STDF | STANDARDS *and* TRADE DEVELOPMENT FACILITY

PRIORITIZING SPS INVESTMENTS FOR MARKET ACCESS **(P-IMA)**

Facilitators Handbook

Food and Agriculture Organization of the United Nations

World Organisation for Animal Health
Founded as OIE

WORLD BANK GROUP

World Health Organization

WORLD TRADE ORGANIZATION

The findings, interpretations and conclusions expressed in this document are entirely those of the author. They do not necessarily represent the view of the STDF or any of its partner agencies or donors.

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The development and finalization of the P-IMA framework would not have been possible without the collaboration of stakeholders across the public and private sectors in the various countries where the framework has been applied to date. Their expertise and experience have been invaluable and is gratefully acknowledged.

For further information or any questions, write to STDFSecretariat@wto.org

Snapshot of the Facilitator Notes

ABOUT P-IMA

The SPS capacity challenge

Developing countries face many demands to improve SPS capacity to boost agri-food exports and support other public policy objectives. Yet resources available from government budgets and donors are insufficient to meet all identified needs. This requires hard choices to be made between competing SPS investments.

The P-IMA framework

The Standards and Trade Development Facility (STDF) developed the Prioritizing SPS Investments for Market Access (P-IMA) framework, which offers an evidence-based approach to inform and improve SPS planning and decision-making processes, including on resource allocation. P-IMA helps to select SPS investments that are likely to deliver the greatest impacts linked to policy goals from export growth to agricultural productivity and employment, including on SMEs, women, and youth. In the process, P-IMA encourages public-private dialogue, boosts transparency and accountability, and improves the economic efficiency of investment decisions.

Steps to the P-IMA framework

The P-IMA framework uses multi-criteria decision analysis (MCDA) approach, as well as computer software (D-Sight), to help derive priorities. The process engages all relevant public and private sector stakeholders to discuss the various SPS investment needs and identify decision criteria and weights to prioritize investments. By transparently documenting the findings, as well as all the data and information used, it ensures that the SPS priorities generated are open to scrutiny and delivers impartial information to inform priority policy decisions. The P-IMA process includes seven steps, as outlined below:

P-IMA process

1. Compile an information dossier with all relevant information to identify the range of SPS capacity building needs and investments options.

2. Consult stakeholders on SPS capacity building options to be prioritized, "sifting out" what is unrelated to SPS capacity or market access.

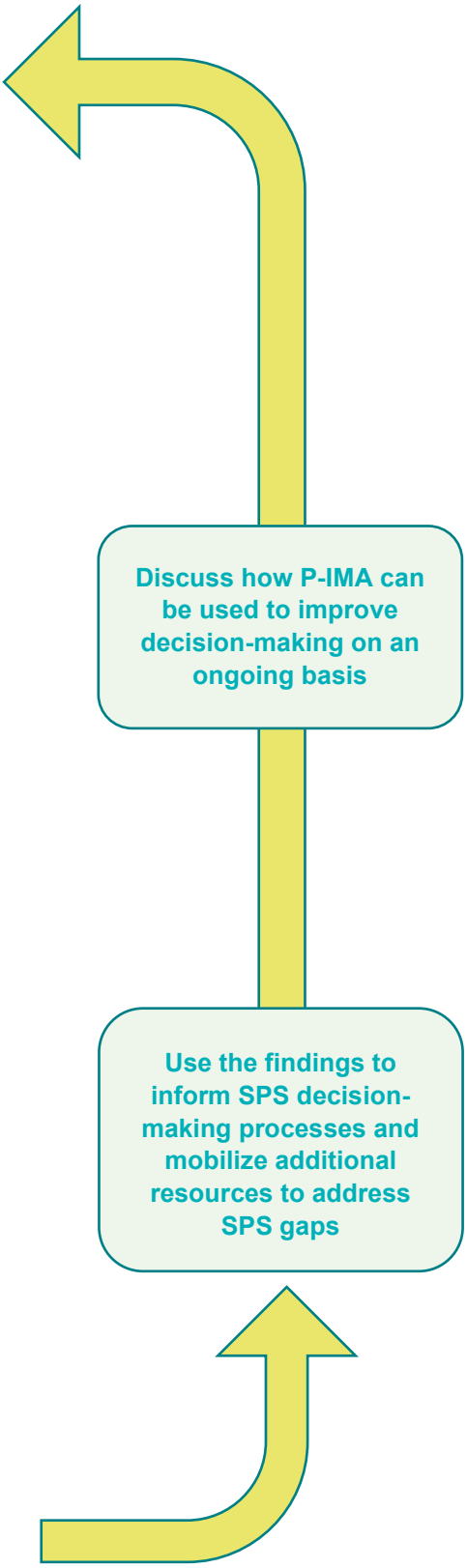
3. Define the decision criteria to prioritize the identified SPS investments and the relative weights assigned to each.

4. Create profiles for each SPS capacity-building option with available data and information on each of the decision criteria.

5. Compare the SPS options according to the decision criteria using "spider diagrams" to get an initial sense of which options perform better

6. Calculate the priorities using multi criteria decision analysis computer software and analyse the results, including any data sensitivities or uncertainties.

7. Discuss, review and validate the priorities with stakeholders, incorporate better data, make any other changes, re-calculate the priorities and finalize the report.



Experience with the use of the P-IMA framework

Recent use of P-IMA, including in various countries in sub-Saharan Africa, has highlighted many of the benefits, including:

- Greater efficiency of SPS investment decisions. Scare resources can be allocated to support policy objectives on trade, poverty reduction, public health, and agricultural development.
- More transparent and accountable choices between multiple investment options.
- Evidence on the likely impacts of investing in SPS capacity can mobilize additional resources from governments or donors.
- Improved dialogue between public, private and other SPS stakeholders, and more inclusive decision-making processes.

These experiences also demonstrated that it is possible and valuable to use the P-IMA framework even where there is limited access to data or where country officials have little or no prior experience with structured approaches to priority-setting.

To find out more see: https://www.standardsfacility.org/prioritizing-sps-investments-market-access-p-ima

About the facilitator notes

One of the challenges faced is facilitators' need for additional guidance to help public and private sector stakeholders in low and middle-income countries apply the P-IMA framework in their countries/regions. Limited experience and confidence to apply the framework was affecting the facilitators' capacity to build skills in developing countries to make use of P-IMA.

Purpose

This "Handbook" aims to provide detailed, step-by-step guidance on how to apply P-IMA to advise experts who facilitate the use of the framework, including in virtual environments. It will support facilitators in providing in-depth training on the P-IMA framework aimed at equipping public and private sector stakeholders in developing countries with the necessary skills to apply the framework to the prioritization of trade-related SPS capacity-building in their own country/region.

Target audience

This document is targeted to provide additional guidance to experts who facilitate the use of P-IMA to prioritize SPS capacity-building needs in developing countries. The so-called "facilitators" or "instructors".

Structure

This handbook include guidance to teach the P-IMA training programme, composed of **13 training modules** that work through the P-IMA framework step-by-step. The Aflandia case study is used to illustrate the practical application of the P-IMA framework and to provide participants with an opportunity to apply the framework to a simulated real-world context. Thus, in-between many of the modules, participants are provided with self-directed tasks to undertake that are related to the analysis of the Aflandia case study.

Upon completion of the series of taught modules, participants in the programme undertake a second country case study, South Indantia. This is a self-directed assignment, with the facilitator providing guidance and assistance remotely in the form of a 'help desk'. The facilitator will make sure participants are able to complete the analysis of the South Indantia case study, including compilation of the information cards and derivation of the prioritization using D-Sight software.

What do you need to be a Facilitator?

It is assumed that the facilitator/instructor has a good working knowledge of the P-IMA framework and the D-Sight platform, and has applied this framework in diverse contexts so that they are well-informed as to the challenges faced, practical procedures needing to be employed, etc.

The training modules are designed to be interactive and responsive to the needs and learning trajectories of participants. Whilst there are frequent slides that prompt participants to ask questions, raise issues and/or make contributions throughout the 13 modules, the instructor needs to be proactive in encouraging and facilitating participants to engage with the material being taught and to highlight any issues on which they need further instruction or help. Given the iterative nature of the P-IMA framework, it is important that participants have a good understanding of each step of the analysis before progressing to the next. If necessary, the facilitator will need to engage with participants in smaller groups and/or on a one-to-one basis in-between the modules to address questions and provide support in the completion of the self-directed assignments.

To respond to the on-going and evolving needs of participants in the training modules, the facilitator may need to adjust the content of the modules and/or spend time revisiting content that some or all participants do not fully understand. For example, it may be clear from questions raised and/or contributions made by participants (during the remote sessions and/or in-between modules), or through performance in the self-directed assignments that participants submit, that certain elements of the course are not fully understood. These issues need to be addressed before proceeding with the next element of the training material.

What do you need to deliver this training?

Place: The training modules can be taught remotely in a synchronous manner using Zoom, MS Teams, or a similar platform. It can also be taught in person, in an appropriate venue with settings for PowerPoint presentation.

Time recommended: Each training module takes between 60 and 90 minutes depending on the level of engagement of participants through questions and/or discussion. It is recommended that these sessions be scheduled at a regular time over a period of seven weeks, with sufficient time in-between sessions for participants to undertake the respective self-directed assignments.

Additional material:

- A series of **PowerPoint slides** is available in the handouts of each module.
- The Aflandia and South Indantia case studies and all other support materials are provided in the handouts of the modules in which they are thought.
- The facilitator needs access to a licence for the D-Sight software.

Who are the typical participants and what is expected of them?

Participants in the training programme are often officials in government departments and ministries responsible for the management of SPS matters, planning and/or finance, as well as those with and interest in SPS matters more generally, including donors, development partners, and private sector stakeholders.

These Facilitator Notes assume that participants in the programme have no prior knowledge of the P-IMA framework, and so works through the rationale behind the development of the framework, its basic structure and the steps involved in its implementation. Upon completion of the series of taught modules, participants in the programme undertake a self-directed assignment: the second country case study, South Indantia. Each participant is expected to complete the analysis of the South Indantia case study, including compilation of the information cards and derivation of the prioritization using D-Sight.

Module 1 – Background and structure of the framework

Objectives

The objectives of Module 1 are to:

- Provide an overview of the overall training programme.
- Outline the context in which the P-IMA framework was developed.
- Outline the basic structure of the P-IMA framework

Handouts

For this module, the facilitator will need:

- Slides of Module 1 – DOWNLOAD HERE

Time required to deliver this module

60-90 minutes

Notes for the facilitator

SLIDE 1 - Module 1: Background and structure of the framework

Inform participants about the topic of the module.

SLIDE 2 - What is this training about?

Inform participants that the aim of the training programme is to introduce the rationale and structure of the P-IMA framework, and to equip public officials with the skills and experience needed to apply the framework to prioritize SPS capacity-building needs in their own country. Whilst the P-IMA training is primarily aimed at public officials with responsibility for the management of SPS matters, it will be of utility to those with an interest in SPS matters more generally.

The programme starts by providing background to the P-IMA framework and how it was developed. It then proceeds to work through the framework stage-by-stage. By the end of the training, participants who remain engaged with the material and complete all the assignments will be equipped to start using the framework in their day-to-day work.

SLIDES 3 and 4 - Structure of the training

There is a series of 13 online modules. Each module takes around one hour and consists of live instruction and the opportunity for questions and discussion.

