Ghana. The size and contributions of agriculture in Ghana is profound and accounts for 54% to the country’s GDP and 40% of export earnings. However, female farmers typically have lower output per unit of land and are much less likely to be active in commercial farming than their male counterparts because of differences in land productivity and participation between

male and female farmers because of gender differences in access to inputs, resources, and services.⁶

The agriculture sector especially the spice value chain already faces several challenges including inadequate input supply/ production, research development, transport and marketing as well as Environmental, Social and Governance (ESG) structures, which leads to poor internal controls, and performance of the entire spice value chain. Adding the several challenges women face with gender biases and discrimination, gender-based violence etc. The need to fully incorporate ESG in this project and future operations is critical in sustaining the value chain and accessing global markets.

We shall be adopting the best practices of ESG using the IFC Performance standards and Environmental and Social Risk Assessment (ESRA). This framework categorizes the value chain of spices as either categories B or Categories C. Both gender and environmental issues will be addressed by using the gender and environmental and social risk assessment tool with the help of an ESG consultant.

Table 2 Environmental and Social Risk Assessment Framework

Categorization	Definition
Category A/ High Risk	A project that has the potential to have significant adverse environmental and/or social impacts. These impacts may affect an area broader than the project scope. A project that falls within this high risk/Category A cannot proceed.
Category B/Medium Risk	A project that has potential adverse environmental and social impacts are not very significant and / or few. Typically, these impacts are site-specific, few if any of them are irreversible, and they could be readily addressed by mitigation measures.
Category C/Low Risk	A project that is likely to have negligible or no adverse environmental and social impacts.

Source: Categorization definitions are aligned with IFC ESMS [Environmental and Social Categorization \(ifc.org\)](https://www.ifc.org/~/media/Environmental-and-Social-Categorization)

Details on Assessment

For Low-risk projects, we will use the light E&S assessment tool to assess the gender risks and opportunities of the project. In addition to the tool, a desk review (review of company documents provided, and online research on the business name and owner/entrepreneur’s name) would be conducted.

For Medium risk, use the full assessment tool which provides a more detailed review of the project operations, gender, and E&S contextual risk such as site-specific issues, legacy

⁶ Croppenstedt, A., Goldstein, M., & Rosas, N. (2013, February) *Gender and Agriculture Inefficiencies, Segregation, and Low Productivity Traps* (WPS6370)
<https://documents1.worldbank.org/curated/en/957311468161359832/pdf/wps6370.pdf>

issues etc., as well company specific risk. At this stage, compliance with local and national laws and regulations on environmental and social issues is also reviewed.

The full assessment stage should involve both a desk review (review of company documents provided, and online research on the business name and owner/entrepreneur's name), and projects that received an exception to proceed. See Appendix 4 for assessment tool template.

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.

We will be seeking the support and guidance of a consultant to run the project effectively. It is proposed to have a consultant who has the skills and knowledge to develop and elaborate a project report, the selected consultant is the Chairman of National Codex sub-committee on Spices in Ghana. Under the guidance of this consultant, the project team will work to implement and supervise the project in various locations. The current proposal is for the Project Preparation Grant.

See appendix 2 for a brief biographical sketch and a full curriculum vitae of proposed consultant.

In addition, we have reached out to the Food and Agriculture Organisation (FAO) through their Ghana Country Office to provide training on the FAO/WHO food assessment capacity tool and awaiting a formal communication from their head office.

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.).



