

Terms of Reference

Prioritization of aflatoxin management activities using the P-IMA tool STDF Project Preparation Grant (STDF/PPG/786)

Background

1. Aflatoxin contamination is highly prevalent in Ghana and affects crops such as maize, groundnuts, and their processed products, exposing humans and animals to the consumption of contaminated food and feed. This has a significant negative impact on public health, food and nutritional security and incomes of poor households.
2. Aflatoxins also pose a barrier to trade and market access due to the rejection of contaminated products by importing countries. The non-compliance with maximum levels for aflatoxins often results in the reduction of export quantities of maize and groundnut products. For instance, 35% of Ghana's groundnut paste (peanut butter) and 28% of raw maize intended for exports in 2019 had total aflatoxins level above the EU limit of 4ppb. Ghana faces a number of challenges to comply with stringent requirements related to aflatoxin levels requested by importing countries and to develop potential value chains for export. SPS capacity gaps in the public and private sector, weak institutional capacity and limited resources are among the key challenges faced.
3. The Science and Technology Policy Research Institute of Ghana's Council for Scientific and Industrial Research (CSIR-STEPRI) submitted a request for an STDF Project Preparation Grant (PPG) to support the implementation of the national policy for aflatoxin control in food and feed by applying STDF's framework on Prioritizing SPS Investments for Market Access ("P-IMA")¹ to rank the various activities identified in the policy's implementation plan. This PPG request received fifteen letters of support from relevant stakeholders, including the Ministries of Agriculture, Health, Trade and Environment (i.e. MOFA, MOH, MOTI and MESTI), competent authorities (i.e. Ghana Standards Authority-GSA, Ghana Food and Drug Authority-FDA and Ghana Health Service), relevant regional initiatives/institutions (i.e. the Partnership for Aflatoxin Control in Africa-PACA and the Alliance for a Green Revolution in Africa-AGRA), private sector organizations and academia/research institutes. The application was approved by the STDF Working Group in March 2021.

Purpose and expected outputs of the PPG

4. The P-IMA framework provides an evidence-based approach to engage all relevant stakeholders to prioritize diverse SPS investments related to market access needs, based on an analysis of available (quantitative and qualitative) data and information. The purpose of this PPG is to enable concerned public and private sector stakeholders, with interest in aflatoxins (from agriculture, trade, health perspective), to (i) use the P-IMA framework to prioritize activities in the implementation plan of the national aflatoxin policy and, (ii) based on prioritized actions identified, develop a project proposal for funding by STDF and/or other donors.
5. Work under the PPG should take account of the National Aflatoxin Sensitisation and Management project (2018-2020), implemented by the Ghana Standards Authority, which aimed to improve food safety and security by increasing farmers' and value chain actors' awareness regarding the impact of aflatoxin contamination. Lastly, the PPG will draw lessons from two STDF-funded initiatives ([STDF/PPG/400](#) and [STDF/PG/566](#)) in Malawi and Burkina Faso. It will build on the learnings from public and private sector stakeholders to ensure collaboration and resource-

¹ See: <https://www.standardsfacility.org/prioritizing-sps-investments-market-access-p-ima>

leveraging to develop the Malawi Programme for Aflatoxin Control (MAPAC) while linking with the STDF Project in Burkina Faso, Ghana's trading neighbour, to reduce aflatoxin contamination in maize. In addition, the PPG work will consider findings of any other relevant food safety related assessments, as appropriate.