The modules are designed to be interactive. Ask participants for their input and/or reactions to the materials being taught, and to reflect on the application of the P-IMA framework within the context of their own country.

Inform participants that, at the end of each module, they will be provided with individual assignments that provide an opportunity to reflect on and/or apply the materials that has been taught. In most cases, this will require only a few minutes of time in-between modules.

Encourage participants to raise questions and/or to ask for clarification as the training progresses. In-between modules, participants can also email the instructor if they do not fully understand the material.

Slide 4 provides an overview of the 13 online modules that are taken over the first six and a half weeks of the training programme.

SLIDE 5 - What is needed from you?

To get the most out of the training and to be able to apply the P-IMA framework on completion, inform participants that they are required to participate actively in the online sessions, do any background readings and to complete the individual assignments. The taught modules are structured around the case study of Aflandia, a fictitious country. Participants should make sure that they have read this case study and immerse themselves in it as the course progresses.

Once the taught modules have concluded, participants will apply the P-IMA framework to a second case study of South Indantia, another fictious country. Participants will be expected to complete fully this case study on an individual basis. The facilitator will be available to answer any questions and provide support.

Throughout the training, participants should reflect critically on the P-IMA framework, especially the benefits this might bring to their day-to-day work and the challenges that are likely to be faced in implementing it in their own country.

SLIDE 6 - What are we doing now?

The focus of the first module is on the context behind the P-IMA framework, the rationale for its development, and the basic structure of the framework. Thus, this module starts by discussing the nature of SPS measures and the SPS environment, how to make effective decisions with respect to SPS capacity-building, and the role of economic analysis in supporting SPS capacity-building decisions. The P-IMA framework is based on multi-criteria decision analysis (MCDA), and so this is a particular focus of these discussions. The module then proceeds by describing the structure of the P-IMA framework.

SLIDE 7 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 8 - Sanitary and phytosanitary (SPS) measures

Explain that the P-IMA framework was designed to guide the prioritization of capacity-building with respect to compliance with trade-related sanitary and phytosanitary (SPS) measures. Broadly, SPS measures relate to the management and control of food safety, plant health and animal health.[1] Thus, these measures are aimed at protecting public health from the hazards associated with food, plants, and animals, and to managing the impacts on agricultural productivity and the natural environment of the pests and diseases that can impact the health of plants and animals.

The P-IMA framework focuses on compliance with SPS measures that are related to trade, although it can be adapted to SPS measures more generally. It can also be applied to capacity-building with respect to SPS sub-components, for example food safety alone.

SLIDES 9 to 13: The SPS environment

These slides explain how the SPS environment has evolved over the last 20 or more years. It's important for you to note that, there has been significant growth in the number of SPS measures applied globally. Under the Agreement on Sanitary and Phytosanitary Measures, WTO members are required to provide notifications of all new SPS measures. These notifications show how the number of SPS measures has grown over time (Slide 10). Whilst some of these new measures are emergency responses to immediate SPS hazards (for example, outbreaks of animal disease) and may be withdrawn later, most are new or revised permanent SPS requirements.

In parallel to the growth in official SPS measures, there has been significant expansion in so-called 'private standards', especially with respect to food safety. Examples include the GlobalGAP series of standards for good agricultural practice[2] and private food safety certification programmes benchmarked to the Global Food Safety Initiative (GFSI).[3] Today, most private food safety standards are developed by non-governmental bodies at the national or international level. Many of the largest commercial buyers of food, including food retailers and food service businesses, require that their suppliers are certified to these private standards. For example, the number of agricultural producers that are certified to a GlobalGAP standard now exceeds 200,000 (Slide 12).

Efforts have been made to compare SPS capacity across countries in a consistent manner though the definition of assessment frameworks that enable prevailing capacity to be assessed against global benchmarks. Most notable are the Phytosanitary Capacity Evaluation (PCE) tool of the International Plant Protection Convention (IPPC)[4], Performance of Veterinary Services (PVS) tool of the World Organisation for Animal Health (OIE)[5] and the WHO/FAO Food Control System Assessment tool[6]. Whilst these frameworks serve to identify weaknesses in the SPS capacity of countries compared to what is desirable, they do not provide guidance on which of the identified weaknesses is less or more important, for example relative to the SPS requirements that a country is facing in the context of trade.

SLIDE 14 - The SPS capacity-building challenge

The rapid growth in official SPS measures and private standards has meant that compliance with SPS requirements has become a significant determinant of the agri-food export performance of countries. Indeed, numerous studies have

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[1] The official definition of SPS measures defined by the WTO is specified in the text of the Agreement of Sanitary and Phytosanitary measures: https://www.wto.org/english/tratop_e/sps_e/spsagr_e.htm.

[2] For further details see: https://www.globalgap.org/uk_en/.

[3] For further details see: https://mygfsi.com/.

[4] For further information see: https://www.ippc.int/en/core-activities/capacity-development/phytosanitary-capacity-evaluation/.

[5] For further information see: https://www.oie.int/solidarity/pvs-pathway/.

[6] For further information see: https://www.who.int/publications/i/item/9789241515719.

shown that SPS requirements can act as barriers to trade and can also be a source of competitive advantage for countries and/or businesses that act fast as these requirements evolve. Arguably, SPS requirements are now one of the foremost issues impacting global trade in agri-food products, and the ability of low and middle-income countries to compete successfully in global markets.

In many low and middle-income countries, the capacity to comply with trade related SPS requirements in the context of trade has lagged the evolution of official SPS measures and private standards. Capacity needs relate both to official SPS controls, including regulations and related systems of surveillance and enforcement, and the systems employed to manage SPS hazards by food producers, processors, and distributors. This widening SPS capacity gap is a fundamental challenge for many countries that are seeking to maintain and/or expand their exports of agri-food products.

Most public and private sector stakeholders in low and middle-income are acutely aware of the need to upgrade SPS capacity. In many cases, however, the needed investments significant exceed available resources. On the one hand, this means that those resources that are available need to be used as efficiently as possible; there is no room for wastage in efforts to build capacity, whilst these efforts should focus on upgrades in capacity that are most urgent. On the other, the case needs to be made for additional resources, whether from the finance ministry, owners or senior managers of agri-food businesses, bilateral donors or multilateral institutions and development organizations. This case needs to be made in terms of the impact of capacity upgrades on trade performance and the wider socio-economic impacts.

It is critical that decisions over the use of scarce resources for SPS capacity-building are based on a coherent and evidence-based assessment of competing needs. In many countries, in stark contrast, such decisions are made in an *ad hoc* manner that lacks transparency. This means that resources are often not used in the most effective and efficient manner. Furthermore, it is difficult to make the case for more resources, especially to non-SPS specialists, when there are so many competing demands. It is this problem that the P-IMA framework addresses.

SLIDE 15 - How do you make decisions over which SPS capacity-building needs to prioritize?

Ask participants how decisions are made over SPS capacity-building options, and especially how the various needs are prioritized. At the outset of the training programme, it is important that participants recognize the nature and scale of weaknesses in the ways in which decisions are made over SPS capacity-building in their own country context. In asking this question, key probes might include:

- Who is generally involved in making these decisions?
- Can you remember the last time a major decision like this was made? How was the decision made?
- What weaknesses can you think of in how decisions over SPS capacity-building are normally made?
- How might the way in which decisions over SPS capacity-building are normally made be improved?

SLIDE 16 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 17 - Optimal planning for SPS capacity-building

Optimal planning for SPS capacity-building, which makes the best use of available resources and/or presents a robust case for additional resources, needs to be based on a coherent set of priorities that are evidence-based. Given that capacity-building needs almost always outstrip available resources, priorities need to be defined amongst these

competing needs based on the associated costs and benefits. Thus, what will be the cost of addressing each of the identified weaknesses in SPS capacity and what will be the impacts should each of these weaknesses be addressed, for example in terms of trade performance, poverty, impact on women and other marginalised groups, etc.?

It is critical that full and careful use is made of available information in defining priorities between competing SPS capacity-building needs. Rarely, all the desired data is available and often assumptions must be made to overcome data gaps. Furthermore, there are often weaknesses in the data that are available that need to be considered. Engagement with stakeholders is critical to this process, both in terms of gaining full access to available data and identifying where these data might be questionable.

If priorities are to garner widespread acceptance and support amongst stakeholders, it is important that they are defined in a manner that is transparent and open to critique. Furthermore, any prioritization represents only a 'snapshot' in time. There needs to be an ongoing reflection and re-examination of priorities in the light of feedback from stakeholders and as the available information evolves. Priorities also need to be re-evaluated as SPS requirements and/or national economic development plans and strategies change.

SLIDE 18 - Economic analysis of SPS capacity-building needs

Economic analysis can play an important role in guiding the prioritization of SPS capacity-building needs. By focusing on the costs and benefits associated with competing needs, economic analysis can identify which options should be given a higher or lower priority.

There are three basic approaches to the economic analysis that can inform SPS capacity-building.[7] Each has its own strengths and weaknesses. Furthermore, each is appropriate given the available information and the criteria that are considered pertinent in defining which needs should be given higher or lower priority.

Cost-benefit analysis (CBA) is often considered the 'gold standard' by economist when it comes to economic analysis. Thus, CBA quantifies in monetary terms all the costs and benefits associated with each of the options under consideration. This approach will identify not only which of the options yields a net benefit, but also which option yields the largest net benefit and by how much. Of course, CBA requires that all the criteria that are considered in the prioritization can be monetized in a meaningful way and that the data required to do this are available. This can be challenging in many low and middle-income countries where data are often lacking and/or where data quality is an issue. Furthermore, important decision criteria, for example poverty and/or gender impacts, may not be amenable to monetization.

Cost-effectiveness analysis (CEA) is employed to identify which of a set of options is the lowest-cost way in which to achieve a desired outcome, for example compliance with a particular SPS requirement. The benefit of CEA is that there is only a need to monetize the cost of each of the capacity-building options under consideration. This approach is not appropriate, however, where multiple potential impacts or benefits are considered pertinent to the prioritization. The use of CEA, furthermore, remains dependent on the ability to monetize fully the costs of all options, and in this sense is still subject to many of the same limitations as CBA when it comes to data availability and/or quality.

An alternative to CBA and CEA that has the flexibility needed to overcome the data availability and quality issues that are often faced in low and middle-income country contexts is **multi-criteria decision analysis (MCDA).** Furthermore,

[7] For more information see: https://www.standardsfacility.org/sites/default/files/STDF_Economic_Analysis_Nov-11_EN_0.pdf.

MCDA is applicable to decisions between competing options where multiple criteria are considered pertinent to the prioritization and where these criteria may not be weighted equally. It is MCDA that is employed in the P-IMA framework.

SLIDES 19 to 22 - Why MCDA?

There are many approaches to MCDA which differ in their precise mechanics and the underlying statistical analysis. All can be applied, however, to the prioritization of choices that are driven by a multitude of criteria and where trade-offs must be made between options that perform better/worse with respect to each criterion. Of course, if any one option is the best for all the criterion, there is no need to use MCDA; the best option is obvious!

As an example, say you are making a choice over a new card (Slide 20). Specifically, you are choosing between three models of car – Audi, Smart Car and Ferrari (Slide 21). Three criteria are important to you in deciding between the three cars. First, how much they cost; you would rather spend more rather than less. Second, whether the car is recommended by a friend; you would rather choose a car that is recommended by a friend as it will likely be seen as more stylish and a good choice to the people that matter to you. Thirdly, fuel consumption; you would rather a card that is more fuel efficient because it is cheaper to run and better for the environment.