Assessing SPS risks in selected Spices in Ghana								
ACTIVITIES	Action	Specifications	Unit	Unit cost (US\$)	Number	Cost (US\$)	STDF (US\$)	In-kind(US\$)
Objective 1: Assessing SPS risks in selected spices in Ghana using the FAO/WHO Food safety capacity evaluation tool								
Activity 1.1.: Inception Workshop	Conference package (refreshment and stationary)	15 participants*2days*US\$40	Workshop	1,200.00	1	1,200.00	1,200.00	-
	Rental of Conference Hall	2days*US\$260	Workshop	520.00	1	520.00	520.00	-
	Local Travel & DSA	15 participants*2days*US\$45	Workshop	1,350.00	1	1,350.00	1,350.00	-
	Secretarial support (in-kind contribution, communication & admin support)	4Days*US\$100.00	Day	400.00	1	400.00	-	400.00
	Sub- Total						3,470.00	3,070.00
Activity 1.2.: Data Collection, Sampling & Analysis	Purchase of Chilli and ginger samples (whole and ground) +sample bags	1kg*100samples*US\$11	Sample/1Kg	11.00	100	1,100.00	1,100.00	-
	Cost for Data collection/survey/interviews	8 field facilitators*15days*US\$5	Day	40.00	10	400.00	400.00	-
	Cost of Testing (Aflatoxin, Ochtratoxin & Microbiology) for baseline analysis and samples from processing sites	110 samples*US\$110	Analysis/sample	110.00	110	12,100.00	12,100.00	-
	Local Travel (Fuel, Transport Fares) /DSA for field personnel	8 field personnel *10 days*(US\$45 DSA + US\$20 Travel)	Day	520.00	10	5,200.00	5,200.00	-
	Secretarial support (in kind contribution, communication & admin support)	23 days*US\$100.00	Day	100.00	23	2,300.00	-	2,300.00
	Technical support (analysis, inkind contribution)	6technicians* 64 hours *US\$2	Hour	2.00	384	768.00	-	768.00
	Consultant Fee	10 days *US\$150	Day	150.00	10	1,500.00	1,500.00	-
Sub- Total						23,368.00	20,300.00	3,068.00
Objective 2: Proposal Development								
Activity 2.1.: Meetings (draft proposal, Focus group discussions)	Refreshment and Stationary	15 participants*1 day*US\$20	Day	300.00	4	1,200.00	1,200.00	-
	Rental of Conference Hall	1day*US\$200	Day	200.00	4	800.00	-	800.00
	Local Travel (DSA)	15 participants*1 day*US\$30	Day	450.00	4	1,800.00	1,800.00	-
	Consultant fee	1day*US\$150	Day	150.00	4	600.00	600.00	-
	Secretarial support (in-kind contribution, communication & admin support)	1 days*US\$100.00	Day	100.00	4	400.00	-	400.00
Sub- Total						4,800.00	3,600.00	1,200.00
Activity 2.2.: Workshops (Stakeholder consultation workshop, finalisation of proposal)	Conference package (refreshment, accomodation and stationary)	15 participants*2days*US\$40	Workshop	1,200.00	2	2,400.00	2,400.00	-
	Rental of Conference Hall	2days*US\$260	Workshop	520.00	2	1,040.00	1,040.00	-
	Local Travel /DSA(includes hotel accomodation fee)	15 participants*2days*US\$200	Workshop	8,000.00	2	16,000.00	16,000.00	-
	Consultant fee	4days*US\$150	Day	150.00	4	600.00	600.00	-
	Secretarial support (in-kind contribution, communication & admin support)	4Days*US\$100.00	Day	100.00	4	400.00	-	400.00
Sub- Total						20,440.00	20,040.00	400.00
TOTAL						52,078.00	47,010.00	5,068.00
OVERHEAD COST (5%)						2,603.90	2,350.50	253.40
GRAND TOTAL						54,681.90	49,360.50	5,321.40

Appendices**Appendix 1:** Letters of support from each of the organizations supporting this proposal.**MINISTRY
OF
FOOD AND
AGRICULTURE**

P.O.Box M37, Accra

Digital Address: GA-110-2082

Kindly quote this number and date on all correspondence

My Ref. No. PPRS/HR/SS/01/103

Your Ref. No. _____

Date: 24th November, 2022

THE SECRETARIAT
STANDARDS AND TRADE DEVELOPMENT FACILITY (STDF)
WORLD TRADE ORGANISATION
CENTRE WILLIAM RAPPARD
RUE DE LAUSANNE 154
CH-1211 GENEVA
SWITZERLAND

LETTER OF SUPPORT

The Plant Protection and Regulatory Services Directorate (PPRSD) of the Ministry of Food and Agriculture (MoFA) gives its full support to the Ghana Standards Authority on the project, **Improving Market Access** through evaluating the Microbial safety status of selected spices in Ghana.

PPRSD is mandated to organize, regulate, implement and coordinate the plant protection services needed for the country in support of sustaining the growth and development of Agriculture in Ghana.

We would cooperate with the Ghana Standards Authority to see that this project is successfully developed and implemented. We believe that the successful implementation will go a long way to support actors along the spice value chain and increase capacity in Sanitary and Phytosanitary related conditions.