6. The PPG will be carried out in close collaboration with stakeholders involved in ongoing and planned initiatives focused on mitigating the impact of aflatoxin contamination on trade, public health and food security. It will identify, wherever possible, opportunities to inform planning and prioritize investments within these projects. These initiatives include:
 - The Partnership for Aflatoxin Control in Africa (PACA), established in 2011 by the African Union Commission, which elaborated a 10-year Strategy (2013-2022) to develop systems for the control of aflatoxins and guide its actions in six pilot countries.² PACA supported the ECOWAS to develop the Aflatoxin Control Action Plan (ECOACAP), which was adopted in 2015 by the ECOWAS Agricultural Ministers, including Ghana. Building on MAPAC, PACA selected Malawi as a pilot country for aflatoxin mitigation measures and promoted the approach in other countries in the region.³
 - Planned initiative by the World Bank to mitigate aflatoxin risks through affordable testing technologies to improve trade in the EAC region.⁴
7. Use of the P-IMA framework in Ghana will support the implementation of Ghana's National Aflatoxin Policy and builds on the strategies of both PACA and ECOACAP programmes in Africa. Ultimately, the PPG will help build awareness among the public and private sector about the benefits of investing in SPS capacity building with respect to Aflatoxins, facilitate dialogue among government and private sector regarding SPS investment priorities, and inform decision-making of members of the National SPS Committee, political leaders, development partners and donors.
8. The STDF developed an online module to support the fully remote application of P-IMA (linked to travel restrictions and social limitation due to the COVID-19 pandemic). The first pilot roll out of the virtual training on the P-IMA approach is being carried out under an STDF supported PPG ([STDF/PPG/733](#)) in the CARICOM region. The Inter-American Institute for Cooperation on Agriculture (IICA) is participating in the virtual course to build skills to apply the P-IMA framework across the wider region, including as part of an STDF PPG in Ecuador ([STDF/PPG/709](#)). Progress on the implementation of the online training modules and resources, as well as the development and results of these two initiatives will be relevant for the implementation of the current PPG.
9. In April 2021, the STDF Working Group approved another PPG to apply the P-IMA framework in Armenia. The PPG will focus on applying P-IMA to prioritize SPS investments for market access in export-oriented value chains ([STDF/PPG/761](#)) and develop a focused project proposal based on prioritized actions identified. The organization that will implement the PPG in Armenia will be kept informed about the implementation of this PPG to identify and ensure synergies among the initiatives.

Deliverables

10. The PPG will result in the following concrete outputs:⁵

² Nigeria, Gambia, Senegal, Tanzania, Uganda, Malawi

³ See: https://www.standardsfacility.org/sites/default/files/STDF_PPG_400_ResultStory.pdf

⁴ See: <https://www.worldbank.org/en/topic/trade/publication/boosting-africas-food-supply-rethinking-aflatoxin-management-for-improved-food-trade-in-east-africa>

⁵ The four outputs will be published on the STDF website.

- Detailed report that analyses and prioritizes the activities in the implementation plan of the national aflatoxin policy using the P-IMA framework. In addition to presenting and analysing the prioritization of activities in the implementation plan of the national aflatoxin policy, this report should describe the process followed, experiences and challenges (if any), experiences in developing linkages and synergies with SPS capacity evaluation tools (PVS, PCE, etc. – if applied), and any other related initiatives, etc. This report should document and describe efforts to mainstream aflatoxin-related investments into broader planning and financing frameworks for agriculture, trade, trade facilitation, public health, the environment, etc. It should also draw conclusions and recommendations on how P-IMA could be used to inform and prioritize aflatoxin work more generally in Africa, based on the experience in Ghana.⁶ Other relevant information including a bibliography of documents consulted, participants at stakeholder workshops, etc., should be annexed.⁷
- A summary report (5-8 pages) that describes the overall results and experiences of the P-IMA work in Ghana (the STDF Secretariat will provide a template).
- A project proposal, based on the priorities identified by the P-IMA Framework, to overcome the main bottlenecks related to aflatoxin contamination impeding the exports of a select value chain.
- A brief implementation report of work carried out under the PPG, including the key activities, a bibliography of the documents consulted (with web links and/or electronic copies, where available), stakeholders met and consulted together their e-mail addresses, etc. The PPG implementation report should be provided within one month from completion of the PPG.

Implementation of the PPG

11. The PPG will be led and implemented by Alliance for a Green Revolution in Africa (AGRA). AGRA has been actively involved in the development of the National Policy for Aflatoxin Control in Ghana. In addition, some AGRA staff (Daniel Njiwa and Isaac Gokah) have been actively involved in the use of P-IMA in Africa including through an STDF project in the COMESA region ([STDF/PG/606](#)) and TMEA work in the East Africa region.⁸ The implementation will be carried out in close cooperation with a small team of officials from relevant national government authorities (i.e. MOFA, MOH, MOTI, GSA, FDA, Ghana Health Service, etc.) involved in food safety, animal and plant health, trade, etc. Other concerned parts of government (i.e. MESTI, the national SPS Committee, etc.), authorities responsible for trade, planning and finance will be actively consulted and engaged in the work. In addition, efforts will be made to actively engage representatives of industry and the private sector, academia/research/policy institutes (i.e. Forum for Agricultural Research in Africa – FARA), regional initiatives such as PACA as well as development partners and donors with an interest in the aflatoxin issue in Ghana.
12. The data collection and analysis work will follow the steps outlined in the P-IMA User Guide⁹. As indicated in the Guide, the work should take stock of and build on the findings and