In choosing between the three cars, you have a problem. First, none of the cars performs the best with respect to all three of the criteria; this means that you are going to have to make a trade-off between the cars in terms of their relative performance on the three criteria (table in Slide 22). Second, the criteria are not as equally important to you. Most important to you, by far, is whether a car is recommended by a friend; you score the importance of this at 72%. Cost is next most important, with an importance of 20%. Least importance is fuel consumption, with an importance score of only 8%. As will be seen as the training progresses, MCDA provides a way in which to choose between the three cars given the criteria that are important to you and the weight you attach to each.

Table on Slide 22: Using MCDA – choosing a car

Criterion	Weight	Capacity-Building Options		
		Audi	Smart Car	Ferrari
Cost	20%	22	13	70
Recommended by a friend	72%	1	0	1
Fuel consumption	8%	8	2	20

The power of MCDA, and especially the approach employed within the P-IMA framework, is not only that the decision criteria do not have to be monetized, but that these do not have to be measured in the same way. This means that MCDA is sufficiently flexible to be employed where data are scarce and even where there is limited scope to quantify the impact of options with respect to decision criteria.

One final benefit of MCDA relates to the ease of communicating the results, especially to non-SPS experts. Thus, at least conceptually, the MCDA process is relatively easy to understand and certainly does not require any technical SPS

or economics expertise. This is critical given that much of the audience for the prioritization is beyond the public officials that have responsibility for SPS issues. Indeed, it is safe to say that the main target is high-ranking officials within ministries responsible for agriculture, trade, or even finance!

SLIDE 23 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 24 - The P-IMA framework

This slide explains how the P-IMA framework provides a structured approach to establishing priorities between alternative SPS capacity-building options. Through a step-by-step process, the information required for the analysis is assembled and compiled in a consistent format. In so doing, the aim is not only to provide detailed and precise guidance to the user of the framework, but to make the procedure behind the framework clear to stakeholders to maximize transparency and facilitate input from diverse interests. Importantly, the P-IMA process starts and concludes with structured processes of stakeholder engagement.

The aim of the P-IMA framework is to facilitate the more efficient use of scarce resources for SPS capacity-building and, in so doing, enhance the trade and social impacts of these investments in low and middle-income countries. Importantly, the framework aims to foster demand-driven SPS capacity-building, recognizing that the enhancement of SPS capacity is not the ultimate end objective *per se*. Rather, investments are made in SPS capacity to facilitate compliance with trade related SPS requirements and, in so doing, achieve higher-level development impacts.

SLIDE 25 - Basic framework structure

The basic structure of the framework is just like the car example that we have just seen. There are three critical inputs:

- Capacity-building options – The list of SPS capacity-building needs that have been identified. Here they are labelled Option 1 to Option 5; these could include upgrades to a laboratory to undertake testing for pesticide residues in fresh produce, controls for fruit fly in fresh produce, achieving recognition as a country that is free of foot and mouth disease (FMD), etc.
- Decision criteria – The portfolio of criteria that encompass the costs and benefits of each of the capacity-building options that will be used to establish the priorities. Here these include the cost (which presumably we wish to minimise) and impacts on exports, public health, and poverty (presumably all of which we wish to maximize).
- Decision weights – The relative importance of each of the decision criteria. Here cost and impacts on poverty are weighted equally at 20%. Impacts on exports and public health are weighted equally and higher at 30%.

The first stages of the P-IMA framework focus on defining these three elements of the prioritization problem.

Having identified the capacity-building options and having defined the decision criteria and weights, a simple spreadsheet can be laid out. The next task is then to fill in this spreadsheet; the value of each capacity-building option for each of the decision criteria (these are the values in black in Slide 25). These values show the cost of each of the five capacity-building options, and the impact of each of option on exports, public health, and poverty. The P-IMA framework provides a structured way in which to gather this information.

Finally, MCDA is used to take these data and to define priorities between the give capacity-building options. These rankings are shown in blue in Slide 25.

SLIDE 26 - Stages to the P-IMA process

There are seven key stages to the P-IMA framework. Note that most of these stages are focused on the collection and basic structuring of information. It is not until Step 6 that the initial prioritization of the SPS capacity-building options is obtained!

A fundamental principle driving the P-IMA framework is that imperfect analysis is better than no analysis at all. Thus, whilst the framework aims to make maximum and best use of available information, it provides a way in which to overcome data gaps. Importantly, however, the assumptions and estimates made in such circumstances are recognized and highlighted to draw attention to elements of the analysis that might be subject to challenge.

SLIDE 27 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 28 - What you need to do now

Remind participants of the key messages from the module:

- Importance of prioritizing trade-related SPS capacity-building needs based on rigorous analysis.
- The P-IMA framework provides a structured approach to prioritization based on multi-criteria decision analysis.
- The P-IMA framework is seven-step process that this training programme will go through step-by-step.

Ask participants to look over this module again and ensure that they understand what has been covered. Ask participants to reflect on the benefits that the framework might bring, and the challenges that might be faced in implementing it in their own country.

Module 2 – First steps

Objectives

The objectives of Module 2 are to:

- Examine the first two stages of the P-IMA framework.
- Examine the content and process of compilation of the information dossier.
- Examine the alternative processes through which the choice set of SPS capacity-building options can be defined.

Handouts

For this module, the facilitator will need:

- Slides of Module 2 – DOWNLOAD HERE
- Aflandia case study – DOWNLOAD HERE
- Proforma capacity-building option sheets – DOWNLOAD HERE

Time required to deliver this module

60-90 minutes

Notes for the facilitator

SLIDE 1 - Module 2: First steps

Inform participants about the topic of the module.

SLIDE 2 – Ask participants if they have any questions or comments on what was covered in the previous module

Listen to the questions and/or comments, respond, and engage with participants.

SLIDE 3 - What are we doing now?

The focus of this second module is on the first two stages of the P-IMA framework. Thus, the compilation of the information dossier and the process by which the choice set, the portfolio of trade-related SPS capacity-building options, is defined.

SLIDE 4 -Stages to the P-IMA process

Here you can see the first two stages in context. Thus, having completed these two stages you will have pulled together existing information and prior assessments of SPS capacity, and identified a portfolio of trade-related SPS capacity-building needs through engagement with stakeholders.

SLIDES 5 to 7 - Before you get started

The inclination is to get started with applying the P-IMA framework as soon as you can. It is important, however, not to commence the first stage of the framework without having completed some important and necessary groundwork. Previous experience with the framework has shown how important this groundwork is!

Firstly, it is important to put in place the technical working group that will be doing the day-to-day work in applying the P-IMA framework (Slide 6). This technical working group should include subject specialists in food safety, animal health, plant health and trade. There should also be expertise in economic analysis. The technical working group should have a lead person who is responsible for managing the application of the P-IMA framework, coordination among members of the team and ensuring that agreed timelines are adhered to.

Beyond recruitment of the technical working group members, it is essential that all members have been provided with a mandate to put in the time required to undertake the data collection and analysis associated with the P-IMA framework. This may require that they are temporarily relieved of some other responsibilities. Furthermore, the resources required by the technical working team need to be secured, for example to purchase the software used for the prioritisation (D-Sight), data collection, organisation of workshops, etc.

Secondly, it is important to publicise the work of the technical working group before it commences to ensure that stakeholders and senior decision-makers within government and the private sector are informed that the P-IMA framework is being applied. The focus of communications should be on:

- What is being done? – the application of the P-IMA framework.
- Why it is being done? – to define priorities for SPS capacity-building related to trade.
- How will stakeholders be engaged and how often? – through workshops and one-on-one communications.
- When it will be completed? – the date that results will be available.
- How the results will be communicated to stakeholders – through a workshop, website, etc.

The aim of this communication is to ensure that key stakeholders and senior decision-makers are onboard with the process and are primed to engage.

SLIDE 8 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 9 - Stages to the P-IMA process

The first stage of applying the P-IMA framework is the compilation of an information dossier.

SLIDE 10 - Information dossier

The information dossier is a written report on prevailing trade related SPS issues and the related status of SPS capacity. Thus, it presents a concise assessment of the current situation and a summary of previous efforts to assess SPS-related trade problems.

Key components of the dossier:

- An overview of current trade in SPS-sensitive products; products for which there are potentially significant food safety, animal health and/or plant health hazards and for which there are related requirements with respect to current or potential export markets. This overview should highlight the main exports of SPS-sensitive products, trends in these exports, main destination markets, etc.
- An overview of previous and current instances where non-compliance with SPS requirements has occurred. This overview should identify the products and destination markets involved, impacts on trade, actions taken to address the issue, etc.
- An assessment of the current state of SPS capacity and evidence of significant weaknesses in capacity that hinder efforts to comply with trade related SPS requirements.
- An overview of current policy towards SPS capacity-building including coverage by key policy documents, financing from national government, private sector, donors, etc.

SLIDE 11 - Indicators of trade related SPS problems

In compiling the information dossier, it is important to explore a wide range of potential indicators of trade related SPS problems. Some of these indicators may be explicitly related to SPS issues (for example, data on border rejections due to non-compliance with food safety regulations), but others may be more general and only address SPS-related issues as a sub-set (for example, the results of surveys of the challenges faced by exporters).

In seeking indicators of trade related SPS problems, it is important to consult widely, both nationally and internationally. **At the country level,** there should be engagement with ministries, departments, and institutions responsible for trade, agriculture, health, consumer affairs, etc. Business and consumer organizations and academic researchers should also be consulted. Media reports can also be an important resource. **Internationally,** the databases and other resources of export market governments, international organizations (such as UNIDO, International Trade Centre (ITC), World Bank, OECD, etc.) and bilateral and multilateral donors can be critical resources. Again, media reports, in export markets and more widely, can be an important resource.

Some potential indicators are explicitly related to the status of SPS capacity. These might include the results of formal capacity evaluations (including the tools of the IPPC, OIE and WHO/FAO discussed in the first module). The results of more *ad hoc* and perhaps partial evaluations of SPS capacity are also relevant. Examples might include evaluations of laboratory infrastructure or implementation of HACCP-based hygiene controls in food processing.

A second set of indicators relate directly to compliance with trade related SPS requirements. These include the reports of inspections undertaken by export market government (for example, by the European Commission to assess compliance with EU food hygiene controls for agri-food products), the lists of approved importers maintained by some export market governments and reports of pest interceptions prior to export and/or at the port of import in export markets.

Thirdly, there are potentially a wide range of indicators that relate to patterns and trends of trade in agri-food products. A good starting point is data on the volume and value of exports that is typically available at a highly disaggregated

level.[8] A simple scan of how exports are evolving to pinpoint major disruptions or marked improvements in export performance can serve to highlight potential trade related SPS problems. More explicitly related to SPS issues, data on border rejections in key export markets are available. These data can provide both a summary of trends in border rejections and/or records of specific instances where a consignment has been rejected due to non-compliance with official SPS requirements. Records of specific actions taken by export market governments due to non-compliance with SPS requirements can also be consulted, including prohibitions on imports, mandatory prior notification and/or inspection requirements, etc.