Thank you

Eric Bentsil Quaye (Mr.)
Director (Acting)

Plant Protection and Regulatory Services Directorate
For: Hon. Minister, Ministry of Food & Agriculture

Cc:
The Chief Director
MoFA, Accra

Our Ref. GEPA/OF/379/390

23rd November 2022

The Secretariat
Standards and Trade Development Facility (STDF)
World Trade Organisation
Centre William Rappard
Rue de Lausanne 154
CH-1211 Geneva
Switzerland

LETTER OF SUPPORT

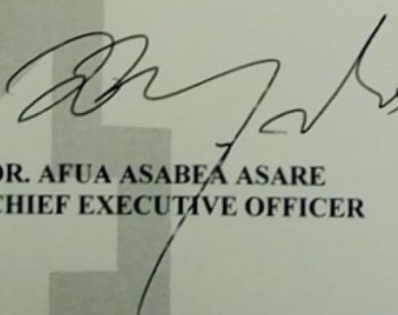
Ghana Export Promotion Authority (GEPA) gives its full support to the Ghana Standards Authority on the project, improving market access through evaluating the microbial safety status of selected spices in Ghana.

GEPA is the national Trade Promotion Institution under the Ministry of Trade and Industry mandated to facilitate, develop, and promote non-traditional export products from Ghana to the rest of the world.

We would cooperate with the Ghana Standards Authority to see that this project is successfully developed and implemented. We believe that the successful implementation will go a long way to support actors along the spice value chain to increase capacity in Sanitary and phytosanitary related conditions.

Thank you.

Yours faithfully,


DR. AFUA ASABEA ASARE
CHIEF EXECUTIVE OFFICER



Council for Scientific and Industrial Research Food Research Institute

Bankers: Ghana Commercial Bank
Telephone: 233-302-519091-5
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E-mail: director@foodresearchgh.org
Website: www.foodresearchgh.org

P.O.Box M20
Accra, Ghana

ALL COMMUNICATIONS SHOULD BE
ADDRESSED TO THE DIRECTOR

Our Ref: CSIR/FRI/RM/2.2/N.6/24.....

Date: 8th FEBRUARY, 2023.....

The Secretariat,
Standards and Trade Development Facility (STDF),
World Trade Organisation,
Centre William Rappard,
Rue de Lausanne 154,
CH-1211 Geneva,
Switzerland.

Dear STDF Team,

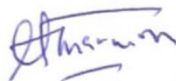
Support for the Project Preparation Grant Being Requested by the Ghana Standards Authority

The Food Research Institute of Council for Scientific and Industrial Research (CSIR-FRI) pledges its support for the Standards and Trade Development Facility (STDF) Project Preparation Grant being requested by the Ghana Standards Authority.

The CSIR - Food Research Institute is mandated to conduct market-oriented applied research into problems of food processing, preservation, marketing and utilization in support of the Ghanaian food industry and advice government on its food policy. Hence it recognizes the importance of enhancing market access through assessing SPS risks along the spice value chain in Ghana.

We therefore support this request that is seeking funding to work with stakeholders to prioritize aflatoxin activities and develop project proposals for funding.

Your faithfully,


f PROF. CHARLES TORTOE
DIRECTOR



UNIVERSITY OF GHANA

OFFICE OF RESEARCH INNOVATION AND DEVELOPMENT (ORID)

P. O. Box LG 571, Legon, Accra-Ghana

UG-ORID/LoS-479/2-23

My Ref. No.:

February 20, 2023

The Secretariat
The Standards and Trade Development Facility (STDF)
World Trade Organization
Centre William Rappard
Rue de Lausanne 154
CH-1211 Geneva
Switzerland

Dear Sir/ Madam,

LETTER OF SUPPORT

The University of Ghana is pleased to confirm its support for the project proposal titled: **“Improving Market Access through Evaluating the Microbial Safety Status of Selected Spices in Ghana”** led by the Ghana Standards Authority in collaboration with the University of Ghana. The University of Ghana is represented on this project by Professor Firibu Kwesi Saalia, a Professor at the Department of Food Processing Engineering at the School of Engineering Sciences, College of Basic and Applied Sciences.

Professor Saalia is the first and current occupant of the OR Tambo Research Chair in Food Science and Technology in recognition of his pioneering work in food safety and quality. The appointment is one of 10 Research Chairs appointed by South Africa’s National Research Foundation (NRF) across Africa. His research interests include food processing (thermal and non-thermal), chemical and physical properties of foods, food chemistry and toxicology and food nutraceuticals. Prof. Saalia has collaborations with the food industry at the local and international levels and has over a hundred publications to his credit.