⁶ Please have a look at the AUC SPS Policy Framework for Africa, as it mentions P-IMA and aflatoxin control in Africa. See: https://au.int/sites/default/files/documents/40036-doc-au_sps_policy_framework_-_full_document.pdf

⁷ Also have a look at "The Safe Food Imperative" publication, as it highlights the value of P-IMA. See: <https://openknowledge.worldbank.org/bitstream/handle/10986/30568/9781464813450.pdf?sequence=6&isAllowed=y>

⁸ See: <https://www.trademarka.com/project/applying-the-prioritizing-sps-investment-for-market-access-p-ima-framework-to-prioritize-sps-investments-for-regional-trade/>

⁹ See: <https://www.standardsfacility.org/prioritizing-sps-investments-market-access-p-ima>

recommendations of previous assessments of SPS capacity (i.e. IPPC's PCE Tool and the OIE's PVS Tool, if implemented in Ghana), as well as any other available assessments, data and information on SPS issues and agricultural trade.

13. During implementation, AGRA will collaborate closely with a national coordinator put forward by STEPRI to coordinate the PPG activities at the national level, including by providing support to the P-IMA analysis and other deliverables under this PPG. AGRA will also sub-contract a national data gathering consultant to support the compilation and review of relevant documents and other deliverables under this PPG.

Role of AGRA

14. AGRA's P-IMA experts will lead and facilitate the use of the P-IMA framework in close collaboration with a small team of national officials (which the national coordinator will identify), and in cooperation with all the other concerned stakeholders (including relevant government authorities, the private sector, academia/policy institutes, development partners, donors, etc.).

15. AGRA's P-IMA experts will carry out the following activities:

- i. Undertake training to apply the P-IMA framework and D-Sight computer software. The expert will learn from the online training modules and recorded resources carried out under the two STDF PPGs mentioned above.
- ii. With support from the national data gathering consultant, compile and review relevant documents, assessments and reports that may inform the P-IMA analysis. These include Ghana's national policy for aflatoxin control in food and feed, ECOWAS' Aflatoxin Control Action Plan (ECOACAP), PCE and PVS evaluations (if relevant and applicable), as well as documents on recent/ongoing/planned projects related to food safety, aflatoxin capacity building, agri-food value chains and/or trade.
- iii. Build on AGRA's convening power to lead discussions on the use and potential benefits of the P-IMA framework with relevant stakeholders, including:
 - Government authorities: Ministry of Food and Agriculture (MOFA), Ministry of Health (MOH), Ministry of Environment, Science, Technology and Innovation (MESTI), Ministry of Trade and Industry (MOTI), Ghana Standards Authority (GSA), Ghana Food and Drug Authority (FDA), Ghana Health Service, etc.
 - Private sector stakeholders: Farmers Organization Network in Ghana (FONG), Ghana Grains Council (GGC), etc.
 - Representatives of relevant international organizations, regional initiatives such as PACA, ECOWAS, development partners and donors (i.e. USAID and USDA and Mexican Embassy) with an interest in SPS capacity building and agricultural development as it pertains to aflatoxin policy.
 - Any other concerned stakeholders such as, the National Steering Committee for Aflatoxin Control (NSCAC), Food Research Institute, Council for Scientific and Industrial Research (CSIR-FRI), Eat Safe Ghana (NGO based in Ghana), Ghana College of Physicians and Surgeons (Faculty of Public Health), etc.