It is also important to consult exporters, whether through formal surveys or informal consultations, to gather information on their experiences. This is especially relevant with respect to issues faced in complying with private standards that may not show up in official data and/or where compliance issues are reflected in the behaviour of commercial buyers in export markets. Finally, media reports, nationally and internationally, of current and/or future problems or changes in SPS requirements should be reviewed. The table presented on Slide 11 provides a summary of the three types of indicators:

Type	Examples
Capacity-based	Formal capacity evaluations *Ad hoc* capacity assessments
Compliance-based	Inspection reports Approved importer lists in export markets Border rejections in export markets Pest interception reports
Trade-based	Trade flow trends and disruptions Official restrictions/actions in export markets Reports of trade problems from exporters Exporter and/or importer interviews and surveys *Ad hoc* problem reports/questionnaires Media reports

It is important to recognize that this exercise is unlikely to provide a comprehensive picture of trade related SPS problems. Furthermore, at times, different indicators may present an inconsistent view of the major SPS problems and how these are evolving. Remember that the information dossier is only the starting point in the prioritisation exercise. In many ways, identifying gaps in knowledge and inconsistencies is one of the most useful functions of the exercise.

SLIDE 12 - Role of the information dossier

The role of the information dossier is to provide a summary of the current 'state of knowledge' with respect to trade related SPS problems and related capacity constraints. In so doing, the aim is to ensure that the prioritization process

[8] Data are available at the national level (typically from ministries of trade and/or national statistical services) and international databases including COMTRADE and the ITC.

is informed by existing knowledge and builds upon previous assessments of trade related SPS capacity. It is important that the information dossier, therefore, is not simply a factual record of the current 'state of knowledge', but also has an evaluative component which highlights gaps and/or weaknesses in previous analyses that the application of the P-IMA framework might address.

The information dossier also has the purpose of levelling the 'playing field' amongst stakeholders, ensuring that all are well-informed about the scale and nature of the issues related to trade related SPS capacity. Furthermore, dissemination of the document serves to highlight the transparency of the P-IMA process from the very first stage.

SLIDE 13 - Disseminating the information dossier

Once completed, the information dossier should be disseminated widely, amongst stakeholders and senior decision-makers within the public and private sectors. Furthermore, feedback on the information dossier should be both encouraged and facilitated, and the draft document revised accordingly. Once completed, the information dossier should be a document that is available publicly, for example on relevant government websites.

Disseminating the information dossier and obtaining feedback serves both to validate the document and to identify elements of the report that may require attention. Furthermore, it is the starting point in the process of stakeholder engagement, that is critical to the implementation of the P-IMA framework.

SLIDE 14 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 15 - Stages to the P-IMA process

The second stage of applying the P-IMA framework defines the choice set; the portfolio of trade-related SPS capacity-building needs that is to be prioritized.

SLIDE 16 - Basic framework structure

Referring to the basic structure of the P-IMA framework from the first module, this second stage identifies the Capacity-Building Option columns, here labelled Option 1 to Option 5. In reality, of course, there may well be far more than five!

SLIDE 17 - Definition of the choice set

Arguably, this stage of the P-IMA process is the most critical; it identifies the trade-related SPS capacity-building needs that will be considered by the prioritization process. It is important to remember that any options that are not in the choice set will be excluded from the prioritization. It is also important to remember that the choice set is simply a listing of capacity-building needs. At this stage there is no attempt to prioritize these needs; it does not matter which is identified first or which is identified by the largest number of people.

In defining the choice set, it is important to be as comprehensive and inclusive as possible. The distinction between 'major' and 'minor' options for investment in trade-related SPS capacity will be dealt with by later stages in the P-IMA process. Thus, the choice set should include both SPS requirements that are already presenting compliance issues, as well as requirements that are changing and that might present future problems. Furthermore, the focus should be not

only on existing exports (in terms of products and/or markets), but also exports that are emerging and/or that are likely to evolve in the short to medium term.

SLIDE 18 - Characteristics of the capacity-building options

Importantly, each of the capacity-building options relates to a specific need for the enhancement of SPS capacity. Furthermore, these needs relate to a specific SPS-related trade problem. This is a critical feature of the P-IMA framework. Thus, all the capacity-building options included in the prioritization exercise are need-related. The reasoning is that SPS capacity is only a means to an end, rather than being the end. Here the end is facilitating compliance with trade related SPS requirements.

There are two further characteristics of the trade-related SPS capacity-building options that are critical for the practical operationalization of the P-IMA framework. First, each of the options must be mutually exclusive, such that a separable relationship can be defined between each option and the associated costs and benefits. Second, each option must be sufficiently specific and clearly defined that the associated costs and benefits can be identified and quantified. For example, it will likely be very difficult to include an option such as 'updating national food law to facilitate exports of agri-food products' in a meaningful way. On the one hand, this option potentially impacts the entirety of agri-food exports. On the other, it is extremely difficult to define with any certainty the associated costs and benefits. Conversely, an option such as 'updating legal food safety requirements for fresh vegetable exports to the United States' is much more conducive to analysis; it is narrow and precise in terms of the action needed, product involved, and exports impacted.

SLIDE 19 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDES 20 to 24 - Identifying the capacity-building options in practice

Identification of the choice set – the portfolio of capacity-building needs that address trade-related SPS problems – involves a structured process of stakeholder engagement. We will soon come to the mechanics of this process.

To direct this process towards the identification of specific and mutually exclusive capacity-building options, it is guided by a precise question (Slide 20). Thus:

> What specific SPS-related problems does [*name of country*] face in exporting agricultural and food products to other countries?

Furthermore, each of the identified options is required to have four components (Slide 21):

- Product affected.
- SPS problem experienced.
- Market where SPS problem is experienced.
- SPS capacity-building reforms or investments that will address the problem.

To guide stakeholders, a series of capacity-building option sheets is used. One sheet is completed for each capacity-building option. There is no limit to the number of options that can be presented by any stakeholder. The only restriction is that all four components must be present for each capacity-building option that is put forward.

Practically, the choice set is defined through a structured process of stakeholder engagement (Slide 22). This can involve a face-to-face workshop or an online questionnaire:

Stakeholder workshop

- Stakeholders individually complete capacity-building option sheets.
- Complete one sheet per capacity-building option.
- Report back the sheets to workshop participants.
- Group consolidation of options.

On-line questionnaire

- Stakeholder information sessions.
- Stakeholders complete capacity-building option sheets remotely.
- Complete one sheet per capacity-building option.
- Options consolidated remotely.
- Consolidated options reported back to stakeholders for comments.

Either way, the participants in the exercise are asked to complete a series of capacity-building options sheets individually; in private and without consulting their colleagues. They are instructed that they can complete as many sheets as they wish, but that each must be fully completed. Note that the sheets are not labelled with the participant's name and so are not attributable.

Once all participants have completed this exercise, the individual sheets are consolidated. In the case of a face-to-face workshop, the sheets are shuffled and reported back individually to participants one-by-one in a plenary session. A list of options is compiled on flip charts, with the same options being grouped. In this way, a preliminary listing of capacity-building options is generated. Participants at the workshop are then given the opportunity to discuss the list, provide clarification and additional information, identify missing options, etc.

In the case of an online survey, the capacity-building option sheets is consolidated by the technical working group. The results are then reported back to participants through a second remote survey, that asks for comments.

A variety of factors might be considered in deciding which approach to employ to engage with stakeholders (Slide 23). These include:

- Number and diversity of stakeholders to be consulted.
- Geography, for example country size, diversity of stakeholders within the country, etc.
- Awareness and engagement with SPS issues by government and stakeholders.
- Factors that might impede the inclusion of stakeholders, such as access to internet, propensity to complete an online survey, etc.
- Cultural norms with respect to engagement with stakeholders.

Regardless of whether a face-to-face workshop or online survey is employed, this process should involve as wide a range of stakeholders with an interest in trade related SPS needs as possible (Slide 24). On the one hand, it is important at this early stage in the P-IMA process to have input from as many viewpoints and interests as possible. On the other, the legitimacy of the process relies on its openness to the participation of diverse stakeholders, and especially those that might have traditionally been disenfranchised. Thus, potential participants will likely include:

- Government official responsible for SPS issues, trade, etc.
- Private sector organisations.
- Key private sector exporters.

- Producer organizations.
- Consumer and other civil society organizations.
- Researchers.
- Donors.
- International organizations.

Of course, there may well be other stakeholder to include that are relevant to countries. The key guiding principle is to include rather than exclude!

SLIDE 25 - What options should be included?

A question that is often asked is, what should be included in the choice set of trade-related SPS capacity-building options? The key guiding principle here is anything and everything! It is important to remember that the aim of this stage of the process is to get capacity-building options 'on the table'. Any minor or superfluous options will be identified in later stages of the P-IMA process. Furthermore, this initial portfolio of capacity-building options will next be 'sifted' to exclude any items that are outside of the parameters of the prioritization exercise.

SLIDE 26 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 27 - The Aflandia case study

To demonstrate the practical use of the P-IMA framework, from now on a case study will be used. This case study relates to a fictitious country - Aflandia - that is facing several trade-related SPS problems. The case study includes all the information needed to use the P-IMA framework to prioritise the capacity-building needs of the country. We will be working through the case study during the remainder of this handbook, applying the P-IMA framework step-by-step. In so doing, we will mimic the application of the framework in practice.

Each participant will then work on a second case study individually, with support from the instructor. By the end of this process, each participant will be well equipped to use the P-IMA framework themselves in the real-world context of their own country.

The task for participants now is to define the choice set for the Aflandia case study; to identify the portfolio of trade-related SPS capacity-building options that are embedded in the case. In practice, these options would have been identified through a stakeholder consultation, whether through a face-to-face workshop or remote survey.

SLIDES 28 to 30 - What you need to do now

Remind participants of the key messages from the module:

- The first two stages of the P-IMA framework are the compilation of an information dossier and definition of the capacity-building options to be prioritized.
- The P-IMA framework provides a structured, open, and transparent way in which to engage with stakeholders to identify the country's trade-related SPS capacity-building needs.
- Critical to this process is the effective and inclusive engagement with stakeholders.

- At this stage of the analysis, the aim is to identify the capacity-building needs, it is not to begin prioritizing these needs!

Before the next module, each participant must review this module's slides and read the Aflandia case study to identify the trade-related SPS capacity-building options that it describes. To do this, ask participants to focus on the following question (Slide 29):

> What specific SPS-related problems does Aflandia face in exporting agricultural and food products to other countries?

Participants should be provided with:

- Aflandia case study
- Proforma capacity-building options sheets for the Aflandia case study

Each capacity-building option should be detailed on a separate capacity-building option sheet (Slide 30); proforma sheets are emailed to each participant along with the case study. Each participant should email their completed capacity-building option sheets to the instructor before the next module.

The instructor should review the capacity-building option sheets submitted by participants to identify any problems that were experienced in undertaking this process. These problems can be discussed during the next module.

SLIDE 31 - Pause and ask participants if they have any questions, comments, or thoughts

Module 3 – Reviewing the capacity-building options

Objectives

The objectives of Module 3 are to:

- Review the SPS capacity-building options in the Aflandia case study.
- Understand the process by which the initial portfolio of capacity-building options is reviewed.
- Understand why certain capacity-building options might be excluded from the portfolio of SPS capacity-building options.

Handouts

For this module, the facilitator will need:

- Slides of Module 3 – DOWNLOAD HERE
- Aflandia case study – DOWNLOAD HERE
- Proforma capacity-building option sheets – DOWNLOAD HERE

Time required to deliver this module

60-90 minutes

Notes for the facilitator

SLIDE 1 - Module 3: Reviewing the capacity-building options in the Aflandia case study

Inform participants about the topic of the module.