The main objective of the proposed project is to assess and address stakeholder non-adherence to standards and the regulatory framework to combat Sanitary and Phytosanitary (SPS) issues such as microbial safety and the negative impact of other harmful substances in the production, post-harvest, processing and trading of Ghanaian spices.

The University of Ghana is committed to enhancing and promoting teaching and research activities among its faculty and will ensure that Prof. Saalia and his team have access to the necessary academic and scientific resources as well as the requisite logistical and institutional support to ensure the success of this project.

I confirm that the University’s Research Office i.e., the Office of Research, Innovation, and Development (ORID) has a good track record in excellent administration and management of grants of various levels from both foreign and local partners.

Our mission is to promote, coordinate and facilitate research activities in the university,
and also lead the development of the university’s strategic plans, including business plans and fund-raising strategies

Tel.: + 233 303930436 /+ 233 302 213850 ext. 2712/2713 | Fax: + 233 302 522860 | Email: orid@ug.edu.gh | Website: <http://orid.ug.edu.gh>
(Location: Ground Floor-LECIAD Building)

The University of Ghana is confident that the efforts outlined in the proposal are aligned with the vision of its research enterprise and will contribute to the promotion of ongoing research in the subject area.

Sincerely,

A handwritten signature in black ink, consisting of the initials 'FAA' followed by a long, sweeping horizontal line that ends in a sharp upward-pointing stroke.

Professor Felix Ankomah Asante
Pro Vice-Chancellor (Research, Innovation and Development)



Kwame Nkrumah
University of Science
and Technology, Kumasi

OFFICE OF THE VICE-CHANCELLOR

OFFICE OF GRANTS & RESEARCH

OGR/23/LoS/Vol.3

23rd January 2023

The Secretariat
Standards and Trade Development Facility (STDF)
World Trade Organization
Centre William Rappard
Rue de Lausanne 154
CH-1211 Geneva
Switzerland

Dear Sir/Madam

**LETTER OF SUPPORT: IMPROVING MARKET ACCESS THROUGH
CONTROLLING SPS RISKS IN MICROBIAL SAFETY AND OTHER HARMFUL
SUBSTANCES IN SPICES IN GHANA**

The Kwame Nkrumah University of Science and Technology (KNUST) confirms its support for the above proposal submitted to the Standards and Trade Development Facility (STDF). The Department of Agricultural and Biosystems Engineering, in the College of Engineering, KNUST will be partnering with the Ghana Standards Authority (GSA) to implement the proposed project.

KNUST has a mission of advancing science and technology through the development of research, teaching and community engagement in improving the quality of life of Ghanaians and Africa as a whole. The University prides itself in providing a quality research environment while pursuing a culture of excellence. The proposed project, which aims to assess stakeholder adherence to standards and the regulatory framework for microbial safety and other harmful substances in spices in Ghana, aligns well with the mission of KNUST.

The project supports the innovative use of science for the national socio-economic development as it will help mitigate the rejection of Ghanaian spices due to Sanitary and Phytosanitary (SPS)-related non-compliances.

The Management of the University is confident in the experience and capabilities of the project team to successfully execute the project. The needed support with regards to office space, internet infrastructure and human resources will be accorded them.

On this basis and with the anticipated benefits of this project to the partner institutions and the researchers involved, KNUST renders its full support to this application.

Yours faithfully,

Prof. Philip Antwi-Agyei
Director



FARMERS ORGANIZATION NETWORK IN GHANA.
c/o P. O. Box DK 216, Darkuman, Accra.
Tel # +233 24 546 1304 E-mail: farmersorganisation@yahoo.com

Bank: Agricultural Development Bank.
AC/NUMBER: 1051010079230801
AC/NAME: Fong Farmers Organization Network
BRANCH: Kaneshie

Office Location: New Life Junction
Pokuase – Mayera Road, Accra

REF #2022/11/ - 01 FONG/SE/023

Wednesday, 30 November 2022

To:

The Secretariat
Standards and Trade Development Facility (STDF)
World Trade Organisation
Centre William Rappard
Rue de Lausanne 154
CH-1211 Geneva
Switzerland

Dear Sir/Madam,

LETTER OF SUPPORT

I am pleased to be writing a letter in support of the proposal for the project preparation grant being submitted to your esteemed establishment by the Ghana Standards Authority. We strongly support this grant application and the focus on improving market access through evaluating the microbial safety status of selected spices in Ghana.