- iv. Train a core group of government officials and other relevant stakeholders on the use of the P-IMA framework and D-Sight computer software to enable them to use and re-apply the P-IMA framework independently in the future.
- v. Facilitate a one-day stakeholder workshop (involving relevant public and private sector stakeholders, academic/research, STDF partners, donors, other concerned stakeholders, etc.) to present the P-IMA framework, identify possible aflatoxin-related intervention activities in export-oriented value chains to be included in the analysis, discuss and identify decision criteria and weights to be used for the prioritization. In setting out the scope of the prioritization decision, and the investment options to be included, support the engagement of appropriate expertise from national government agencies, as well as relevant STDF partners (including the World Bank), to ensure that the most appropriate expertise is available to support the work to be carried out.
- vi. Support and guide the local team to collect, review and compile data for information sheets for each of the SPS capacity investment options identified from the aflatoxin policy and its implementation plan and included in the P-IMA analysis, and to use the D-Sight computer software to prioritize SPS investment options. In compiling information sheets, take account of the role of women (and other vulnerable groups) in different value chains (as producers, processors, employees of SMEs, etc.) and how they could be expected to benefit from effective prioritization of activities under the national aflatoxin policy.
- vii. Carry out analytical work to review the national aflatoxin policy and its implementation plan against the top priorities emerging from the P-IMA analysis to identify financing gaps and map out options to mainstream aflatoxin-related priorities within national investment frameworks.
- viii. Prepare a draft report that prioritizes implementation activities of the national aflatoxin policy. Participate in debriefing meetings with STEPRI to discuss and review the P-IMA report, as well as how to: (i) use the information generated to feed into the development of a strategic action plan for national aflatoxin policy implementation in Ghana that will enable relevant government agencies to effectively deliver their mandate and meet the needs of the private sector in terms of aflatoxin control, compliance and market access; (ii) inform the allocation of resources by the Government, as well as donors and development partners; (iii) replicate and "institutionalize" the evidence-based approach to identify priorities within decision-making processes in government; and (iv) draw conclusions and recommendations on how P-IMA could be used to inform and prioritize aflatoxin work more broadly in Africa, based on the experience in Ghana.
- ix. Facilitate a stakeholder workshop to present and discuss the initial findings of the P-IMA analysis with key stakeholders (government, private sector, development partners, donors, academia, etc.), obtain feedback, respond to questions or concerns, validate the analysis and draft report, and discuss the project proposal focusing on a select export-oriented value chain.
- x. Review and finalize report documenting the use of the P-IMA framework to prioritize activities in the implementation plan of the national aflatoxin policy in Ghana.
- xi. Prepare a summary report (5-8 pages) highlighting the process, experiences, challenges, results, next steps, etc. of using the P-IMA framework in Ghana. It should include how the analysis and findings will be utilized to inform planning under the

national policy for aflatoxin control and any other related national framework for agriculture, trade, etc. (the STDF Secretariat will provide a template).

- xii. Organize meeting(s) with high-level government officials in relevant ministries such as Ministries of Agriculture, Health, Trade and Environment (i.e. MOFA, MOH, MOTI and MESTI), competent authorities, development partners (i.e. World Bank) and donors (i.e. USAID and USDA, FARA, etc.) to discuss how the national aflatoxin policy prioritization generated through the P-IMA analysis can inform planning and decision-making. These discussions should address the following aspects and be well documented to facilitate follow-up:
 - Use of the findings of the P-IMA analysis to develop a prioritization of activities as part of the national aflatoxin policy.
 - Options to mainstream aflatoxin-related priorities into national investment frameworks for agricultural development, trade, public health environment, etc.
 - Options to use the P-IMA analysis to inform resource allocation decisions by government and/or to leverage additional resources from development partners and/or donors (including discussions around the emerging project proposal).
- xiii. Prepare a project proposal, with prominent support from CSIR/STEPRI and data gathering consultant, based on the aflatoxin-related priorities identified by the P-IMA Framework, to overcome the main bottlenecks impeding the export of a select export-oriented value chain.
- xiv. Prepare a short report describing the overall work carried out under the PPG, including the outputs delivered, results, any issues or challenges encountered, lessons and experiences.

Role of The Council for Scientific and Industrial Research (CSIR/STEPRI)

16. CSIR/STEPRI, as the National Coordinator, will:

- Identify and make available a small group of key government officials (including officials with responsibility for food safety, animal and plant health and trade) to work with the P-IMA expert and actively support the data collection and analysis process for P-IMA.
- Play a prominent role in supporting AGRA and the national gathering consultant to identify, compile and review relevant documents, assessments and reports that may inform the P-IMA analysis. These will include Ghana's national policy for aflatoxin control in food and feed, ECOWAS' Aflatoxin Control Action Plan (ECOACAP), PCE and PVS evaluations (if applicable), as well as documents on recent/ongoing/planned projects related to aflatoxin capacity building, agri-food value chains and/or trade.
- Liaison with relevant stakeholders about the PPG and work to prioritize activities under the national aflatoxin policy, including government authorities, private sector, research and academia, donors, development partners, etc. identified in paragraph 16, item ii. Inform stakeholders about the P-IMA analysis and schedule meetings so that the P-IMA expert can brief them on the planned work and seek their engagement and inputs.
- Provide support to organize and report on a one-day stakeholder workshop (public/private sector, academic/research, donors, etc.) to present the P-IMA framework

and identify possible SPS investment options in export-oriented value chains, discuss decision criteria and weights, etc.