SLIDE 2 - Ask participants if they have any questions or comments on what was covered in the previous module

Listen to the questions and/or comments, respond, and engage with participants.

SLIDE 3 - What we are doing now?

The focus of this third module is on the choice set for the Aflandia case study; the portfolio of capacity-building options that are in the case study. Each participant will have completed a series of capacity-building option sheets individually and emailed these to the instructor. The instructor should have looked over these and be aware of how well this exercise was completed and where problems were experienced. Any issues should be addressed during this third module.

SLIDE 4 - Stages to the P-IMA process

To put things in context, we are now at stage 2 in the P-IMA process. Thus, the choice set for the Aflandia case study will be defined and the identified capacity-building options checked and 'sifted'.

Now, the capacity-building options will be reviewed one-by-one, in the order that each commodity appears in the case study. Note that this ordering in no way implies any prioritization of the identified capacity-building options.

SLIDE 5 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 6 - Aflatoxin testing for groundnuts

Groundnut exports, most of which are to the European Union (EU), are identified on Page 2 of the case study. The lack of testing capacity for aflatoxins are identified on Page 4. Importers in the EU undertake tests for aflatoxins and charge the cost to exporters in Aflandia. This option would establish accredited laboratory testing capacity in Aflandia.

SLIDE 7 - Hygiene controls for wild capture shrimp

Shrimp exports are identified on Page 2 of the case study. Around 90% of shrimp is exported to the EU, and 60% is wild capture. Weaknesses in hygiene controls in shrimp capture are identified on Page 5, specifically with respect to exports to the EU. This option involves the training of fishers and implementation of hygienic handling practices.

SLIDE 8 - Antibiotics controls for aquaculture shrimp

Shrimp exports are identified on Page 2 of the case study. Around 90% of shrimp is exported to the EU, and 40% is produced through aquaculture. Controls on the use of antibiotics in shrimp production are identified as an issue with exports to the EU on Page 5. This option invests in laboratory testing capacity and the implementation of good aquaculture practice.

SLIDE 9 - Pest status for pineapple

The potential to export pineapple to North Rinzandia is identified on Page 3 of the case study. Access to this new market is dependent on the production region in Aflandia is free of fruit fly (Page 5). This option would undertake a pest status survey to confirm that this region is indeed free of fruit fly.

SLIDE 10 - Residue monitoring for honey

The potential to export honey to the EU is described on Page 3, and specifically Germany and the UK (Page 5). To be approved to export to the EU, an approved residue monitoring plan must be put in place, as described on Pages 5-6.

SLIDE 11 - Pesticide controls for fresh vegetables

Existing exports of fresh vegetables to the EU are identified on Page 3. In the last two years, several consignments of fresh vegetables have been rejected at the EU border due to high levels of pesticide residues (Page 6). This option

would implement good agricultural practice (GAP) in fresh vegetable production by smallholders and a related certification programme (Page 6).

SLIDE 12 - Pest risk assessment for hot peppers

The potential for hot pepper exports to the United States is identified on Page 3-4. This will require that a pest risk assessment is undertaken by the US authorities, and Aflandia will need to collect the required data. This option involves surveillance for quarantine pests (Page 6).

SLIDE 13 - Establishing Foot and Mouth Disease-free area for beef

The potential to export beef to regional markets I described on Page 4. Currently, Aflandia has no areas that are free of Foot and Mouth Disease (FMD). This option would establish an FMD-free area and maintain a buffer zone around this area (Page 6).

SLIDE 14 - Aflatoxin controls for maize

Exports of maize to regional markets are described on Page 4. The fact that the price received by exporters is discounted due to high levels of aflatoxins and that if controls are implemented exports will expand is also described on Page 4. This option would implement improved production practices and controls (Pages 6 and 7).

SLIDE 15 - Pest treatment for mango

The potential to export mango to North Rinzandia is described on Page 4. This would require that controls on fruit fly are put in place. This option would install a hot water treatment facility for the treatment of mango prior to export.

SLIDE 16 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 17 - Trade-related capacity-building options for Aflandia

Slide 17 shows the choice set for the Aflandia case study so far; the list of trade-related SPS capacity-building options. Ask participants if they found any other capacity-building options.

SLIDE 18 – Other capacity-building options in the Aflandia case study

There are four other potential capacity-building options in the case study. However, we exclude these as they do not relate to compliance with trade related SPS requirements.

1. Enhanced quality controls for cinnamon exports to the US: Potential exports of organic cinnamon are described on Pages 2-3. The fact that exports have struggled and that there have been border rejections due to non-conformity with quality standards is described on Page 5. This option would involve the implementation of enhanced quality control procedures. **This option is excluded as it is not an SPS issues.**

2. Fair trade certification for nutmeg exports to the EU and US: Potential exports of organic nutmeg are described on Pages 2-3. This would require the implementation of Fair-Trade certification (Page 5). **This option is excluded as it is not an SPS issues.**

3. Implementation of GAP for fresh vegetables to meet requirements of domestic supermarkets: The growth in the domestic market for fresh vegetables is described on Page 3. However, the dominant domestic supermarket chain is requiring that producers implement good agricultural practice (GAP) (Page 6). **This option is an SPS issue but relates to domestic markets rather than trade and is excluded.**

4. Organic certification of honey for exports to the EU: The potential for honey exports to the EU is identified on Page 3, and especially Germany and the UK (Page 6). This option has already been identified and included in the choice set. However, **this option relates to organic certification, which is excluded as it is not an SPS issue.**

SLIDE 19 - Stages to the P-IMA process

The P-IMA process has a formal stage at which the preliminary portfolio of trade-related SPS capacity-building options is checked and options that do not fall within the purview of the analysis are excluded through a process of 'sifting'. It is through this process that these four excluded capacity-building options would have been identified and taken out of the choice set in Aflandia.

SLIDE 20 - 'Sifting' the choice set (Slide 20)

Several criteria are applied to the sifting process to exclude options that do not relate to compliance with trade related SPS requirements:

- Does the option relate to an SPS problem? In other words, are exports constrained by weaknesses in food safety, plant health or animal health capacity? If instead the option relates to a non-SPS issue, for example quality or labelling, it will be excluded.
- Does the option relate to trade? If instead the option relates to domestic markets, even if it is an SPS issue, it will be excluded.
- Does the option relate to a current trade related SPS problem? If instead the option relates to a historic problem that has been rectified and/or that has not been experienced for a significant time, it will be excluded.
- Is the option economically viable beyond the SPS issue identified? If there is evidence of wider issues that might constrain/prevent exports (for example, production costs, transport costs, lack of access to appropriate transport facilities, insufficient productive capacity, etc.), it will be excluded.

Note that all four of the excluded options in the Aflandia case study violate at least one of these conditions.

SLIDE 21 - Capacity-building option descriptions

Having finalized the choice set a description is needed of each of the trade-related SPS capacity-building options. This description should provide a concise overview of each of the options that is sufficient to communicate the substance of the option to a wider audience. This description will typically include:

- The SPS issues involved – what and why?
- The specific product impacted.
- The export market involved.

- Evidence of the impact of the problem on exports.
- Identified weaknesses in SPS capacity that are the cause of the problem.
- Proposed reforms and investments to address the identified weaknesses in SPS capacity.

Typically, each description is between half and one page in length. Importantly, these descriptions need to be written using language that is accessible to those who do not have a technical training in the respective SPS issue.

SLIDE 22 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 23 - Stages to the P-IMA process

We are now at the end of the second stage of the P-IMA process. We have reviewed the current state of knowledge on trade related SPS problems and needs and disseminated this amongst stakeholders. We have also engaged with stakeholders through a structured process to define the portfolio of trade-related SPS capacity-building options that we need to prioritize.

SLIDE 24 - What you need to do now

Remind participants of the key messages from the module:

- The P-IMA process enables a set of mutually exclusive capacity-building options to be defined.
- The 'long list' of options needs to be checked to ensure that all options relate to trade-related SPS measures.

Participants must be instructed to have a look at this module again to make sure they understand what was covered.

Before the next module, participants should think about the criteria that might be used to prioritise the capacity-building options that have been identified in the Aflandia case study. There are many factors to consider, and it would be good if they could give some thought to the criteria they might use.

Module 4 – Defining the decision criteria and weights

Objectives

The objectives of Module 4 are to:

- Explore what decision criteria might be used for the prioritization and how these might be defined.
- Explore how weights can be assigned to the decision criteria.
- Lay down the decision criteria and weights to be used in the analysis of the Aflandia case study.

Handouts

For this module, the facilitator will need:

- Slides of Module 4 – DOWNLOAD HERE
- Aflandia case study decision criteria and weights – DOWNLOAD HERE

Time required to deliver this module

60-90 minutes

Notes for the facilitator

SLIDE 1 - Module 4: Defining the decision criteria and weights

Inform participants about the topic of the module.

SLIDE 2 – Ask participants if they have any questions or comments on what was covered in the previous module

Listen to the questions and/or comments, respond, and engage with participants.

SLIDE 3 - What are we doing now?

In this fourth module, the focus is on the decision criteria and weights that are employed in the prioritization process.

SLIDE 4 - Stages to the P-IMA process

Thus, we are now at the third stage of the P-IMA process.

SLIDE 5 - Basic framework structure

Looking back to the basic structure of the P-IMA framework that was seen in the first module, this stage of the process defines the rows of the spreadsheet; in this example, the criteria are cost, impact on exports, health impact and poverty impact. This stage also defines the second column of the framework; the weights that will be attached to each of the choice criteria.

SLIDES 6 and 7 - Defining the decision criteria

The choice of decision criteria is arguably the most critical element of the P-IMA framework. The decision criteria capture the potential impacts of trade-related SPS capacity-building that are considered relevant in deciding which capacity-building options should be prioritized ahead of others. Thus, the set of criteria should capture all the costs and benefits that are considered pertinent. Note that any criteria that are not included will have no impact on the prioritization!

In defining the decision criteria to be used, the question that is being addressed is as follows (Slide 7):

> Which criteria should be used to determine which trade-related SPS capacity-building options should be given greater or less priority?

Importantly, there are no rights or wrong decisions as to the decision criteria to include. This is a decision that is made based on the specific country context, prevailing development priorities, etc. Thus, countries can and do select different decision criteria.

Furthermore, the selection of decision criteria is not ‘carved in stone’. Criteria can be added or taken away at any time, and a new prioritization of the trade-related SPS capacity-building options estimated.

SLIDES 8 and 9 - Possible decision criteria

A range of possible criteria that might be employed to prioritize the capacity-building options that are in the choice set. Collectively, these criteria encompass:

- Costs of implementing each capacity-building options:
  - Up-front investment
  - Ongoing costs
- Difficulty of implementing and sustainability:
  - Difficulty of implementation
  - Sustainability of capacity
- Trade impacts of the option:
  - Growth/avoided losses in value of exports.
  - Diversification of exports
  - International reputation
  - Capacity to prevent future problems.
- Domestic spill overs:
  - Agricultural productivity
  - Public health
  - Environmental protection
- Social impacts:
  - Level of poverty
  - Gender impact
  - Impact on marginalized groups

This listing is meant to be indicative, and to act as the starting point for conversations over the definition of the criteria to be used. It is does not suggest that these criteria are the right ones to use, or that these are more important than any other criteria.