As a farmer group, Farmers Organization Network in Ghana-FONG, our mission is to *enable the formation of a network of small-scale farmers and fishers based organisations in Ghana to empower individuals and members in order to contribute to agriculture development, economic growth and sustainable use of natural resources.*

We would cooperate with the Ghana Standards Authority to see that this project is successfully developed and implemented. We believe that the successful implementation will go a long way to support our members who are mostly a network of farmer based organisations made up of small and medium scale farmers, aggregators, processors and marketers of agricultural produce in Ghana and other actors along the spice value chain, increase capacity in Sanitary and phytosanitary related conditions.

Sincerely,



Nathaniel Sulemana (National Coordinator)



**ECUMENICAL ASSOCIATION FOR SUSTAINABLE
AGRICULTURE AND RURAL DEVELOPMENT**

P. O. Box 519, Madina - Accra, Tel: 233-243 86 35 67

Email: info.ecasard@gmail.com

Bank: Standard Chartered Bank, Madina

Ref: EC/SE/DE/01/22

Thursday, 01 December 2022

**THE SECRETARIAT
STANDARDS AND TRADE DEVELOPMENT FACILITY (STDF)
WORLD TRADE ORGANISATION
CENTRE WILLIAM RAPPARD
RUE DE LAUSANNE 154
CH-1211 GENEVA
SWITZERLAND**

Dear Sir/Madam,

LETTER OF SUPPORT

I am pleased to be writing a letter in support of the proposal for the project preparation grant being submitted to your esteemed establishment by the Ghana Standards Authority. We strongly support this grant application and the focus on improving market access through evaluating the microbial safety status of selected spices in Ghana.

As a farmer group, The Ecumenical Association for Sustainable Agriculture and Rural Development (ECASARD) mission is to reinforce and enhance the efforts of its member organizations in Sustainable Agriculture and Rural Development (SARD) activities through gender sensitive networking, capacity building and advocacy in collaboration with other stakeholders.

We would cooperate with the Ghana Standards Authority to see that this project is successfully developed and implemented. We believe that the successful implementation will go a long way to support us producers and other actors along the spice value chain increase capacity in Sanitary and phytosanitary related conditions.

Thank you.

Yours Sincerely,

Dr. King-David Amoah.
Executive Director, ECASARD



Food Chain Bureau

(We advocate food safety and promote local food)



The Secretariat
Standards and Trade Development Facility (STDF)
World Trade Organisation
Centre William Rappard
Rue de Lausanne 154
CH-1211 Geneva
Switzerland

LETTER OF SUPPORT

I am pleased to be writing a letter in support of the proposal for the project preparation grant being submitted to your esteemed establishment by the Ghana Standards Authority. We strongly support this grant application and the focus on improving market access through evaluating the microbial safety status of selected spices in Ghana.

As a Non-governmental organization whose mission is to Advocate and Promote food safety, food quality, a healthier lifestyle concerning what we take in as food through all forms of education leading to limiting or avoiding food poisonings.

We would cooperate with the Ghana Standards Authority to see that this project is successfully developed and implemented. We believe that the successful implementation will go a long way to support actors along the spice value chain increase capacity in Sanitary and phytosanitary related conditions.

Thank you for your attention and hope to have a positive feedback from you.

Yours Sincerely

Nana M. Akosah
Executive Director
Food Chain Bureau

**Bless Street, Fise Accra Near Meri Crescent School
P.O. Box KN 1330 Kaneshie, Accra.
+233 (0) 244 045 275/ 026 707 1075
foodadvocacy@yahoo.com**

Appendix 3: Results from study by the Mycotoxin and Histamine Laboratory at the GSA

Table 1: Prevalence and levels of **aflatoxins** in Ground Chilli (Whole Chilli)