- Assist the local team with data and information collection and analysis (including use of the D-Sight computer software), to compile the draft information sheets for the capacity building options included in the analysis, etc.
- Provide support to carry out analytical work to review the national aflatoxin policy and its implementation plan against the top priorities emerging from the P-IMA analysis to identify financing gaps and map out options to mainstream SPS/aflatoxin-related priorities within national investment frameworks.
- Provide support to a stakeholder workshop to present and discuss the initial findings of the P-IMA analysis with key stakeholders, obtain feedback, respond to questions or concerns, validate the analysis and draft report, and discuss project proposal focusing on a select export-oriented value chain.
- Technical review and provision of feedback on the draft P-IMA report.
- Have a prominent role in supporting AGRA and the data gathering consultant on the preparation of project proposal, based on the aflatoxin-related priorities identified by the P-IMA Framework, to overcome the main bottlenecks impeding the export of a select export-oriented value chain.
- Provide support to meeting(s) with high-level government officials in relevant ministries, competent authorities, development partners and donors to discuss how the national aflatoxin policy prioritization generated through the P-IMA analysis can be used in practice to inform planning and decision-making (including discussions around the emerging project proposal).
- Assist and provide any other assistance to AGRA.

Logistics

17. With support from STEPRI, AGRA will:

- i. Coordinate letters of support where needed for the project proposal from key public and private stakeholders. These letters should include a clear expression of support for the proposed project and demonstrate a clear commitment to take actions needed to ensure the success and sustainability of the project.
- ii. Systematically compile all relevant information (in English), including assessments, project reports, evaluations, value chain studies, etc., which were identified during the implementation of the PPG implementation for inclusion in the STDF Virtual Library.
- iii. Keep detailed financial records of funds disbursed under this PPG and provide the STDF Secretariat with original receipts for costs incurred in the implementation of this PPG, along with the final invoice.

Stakeholders' Workshops and other meetings will be held virtually, on-site or in hybrid format depending on the country's measure for the COVID-19 pandemics. In case COVID-19 restrictions present risks and delays on the implementation of this PPG, risk mitigation measures should be reflected on the implementation's planning and informed to the STDF Secretariat. During the course of the PPG, AGRA will update the STDF Secretariat regularly on progress.

Timeframe

18. The activities of this PPG will take place for a period of up to one year, starting from 01 December, upon agreement between the STDF Secretariat and AGRA.

Estimated Budget

19. An estimated budget breakdown for the PPG is included below. This includes the estimated number of working days required for AGRA's P-IMA experts and a national data gathering consultant to carry out this work. The total number of days will be reimbursed based on the actual number of days worked. Stakeholder workshops and meetings, and other expenses will be paid on the basis of actual costs incurred, upon presentation of receipts and invoices. An alternative budget column is provided with virtual meetings in case COVID-19 restrictions persist.

Activity	Estimated Budget (US\$)	Alternative Estimated Budget (US\$) with virtual meetings
AGRA expertise on P-IMA: 36 working days (USD 600/day) – to lead work under PPG (i.e. steps involved in the P-IMA framework, etc.) and deliver on outputs (i.e. P-IMA report, summary report, Project proposal, and PPG implementation report).	21,600	21,600
National data gathering consultant: 10 working days (USD 350/day) to support the compilation and review of relevant documents and other deliverables under this PPG.	3,500	3,500
Stakeholder workshops and meetings		
	Costs of workshop facilities, coffee breaks, lunches, etc. (upon presentation of invoices)	Internet and virtual meeting platform. (upon presentation of invoices)
Two Stakeholder Workshops: one to identify the SPS capacity-building needs and define decision criteria/weights and one to present the findings of the P-IMA exercise and validate the P-IMA draft report.	8,000	3,000
	Meeting venue, coffee breaks, lunches, etc. (upon presentation of invoices)	Internet and virtual meeting platform. (upon presentation of invoices)
Meeting(s) with high-level government officials, competent authorities, development partners and donors to follow up on the priorities identified by P-IMA.	4,000	1,500
Other costs		
P-IMA Experts/national consultant/other key stakeholders (i.e. from PACA) travel within/to the country - if necessary (including vehicle rental, fuel, short-distance flights, and DSA - upon presentation of invoices)	6,000	0
Operating costs, i.e. printing and duplication of documents, office equipment, secretarial support, telephone calls, local transport, etc. (upon presentation of invoices)	300	300
Total	43,400	29,900