SLIDE 10 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDES 11 and 12 - Decision weights

Of course, it may be that not all the chosen decision criteria are of equal importance in deciding which of the capacity-building options to prioritize. For this reason, a weight is applied to each decision criterion that indicates its relative importance. If no weights are applied, all the decision criteria are treated as equally important.

In defining the decision weights, the question that is being addressed is as follows (Slide 12):

> Which weight should be given to each of the decision criteria in determining which trade-related SPS capacity-building options should be given greater or less priority?

Again, there are no right or wrong decisions over the weights to be applied; this will differ between countries, for example according to development priorities, and likely also over time.

As with the decision criteria, the weights are not 'carved in stone'. At any time, the weights can be changed, and a new prioritization estimated. It is also possible to derive a series of prioritizations, each based on a different set of weights. For example, it might be that there are different views on the relative importance of criteria within government (for example, between the ministry responsible for agriculture and the ministry responsible for trade), or between different stakeholder groups. In such situations, estimating a series of prioritizations can be helpful in determining whether differing views on the weights that should be attached to the decision criteria makes a big difference in terms of the capacity-building options that are ranked as high or low priority.

SLIDE 13 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 14 - Who should define the decision criteria and weights?

There are no 'hard and fast' rules as to who should define the decision criteria and weights that are employed in the P-IMA framework. At the same time, given that different stakeholders or decision-makers may have divergent views on the criteria that should drive the prioritization and/or the weight that should be assigned to criteria, this is a key decision.

On the one hand, consulting a wide range of stakeholders in selecting the decision criteria and weights will ensure that diverse viewpoints are reflecting in the prioritisation. On the other, utilising decision criteria and weights that reflect the views of those who are charged with making investments decisions with respect to trade-related SPS capacity-building,

be they public administration/policy officials or political leaders, will likely mean that the output of the P-IMA process has more impact.

SLIDES 15 to 18 - Defining the decision criteria and weights in practice

Having decided who will define the decision criteria and weights, a process needs to be laid out by which these parameters will be specified. Unless the decision criteria and weights are to be defined by a single individual, there needs to be a way to get input from multiple individuals and to reconcile differences of opinion as to the decision criteria to be used and/or the weight that is assigned to these.

In situations where individuals can be brought together face-to-face and where the number of individuals involved is limited in number, the decision criteria and weight can be defined by a process of structured group discussion. There are numerous group elicitation techniques available to facilitate this process. For example, the nominal group technique (NGT) involves the following process (Slide 16)[9]:

1. Individuals generate their own ideas with respect to the decision criteria to be employed.
2. The ideas of everyone are shared within the group, for example by posting them on a flip chart.
3. There is a group discussion through which the individual ideas are clarified and reconciled.
4. Individuals vote on the reconcile list of decision criteria by applying scores that sum to 100% to all items on the list. This score represents the decision weight.
5. The voting scores are tallied. Any item with a score of zero is excluded. A threshold might be employed, under which items are excluded. Otherwise, the list of decision criteria and the associated weights (normalised as necessary such that they sum to 100%) is then employed in the P-IMA framework.

Alternatively, and if it is not possible to bring individuals together and/or the number of individuals is too large, the decision criteria and weights can be defined remotely using a survey-based approach. Again, there are various ways in which to do this.

One option is to employ a one-off survey whereby individuals list out the decision criteria they consider should be employed and then assign a weight out of 100% to each item on their list (Slide 17). The criteria and scores from respondents to the survey are then reconciled and tallied. A threshold might be employed to determine which decision criteria are included/excluded.

An alternative approach which aims to generate consensus amongst the individuals who are defining the decision criteria and weights, is the Delphi method (Slide 18). In many ways, the Delphi method is equivalent to the NGT described above. It involves a series of remote surveys as follows:

1. In the first survey, individuals are asked to define the decision criteria they consider should be employed in the P-IMA framework.
2. The responses of the individual respondents are tallied, and a list compiled.
3. In the second survey, the tallied list is sent to respondents, who are asked to apply weights to each item that sum to 100%.
4. The responses of the individual respondents are tallied and a list with the mean weight for each compiled.

[9] For further information see, for example: https://sswm.info/sites/default/files/reference_attachments/DUNHAM%201998%20Nominal%20Group%20Technique%20-%20A%20Users'%20Guide.pdf.

5. In the third survey, respondents are presented with the tallied list and weights and asked again to apply weights to each item that sum to 100%.
6. The responses of the individual respondents from the third survey are tallied and a list with the mean weight for each compiled.
7. A final list of decision criteria and weights is derived. Any item with a score of zero is excluded. A threshold might be employed, under which items are excluded.

SLIDE 19 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 20 - Decision criteria and weights for the Aflandia case study

We are going to assume that this process has been used in Aflandia, and that the decision criteria and weights presented in the table on Slide 20 have been derived. The table shows eight criteria, with weights that sum to 100%. Most important (with a weight of 21%) is the trade impact of each of the trade-related SPS capacity-building options. Least important (with a weight of 7%) is the impact on local environmental protection.

Table on Slide 20: Decision criteria and weights for the Aflandia case study

Criterion	Weight
Up-front investment	15
On-going costs	9
Impact on annual exports	21
Impact on domestic agricultural productivity	13
Impact on domestic public health	11
Impact on local environmental protection	7
Impact on poverty	14
Impact on vulnerable groups	10

SLIDES 21 and 22 - Stages to the P-IMA process and basic framework structure

We have now completed the third stage of the P-IMA process and are in a position where we can lay out the basic structure of the prioritisation model like we have seen previously (Slide 22).

SLIDE 23 - The Aflandia worksheet

The table on Slide 23 details the worksheet for the Aflandia case study. It has eight rows, corresponding to the weight decision criteria we have just seen. There are weights assigned to each in the second column. There are 10 option columns that correspond to the 10 trade-related SPS capacity-building options that were discussed in the third module.

The next task is to fill in the cell in this worksheet; the value for each capacity-building option for each decision criterion. This is the next stage of the P-IMA process, which is the focus of the next five modules.

SLIDE 24 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 25 - What you need to do now

Remind participants of the key messages of the module:

- The third stage of the P-IMA framework involves the definition of the criteria to be used to prioritize the capacity-building options, and the weight that should be assigned to each criterion.
- Having defined the decision criteria and weights, we now have all dimensions of the prioritization worksheet.

Encourage participants to look over the module again, and then take a rest!

Module 5 – Compiling the information cards

Objectives

The objectives of Module 5 are to:

- Explore the role and structure of the information cards.
- Look at the ways in which the decision criteria can be measured.
- Look at the procedure by which the data needed for the information cards is gathered.

Handouts

For this module, the facilitator will need:

- Slides of Module 5 – DOWNLOAD HERE
- Aflandia case study – DOWNLOAD HERE
- Proforma information cards for Aflandia case study – DOWNLOAD HERE
- Aflandia case study decision criteria and weights – DOWNLOAD HERE
- Aflandia case study decision criteria measurement – DOWNLOAD HERE

Time required to deliver this module

60-90 minutes

Notes for the facilitator

SLIDE 1 - Module 5: Compiling the information cards

Inform participants about the topic of the module.

SLIDE 2 - Ask participants if they have any questions or comments on what was covered in the previous module

Listen to the questions and/or comments, respond, and engage with participants.

SLIDE 3 - What are we doing now?

The focus of this fifth module is the information cards and how these are compiled. Today and over the next four modules we will then be putting together the 10 information sheets for the Aflandia case study.

SLIDE 4 - Stage to the P-IMA process

We are now at the fourth stage of the P-IMA process.

SLIDE 5 - The Aflandia worksheet

Each of the information cards corresponds to one option column of the Aflandia worksheet. For example, the information sheet for Aflatoxin Controls for Groundnuts provides estimates of the measures for each of the eight decision criteria for that option.

SLIDE 6 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 7 - Compilation of information cards

The information cards bring into one place the data corresponding to the decision criteria for each of the trade-related SPS capacity-building options. There is one information card for each option in the choice set.

The information card has three elements:

- Quantitative estimate of the impact of the capacity-building option with respect to each decision criterion.
- Description of how this estimate was derived including assumptions made, sources of data, key elements of the calculation, etc.
- Indicator of confidence in the estimate.

SLIDE 8 - Proforma information card for Aflandia case study

Slide 8 shows the proforma information card for the Aflandia case study. There will be 10 of these cards, each corresponding to one of the 10 trade-related SPS capacity-building options in the choice set.

SLIDE 9 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 10 - Sources of information

Compiling the information sheets can be a significant undertaking, especially where limited prior analysis has been undertaken of the respective capacity-building options. To minimize the time and resources expended in this process, it is important to make maximize use of existing information.

Where prior assessments have been undertaken of the costs and/or impacts of some or all the trade-related SPS capacity-building options, these should be utilized. Of course, these may need updating, for example if they were concluded at some time in the past, and/or extended if not all the costs and benefits encompassed in the decision criteria were included in the assessment.

Another potential source of information is prior assessments of related (but not the same) SPS capacity-building options, for example, that apply to other products or sectors (e.g., the option being considered relates to mango but there is a prior assessment of pineapple), or a related SPS issue (e.g., a different plant pest). There might also be prior assessments of the same or a related SPS capacity-building option in another country, the results of which can be extrapolated, with due adjustment.

Almost always, there is a need to gather new information from stakeholders with expertise and experience in the respective trade-related capacity-building option and/or the respective product. In identifying and consulting these stakeholders, full use should be made of existing relations and networks between the public and private sectors. Stakeholders can be consulted on an *ad hoc* basis, often through one-on-one communication, structured consultations (for example, a call for information through post or email) and/or online, telephone or postal surveys.

Where there is a lack of experience with a capacity-building option locally, international experts and/or stakeholders may need to be consulted, including SPS officials in other countries and international organizations, researchers, and the private sector. This can be undertaken in an *ad hoc* manner, or through structured consultations and/or surveys.

If all else fails, the compilation of the information cards may need to rely on educated guesses. It is important that such estimates have a clear rationale and reasoning, and that these are laid out in the information card. Confidence in such estimates will likely be quite low, and they need to be open to scrutiny by stakeholders and decision- makers.

SLIDE 11 - Working principles

As we work through the Aflandia case study, the procedures through which information is assembled and analysed will become clearer. However, it is important at the outset to lay out some key guiding principles:

- The analysis is based on plausible scenarios as to what is likely to happen (or not happen) if each of the capacity-building options is implemented: This requires the analyst to think through the consequences of making the required investment, recognizing that there may be uncertainty over what might happen and/or alternative scenarios.

- Imperfect information is better than no information: The implication of an incomplete information card is that the respective trade-related capacity-building option will need to be excluded from the analysis. Furthermore, the information in any of the information cards can be revisited once the initial prioritization has been estimated, further information becomes available, etc.

- Use the best information available: Always seek out the most reliable and comprehensive information available, rather than information that is more immediately to hand and/or that has been used in the past.

- Measure each decision criterion as best you can: We will see that a range of metrics can be employed to measure a particular decision criterion. Often it is not possible to measure a criterion in the manner that is most desired because of limitations in the available data. The aim should always be to measure the criterion in the best way possible, meaning that achieves the greatest and most reliable level of quantification.