Region	Number (N) of samples	Positive samples N (%)	Range of positive samples (µg/kg)	Median (µg/kg)	Percent of samples exceeding the Codex proposed maximum limit of 20 µg/kg; n (%)	Percent of samples exceeding the EU regulation (EC) no 1881/2006 for B1 with limit of 5 µg/kg; n (%)	Percent of samples exceeding the EU regulation (EC) no 1881/2006 for Total with limit of 10 µg/kg; n (%)
GAR	42	33	0.42 - 51.83	4.05	4 (11%)	13 (31%)	8 (9%)
CER	18	12	0.59 - 46.15	1.04	1 (6%)	4 (22%)	1 (6%)
WER	24	13	0.30 - 11.49	1.86	0 (0%)	3 (13%)	1 (4%)
ASR	36	29	0.38 - 158.93	8.33	6 (17%)	16 (44%)	11 (31%)
NOR	18	15	0.67 - 71.89	9.46	2 (11%)	11 (61%)	7 (39%)
BOR	12	12	1.26 - 39.51	3.47	1 (8%)	3 (25%)	3 (25%)
BER	6	6	1.27 - 5.02	2.12	0 (0%)	0 (0%)	0(0%)
AHR	6	6	1.30 - 10.02	3.34	0 (0%)	2 (33%)	1 (17%)
EAR	18	18	0.42 - 21.09	2.78	1 (16.7%)	6 (33%)	4 (22%)
UER	24	21	0.23 - 31.88	5.83	2 (8%)	9 (38%)	9 (38%)
UWR	18	18	0.58 -104.38	24.64	10 (56%)	10 (56%)	10 (56%)
VOR	22	21	0.31 - 17.28	4.48	0 (0%)	5 (23%)	4 (18%)
TOTAL	244	203	0.30 - 158.93	3.86	27 (11%)	82 (34%)	59 (24%)

Table 2: Prevalence and levels of **Ochratoxin A** in Ground Chili (Whole Chili)

Region	Number (N) of samples	Positive samples N (%)	Range of positive samples (µg/kg)	Median (µg/kg)	Percent of samples exceeding the Codex proposed maximum limit of 20 µg/kg; n (%)	Percent of samples exceeding the EU regulation (EC) no 1881/2006 for OTA with limit of 20 µg/kg; n (%)
GAR	42	24	0.26 – 110.30	2.20	4 (11%)	4 (11%)
CER	18	9	0.34 – 2.49	1.38	0 (0%)	0 (0%)
WER	24	15	0.49 – 5.11	1.06	0 (0%)	0 (0%)
ASR	36	29	0.23 – 114.77	5.53	7 (19%)	7 (19%)
NOR	18	9	0.44 – 24.42	0.62	1 (6%)	1 (6%)
BOR	12	12	1.07 – 63.26	7.5	1 (8%)	1 (8%)
BER	6	6	1.03 – 8.13	4.58	0 (0%)	0 (0%)
AHR	6	6	0.3 - 49.92	5.38	1 (16.7%)	1 (16.7%)
EAR	18	14	0.37-39.58	1.46	2 (11%)	2 (11%)
UER	24	10	0.30 – 2.43	1.08	0 (0%)	0 (0%)
UWR	18	15	0.26 – 144.54	1.23	2 (11%)	2 (11%)
VOR	22	17	0.26 – 138.53	2.01	1 (5%)	1 (5%)
TOTAL	244	166	0.23 – 144.54	1.41	19 (8%)	19 (8%)

Table 3: Prevalence and levels of **aflatoxins** in Ground Ginger

Region	Number (N) of samples	Positive samples N (%)	Range of positive samples (µg/kg)	Median (µg/kg)	Percent of samples exceeding the Codex proposed maximum limit of 20 µg/kg; n (%)	Percent of samples exceeding the EU regulation (EC) no 1881/2006 for B1 with limit of 5 µg/kg; n (%)	Percent of samples exceeding the EU regulation (EC) no 1881/2006 for Total with limit of 10 µg/kg; n (%)
GAR	21	20	0.57 – 30.53	2.74	1 (6%)	4 (19%)	4 (19%)
CER	9	8	0.52 -168.33	1.47	2 (22%)	2 (22%)	3 (33%)
WER	9	8	0.45 – 5.13	1.27	0 (0%)	0 (0%)	0 (0%)
ASR	18	15	0.29 – 19.05	5.43	0 (0%)	5 (28%)	5 (28%)
NOR	9	9	3.52 – 17.64	12.99	0 (0%)	4 (44%)	5 (56%)
BOR	6	6	1.81 – 45.09	3.86	1 (16.7%)	1 (17%)	1 (17%)
BER	3	3	2.8 – 72.12	6.47	1 (33.3%)	1 (33%)	1 (33%)
AHR	3	3	6.01 – 72.46	32.37	2 (66.6%)	2 (67%)	2 (67%)
EAR	9	9	0.68 – 79.01	5.07	3 (33%)	3 (33%)	4 (33%)
UER	12	12	5.41 – 30.33	9.99	1 (3%)	7 (8%)	6 (50%)
UWR	8	8	1.08 -64.79	9.02	1 (13%)	5 (12%)	4 (50%)
VOR	11	11	1.68 – 6.95	4.48	0 (0%)	1 (9%)	0 (0%)
TOTAL	118	112	0.29 – 168.33	5.04	11 (9%)	35 (30%)	35 (30%)