- Relative not absolute values matter: Whilst the analysis should aim for the highest level of quantification it is important to recognize that, in deriving the prioritization, the capacity-building options are compared based on the relative value of each of the decision criteria. Thus, it is only necessary to estimate the costs and impacts of each of the capacity-building options in broad quantitative terms.

- Need to define a common time horizon for the analysis: Different capacity-building options may take shorter or longer periods of time to be implemented and/or for impacts to evolve. It is suggested that a period of **five years** be applied in the analysis. Given this relatively short period, discounting is generally not needed.[10]

SLIDE 12 - What measurements to use

The decision criteria can be measured in a variety of ways, depending on the available data and level of certainty over the plausible impacts of the trade-related SPS capacity-building options. One of the key advantages of the P-IMA framework is that it is possible to measure each decision criterion in different ways, allowing for the fact that there may be better information available with respect to some of the decision criteria, and weaker information for others. However, remember one of the working principles that has just been discussed; always measure each decision criterion in the best way possible. Finally, remember that the same metric needs to be applied consistently for each decision criterion across all the capacity-building options. This means that the metric to be used will always be driven by the capacity-building option for which the available information is weakest!

The most desirable way in which to measure a decision criterion is using a continuous scale; that is in terms of absolute values and/or magnitude of change. For example, the estimated monetary cost of the up-front investment incurred with a capacity-building options (in US$ or local currency). Likewise, the percentage change in the annual value of exports.

Where continuous measurement is not possible, use of a discrete scale should be considered. For example, the number of small farmers that is impacted by the capacity-building option. Note that a discrete scale does not permit fractional units.

Where data are weaker, it may be necessary to use ordinal scales to measure a decision criterion. For example, a scale from ‘large impact’ (2), through ‘small impact (1) to ‘no impact’ (0). If such an approach is employed, effort should be made to use a more rather than less detailed scale. Thus, a seven-point scale will be more sensitive at capturing differences between the capacity-building options than a three-point scale.

Finally, where it is not possible to get any sense of the scale of impact of all or some of the capacity-building options, a nominal scale will need to be used. Such a scale simply indicates whether a particular capacity-building option will or will not bring about a particular impact, for example access to a new market or increase exports in ‘yes’ or ‘no’ terms. The table on Slide 12 summarises these measures:

[10] The process of discounting is used by economists to take account of the fact that the flow of costs and benefits associated with a particular investment may take play at different points in time. Discounting is used to reflect the fact that we tend to put a lesser value on costs and benefits as these occur longer into the future.

Type	Description	Example
Continuous	Absolute value and/or magnitude of change	Monetary value of up-front investment ($) Percentage change in annual value of exports (%)
Discrete	Number	Number of small farmers impacted
Ordinal	Scaling	2 = 'Large impact' 1 = Small impact' 0 = 'No impact'
Nominal	Yes/No	Access to new market Increase in exports

SLIDE 13 - An example – measuring the impact on exports

To illustrate, this is the example of a decision criterion that relates to the impact of trade-related capacity-building options on exports.

In the most restrictive situations, it might only be possible to ascertain whether some or all of the options do or do not increase exports. Thus, 0/1 scale will need to be used, where 0 corresponds to 'no' and 1 to 'yes'.

Where it is possible to get some sense of the scale of impact, but not to quantify this with any degree of precisions, a multi-item scale might be used. For example, a 5-point scale from 'minimal impact' (1) to 'significant impact' (5) or 'large reduction' (-2) to 'large increase' (+2).

If it possible to estimate the scale of impact of the capacity-building options on exports, but only with a degree of uncertainty, it might be necessary to make measurements in terms of monetary intervals. Thus, for example, 'increase in exports of more than $0 but less than $1 million' (0), 'increase in exports of $1 million or more but less than $5 million' (2), etc.

The most desirable way in which to measure the impact of each of the capacity-building options on exports is using a continuous scale. Thus, an increase of $9.8 million or an increase of 10%.

SLIDE 14 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 15 - Mozambique – measurements of decision criteria

This slide shows the actual metrics used in one of the first applications of the P-IMA framework, in Mozambique. In this application, eight decision criteria were selected. The way in which each of these criteria was measured is as follows.

The up-front investment and impact on exports (in terms of changes in the annual value of exports) was measured in monetary terms (in $).

The on-going costs of maintaining and operating the enhanced SPS capacity was measured as a percent (%) of the annual value of exports.

The domestic spill overs, in terms of agricultural/fisheries productivity, public health and local environmental protection, were measured on a five-point scale from 'major reduction' (-2) to 'major improvement' (+2). Zero corresponded to 'no impact'.

Impacts of each of the capacity-building options were measured on a five-point scale from 'significant negative impact' (-2) to significant positive impact' (+2). Zero corresponded to 'no impact'.

Finally, the impact on vulnerable groups on four distinct groups was measured on a five-point scale from 'significant negative impact' (-2) to significant positive impact' (+2). Zero corresponded to 'no impact'. These groups were: 1) women; 2) children; 3) vulnerable areas; and 4) smallholders/artisanal fishers. These four individual scales were then aggregated to give a 17-point scale from -8 (where the impact on all four of the groups was significantly negative) to +8 (where the impact on all four of the groups was significantly positive).

SLIDE 16 - Judging the confidence of the estimates

Each information card includes an indicator of the level of confidence in each of the estimates from 'low' to 'high'. This is designed to act as a 'red flag' for estimates over which there is weak confidence. Thus, measures for which confidence is low (and to a lesser extent medium) need to be double-checked and will be the focus of attention when the first prioritization is validated. For example, if a capacity-building option for which there is low confidence in the measurement of one or more of the decision criteria is ranked as high priority, it will be important to look again at the information card and see if more robust estimates can be derived.

These indicators of confidence are very much judgements. Key factors to be taken into account will include the degree of confidence in the likely impacts of the respective capacity-building option (and thus the impacts that are assumed in compiling the information sheet) and the amount and quality of data available to quantify this impact.

SLIDE 17 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 18 - Mozambique – Hygiene controls for crustacean exports

This slide shows one of the completed information cards for Mozambique. It relates to an option that involved improvements to hygiene controls for crustacean exports to the EU. Inform participants that they will compile sheets just like this for each of the 10 trade-related capacity-building options in the Aflandia case study.

SLIDE 19 - Importance of information cards

The information cards provide the most critical inputs; they fuel the prioritization process. Thus, the rigour and reliability of the prioritization of trade-related SPS capacity-building options that emerges from the P-IMA process will depend on how well the information cards are compiled.

Importantly, the information cards are also critical to the transparency of the P-IMA process. Thus, they indicate the estimated costs and impacts of every capacity-building option. The information cards also report how these estimates were derived and how confident the analyst is in them. Anyone who questions the prioritization can look to the information cards to see if they agree with the data that was used.

The information cards also, therefore, facilitate discourses between the analysts, stakeholders, and decision-makers over the prioritization. On the one hand, the information cards ensure that the analysts can defend their analysis. On the other, stakeholders and/or decision-makers that question the prioritization must be able to highlight errors in the information cards and be able to provide plausible alternative measures where the existing estimates are claimed to be suspect.

SLIDE 20 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 21 - Decision criteria measurement for Aflandia case study

This Slide shows the metrics that will be used for the Aflandia case study. The metrics have been defined by looking at the level of uncertainty over the impacts of each of the 10 trade-related capacity-building options and the quality of the available data. A combination of continuous and ordinal scales is employed.

You should keep these metrics by your side as you work on the information sheets for each of the capacity-building options and as we discuss these in the online modules.

SLIDE 22 - Aflandia trade-related SPS capacity-building options

As a reminder, there are the 10 trade-related capacity-building options in the Aflandia case study. They are ordered here according to the order that we will be compiling the respective information sheet:

1. Hygiene controls for wild capture shrimp.
2. Pest status for pineapple.
3. Residue monitoring for honey.
4. Pesticide controls for fresh produce.
5. Pest risk assessment for hot peppers.
6. Aflatoxin controls for maize.
7. FMD-free area for beef.
8. Pest treatment for mango.
9. Antibiotic controls for aquaculture shrimp.
10. Aflatoxin testing for groundnuts.

SLIDE 23 - Aflandia proforma information card

Remind participants about the proforma information card for the Aflandia case study. Inform them that over the next four modules they will be completing one of these cards for each of the 10 trade-related SPS capacity-building options.

SLIDE 24 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 25 - What you need to do now

Remind the participants of the key messages of the module:

- For each of the capacity-building options in the analysis we need to compile an information card.
- The information card brings together all the measures for the decision criteria, detailing how these measures were derived and how confident we are in each of these measures.
- You will be learning how to compile the information cards through the example of the Aflandia case study.

Ask them to look over this module again to make sure they understand fully the basic principles behind the compilation of the information cards and the metrics that are going to be used in the analysis of the Aflandia case study. Also, ask them to re-read the Aflandia case study itself.

The major task now is to draft the information card for the first trade-related capacity-building option, namely Hygiene Controls for Wild Capture Shrimp. If participants have any questions, they should email the instructor.

Distribute to participants:

- Proforma information sheet for the Aflandia case study
- Aflandia decision criteria and weights sheet
- Aflandia case study decision criteria measurement sheet

Once participants have drafted the information card, they should email it to the instructor.

Module 6 – Information card for Aflandia Capacity-Building Option 1

Objectives

The objective of Module 6 is to:

- Begin exploring the process of assembling the information cards.
- Assemble the information card for Capacity-Building Option 1 from the Aflandia case study.

Handouts

For this module, the facilitator will need:

- Slides of Module 6 – DOWNLOAD HERE
- Aflandia case study – DOWNLOAD HERE
- Proforma information cards for Aflandia case study – DOWNLOAD HERE
- Aflandia case study decision criteria and weights – DOWNLOAD HERE
- Aflandia case study decision criteria measurement – DOWNLOAD HERE

Time required to deliver this module

60-90 minutes

Notes for the facilitator

SLIDE 1 - Module 6: Aflandia information card for Capacity-Building Option 1

Inform participants about the topic of the module.

SLIDE 2 – Ask participants if they have any questions or comments on what was covered in the previous module

Listen to the questions and/or comments, respond, and engage with participants.

SLIDE 3 - What we are doing now

This sixth module provides the first opportunity to compile an information card. This will be undertaken by looking at one of the information cards for the 10 capacity-building options in the Aflandia case study.

SLIDE 4 - Stages to the P-IMA process

A reminder, that we are at Stage 4 in the P-IMA process. As you will see, this is the most time and effort-intensive part of the process. Indeed, typically more than half of the time involved in applying the entire P-IMA framework is devoted to the compilation of the information cards.

SLIDE 5 - Aflandia trade related SPS capacity options

This Slide presents the 10 capacity-building options in the Aflandia case study. Over the next four modules we will be compiling the information cards for all these options. We will start by compiling the information card for the first capacity-building option, namely Hygiene Controls for Wild Capture Shrimp.

SLIDE 6 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 7 - Aflandia worksheet

A reminder, that we have compiled the basic framework of the worksheet for the Aflandia case study. By compiling the information cards, we are putting together the data needed to complete this worksheet.

SLIDE 8 - Decision criteria measurement for the Aflandia case study

A further reminder that these are the metrics we are going to use in compiling the information cards. You should keep this by your side as you work on the information cards yourself and we discuss them in the online modules.

SLIDE 9 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDES 10 to 12 - Impact of the capacity-building option

The fundamental questions that are asked in compiling the information cards is (Slide 10):

> What is likely to happen or not happen if the respective capacity-building option is implemented?