Table 4: Prevalence and levels of **Ochratoxin A** in Ground Ginger

Region	Number (N) of samples	Positive samples N (%)	Range of positive samples (µg/kg)	Median (µg/kg)	Percent of samples exceeding the Codex proposed maximum limit of 20 µg/kg; n (%)	Percent of samples exceeding the EU regulation (EC) no 1881/2006 for OTA with limit of 15 µg/kg; n (%)
GAR	21	20	0.57 – 9.49	3.06	0 (0%)	0 (0%)
CER	9	7	0.54 – 296.0	1.91	1 (11%)	1 (11%)
WER	9	7	0.56 – 14.44	2.01	0 (0%)	0 (0%)
ASR	18	11	0.41 – 33.85	6.88	3 (17%)	4 (22%)
NOR	9	8	0.51 – 6.95	1.00	0 (0%)	0 (0%)
BOR	6	5	0.37 -2.74	2.07	0 (0%)	0 (0%)
BER	3	1	4.09	4.09	0 (0%)	0 (0%)
AHR	3	3	0.75 – 3.89	2.82	0 (0%)	0 (0%)
EAR	9	9	1.01 – 23.59	6.43	1 (11%)	2 (22%)
UER	12	12	2,01 – 3.87	3.07	0 (0%)	0 (0%)
UWR	8	7	0.26 – 29.22	2.37	2 (25%)	3 (38%)
VOR	11	11	0.36 – 46.67	2.01	1 (9%)	1 (9%)
TOTAL	118	101	0.37 – 296.0	2.62	8 (7%)	11 (9%)



Appendix 4:

THE GENDER AND ENVIRONMENTAL AND SOCIAL RISK ASSESSMENT TOOL

Full Assessment Tool		
Name of respondent		
Sector (value chain)		
Details of Activity		
Location of farm/processing /market site etc.		
Number of members/staffs		
Date		
PART A: GENDER ASSESSMENT		
1. Organisational Operations and Organisation Activities gender risk assessment		
<i>Please answer the following questions about the business by selecting 'Yes', '?' or 'No'</i>		
	Question	Response: Y/N/Not Applicable Comments: Please add supporting comments in the box below
Non-discriminatory and inclusive policy and gender considerations	Does the organisation have a non-discriminatory and inclusive rules or policies in place for women?	
	Is the non-discriminatory and inclusive rules or policies communicated to members?	
Internal Capacity	(For organisations with more than 20 members) Has the organisation identified focal persons to address gender issues and promote the organisations approach to gender equality internally and externally?	
PART B: E&S ASSESSMENT		
	Question	Response: Y/N/Not Applicable Please add supporting comments in the box below
Compliance with local E&S laws and regulation	Does the organisation have a Business Operating Permit from the Metropolitan Assembly?	
	Does the organisation have an EPA permit?	
	If no, is the company currently processing the permit	

	<p>Does the organisation have Ghana Standard Authority Certification?</p> <p><i>(Applicable for entities involved in processing and exporting in the value chain)</i></p>	
	<p>Does the organisation have Fire Certificate?</p> <p><i>(Applicable for MSMEs involved in manufacturing/producing any goods)</i></p>	
	<p>Does the organisation have any other permits/licenses?</p> <p><i>If yes, please list here:</i></p>	
	<p>Does the organisation have an E&S management or action plan?</p>	
	<p>Does the organisation monitor the age of employees and restrict minimum age to 18 years?</p>	
Resource Efficiency and Pollution Prevention	<p>Does the organisation monitor it pollution to the environment?</p>	
	<p>Does the organisation monitor its waste produced?</p>	
	<p>Does the organisation recycle its waste?</p>	
	<p>Does the organisation monitor its use of land?</p>	
	<p>Does the business monitor its use of energy?</p>	
	<p>Does the organisation monitor its water usage?</p>	