In answering this question, the participants must lay out the alternative plausible scenarios and determine which is most likely to happen.

Thus, each of the decision criteria needs to be taken in turn, and a comparison made between the ‘state of play’ if the capacity-building option is pursued and the ‘state of play’ if the capacity-building option is not pursued (Slide 11). For example, the value of exports (by the end of the five-year time horizon that is applied in the analysis), if the respective trade-related SPS capacity-building is pursued, is compared with the likely value of exports if the option is not pursued.

Importantly, it cannot be assumed that the status quo will prevail if the capacity-building option is not pursued. Thus, the impact of a capacity-building option can be to create a positive opportunity, for example to access a new export market and/or to expand exports of a particular agri-food product (Slide 12). Alternatively, however, it could be that a capacity-building option allows a potential loss to be averted, for example by preventing the loss of access to an existing export market.

SLIDE 13 - Time horizon for the costs and impacts of capacity-building options

To assess the costs and impacts of each capacity-building option in a consistent and comparable manner, a common time horizon needs to be defined. In so doing, it is important to recognize that the place in time when the various costs and impacts of a particular capacity-building option are realized might differ significantly. Thus, the time horizon should be defined according to the option that takes the longest time to implement and for the full impacts to be realized. In most applications of the P-IMA framework to date, a time horizon of fine years has been employed.

The costs and impacts of each capacity-building option should be assessed at the end of this time horizon; thus, if a time horizon of five years is employed, these should be estimated in Year 5. In so doing, account is taken of the fact that some options may take time to be fully implemented and for any impacts to flow.

In cases where costs and financial returns flow over time, and are spaced unevenly over time, economists often calculate the net present value (NPV) of these flows using discounting. Such calculations aim to address the fact that, everything else being equal, there is a preference for costs that are incurred further into the future and/or benefits that flow sooner rather than later. To simplify the use of the P-IMA framework and reflecting the fact that a five-year time horizon is quite short, generally discounting is not employed.

SLIDE 14 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 15 - Hygiene controls for wild capture shrimp

Now let's turn to the first trade-related capacity-building option in the Aflandia case study, the upgrading of hygiene control for exports of wild capture shrimp to the EU. We will be looking at each of the decision criteria in turn, using the metrics we have just seen.

First, the up-front investment, which is measured in monetary amounts. The case study tells us that the required investments are fisher training and the provision of plastic storage boxes at a cost of $55,000. Presumably, we can have high confidence in this estimate as a specific amount is provided.

Next is the ongoing cost, which is also measured in monetary amounts. The case tells us that the annual cost of ensuring that fishers maintain the improved hygiene practices is $15,000 per year. Again, presumably we can have high confidence in this estimate given a specific amount is provided.

Often, the impact of a capacity-building option on exports is one of the most difficult decision criteria to quantify. Whilst an estimate of $13 million per year is provided in the information card, there are several plausible scenarios with respect to how the value of exports will differ depending on whether this capacity-building option is or is not pursued. This

estimate is based on the scenario that is considered most likely to occur. Of course, there is some uncertainty here, and so a confidence level of medium is applied.

SLIDES 16 to 19 - Impact on exports- Plausible scenarios

There are four most plausible scenarios with respect to the impact of upgrading hygiene controls for wild capture shrimp on the annual value of exports. Remember that the European Commission had undertaken inspections and raised concerns about hygiene controls in the wild capture shrimp fishery. Thus, the impact of this option on exports is dependent on the action the EU is likely to take given the response by Aflandia.

One plausible scenario is that the EU does nothing (Slide 16), in which case exports will be unaffected by this option. Thus, the impact of the option is zero.

If the EU was to impose restrictions if Aflandia did not act, the impact of this capacity-building option is the avoided loss of exports. Thus, in evaluating the impact of the option on the value of exports, we need to consider what is likely to happen if access to the EU market is lost.

One plausible scenario is that the EU imposes restrictions and other countries respond by doing the same, presumably because the EU's actions raise concerns about the safety of wild capture shrimp from Aflandia (Slide 17). Under this scenario, the capacity-building option avoids the loss of all wild capture shrimp exports. The case study indicates that, of shrimp exports of $60 million per year, 60% are wild capture. This gives annual exports of $36 million. The impact of this capacity-building option is thus avoiding this loss of $36 million.

If the EU was to impose restrictions, but other countries did not follow suit, exports to the EU would be lost (Slide 18). We are told that 90% of shrimp exports are to the EU. Thus, the loss would by 90% of $36 million (see above), which is $32.4 million. Thus, the impact of the option would be to avoid a loss of $32.4 million exports annually.

The above scenario assumes that Aflandia would be unable to divert any of the exports it would have shipped to the EU to other markets. This is probably unrealistic. A more plausible scenario is that the shrimp is instead exported to other markets (Slide 19). The case study states that these markets pay a lower price; the EU pays a price premium of 40%. Thus, the avoided loss is $32.4 million x 40% = $13 million.

The final of these four scenarios is considered most plausible and is used in calculating the impact of upgrading hygiene controls for wild capture shrimp on annual exports. However, there remains uncertainty over the scenario that would play out, and so a confidence level of medium is applied.

SLIDE 20 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 21 - Hygiene controls for wild capture shrimp

The next three decision criteria relate to domestic spill overs on: 1) agricultural/fisheries productivity; domestic public health; and 3) environmental protection. All are measured on a five-point scale from 'large negative impact' (-2) to 'large positive impact' (+2). A degree of judgment is needed in assigning values to these three decision criteria and as no specific information is provided in the case study.

Thus, it is judged that there will a relatively minor impact on agricultural/fisheries productivity due to reduced wastage and spoilage of shrimp on fishing boxes. It is a plausible assumption that better hygiene controls, including the use of plastic boxes, will reduce spoilage as well as improved food safety. A medium level of confidence is associated with this estimate.

There is judged to be minimal impact on domestic public health and environmental protection. A medium level of confidence is associated with these estimates.

SLIDE 22 - Impact on domestic public health – Plausible scenarios

Taking the impact on domestic public health as an example, there are three plausible scenarios.

First, the value chain for exports is totally separate from the value chain to domestic markets. For example, fishing for export is undertaken by different fishing vessels. In this case, improved hygiene controls in the export value chain will have no impact on fish supplied to domestic markets. This is the assumption made in the information card.

Alternatively, export and domestic markets might be supplied by the same supply chain, including the same fishing vessels. In this case, improvements in hygiene controls aimed at exports may have the impact of improving hygiene controls to all markets, bringing improvements in domestic public health.

A final scenario is based on the possibility that products rejected from the supply chain to exports, because of enhanced checks as part of more rigorous hygiene controls, are diverted to domestic markets. This scenario could reduce the safety of fish in domestic markets, having a negative impact on public health.

SLIDE 23 - Hygiene controls for wild capture shrimp

Turning finally to the social impacts of enhanced hygiene controls for wild capture shrimp: 1) poverty impacts; and 2) impact on vulnerable groups. Again, considerable judgement is needed to derive measures for these two decision criteria, based on the limited information that is provided in the case.

The poverty impacts are measured on a five-point scale from ‘large negative’ (-2) to ‘large positive’ (+2). The case study indicates that 30,000 poor fishers are engaged in the value chain. Furthermore, the loss of exports is over 20% ($13 million of $60 million) is significant. Thus, a score of +2 is applied. Given that the case study specifies the number of fishers potentially impacted, we can probably have high confidence in this estimate.

The impact on four vulnerable groups is assessed: 1) marginal areas; 2) women; 3) children; and 4) smallholders producers/fishers. The impact on each is measured on a five-point scale from ‘large negative’ (-2) to ‘large positive’ (+2). The case study indicates that the wild capture fishery is situated far along the coast from the capital and has few other income opportunities. Thus, a score of +2 is assigned to impact on marginal areas. The case study also indicates that the sector is dominated by small fishers, so a score of +2 is assigned to the impact on smallholder producers/fishers. Women and children are not engaged in the sector, and so a score of 0 is assigned to each. The aggregate score, here is +4. A medium level of confidence is associated with this estimate.

SLIDE 24 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 25 - Selecting the most plausible scenario

As you have just seen, often multiple plausible scenarios can be defined for impact of each trade-related SPS capacity-building option with respect to each of the decision criteria. In such circumstances, a decision must be made over which of these plausible scenarios is most likely.

In selecting the most likely scenario, it is important to recognize that the most extreme impacts tend to be less likely. Furthermore, the impacts of trade-related SPS capacity-building are often multi-layered and reflect complex adaptations by stakeholders. For example, businesses often adjust their exports in response to the loss of, or new access to, markets.

Finally, if it is not possible to identify and agree upon a single scenario with respect to the impact of a particular capacity-building option, it is possible to run prioritizations with multiple scenarios. The results of these various prioritizations can then be compared.

SLIDE 26 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 27 - What you need to do now

Remind participants of the key messages of the module:

- In compiling an information card, the focus is on how the 'state of the world' in five years will be different if the respective capacity-building option is pursued.
- Given there may be uncertainty over the impact of the capacity-building option, the focus is on the most plausible scenario; what is most likely to happen.

Instruct participants to look over the module again to make sure they understand how this first information card was put together. Participants should inform the instructor if they have any questions.

The major task before the next module is to draft the information cards for the next three capacity-building options, namely:

- Option 2: Pest status for pineapple.
- Option 3: Residue monitoring for honey.
- Option 4: Pesticide controls for fresh vegetables.

Draft information cards should be sent to the instructor.

Module 7 – Aflandia information cards for Capacity-Building Options 2 to 4

Objectives

The objectives of Module 7 are to:

- Assemble the information cards for trade-related capacity-building options 2 to 4.
- Understand more fully the process by which measures for decision criteria are estimated.

Handouts

For this module, the facilitator will need:

- Slides of Module 7 – DOWNLOAD HERE
- Aflandia case study – DOWNLOAD HERE
- Proforma information cards for Aflandia case study – DOWNLOAD HERE
- Aflandia case study decision criteria measurement – DOWNLOAD HERE

Time required to deliver this module

60-90 minutes

Notes for the facilitator

SLIDE 1 - Module 7: Information sheets for Aflandia: Options 2 to 4

Inform participants about the topic of the module.

SLIDE 2 - Ask participants if they have any questions or comments on what was covered in the previous module

Listen to the questions and/or comments, respond, and engage with participants.

SLIDE 3 -What are we doing now?

In this seventh module the focus is on constructing information cards for the next tranche of trade-related capacity-building options, namely Options 2 to 4.

SLIDE 4 - Stages to the P-IMA process

A reminder that we are at stage four of the P-IMA process, so you can out this stage of the analysis in context.

SLIDE 5 - Aflandia trade-related SPS capacity-building options

We are now looking at the second, third and fourth of the capacity-building options in the Aflandia case study.

SLIDE 6 - Decision criteria measurement for Aflandia case study

A reminder also that these are the metrics we are using to measure each of the decision criteria.

SLIDE 7 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 8 - Pest status for pineapple

This option involves surveillance for fruit fly to confirm that the production area is pest-free and can be used for the expanded production of pineapple for export to North Rinzandia.

The up-front investment involved with this option ($150,0000) is associated with the cost of the pest survey. The cost is specified in the case, so we can presumably have high confidence in this estimate.

The case study indicates that there are no on-going costs associated with this option. However, this is somewhat questionable; presumably surveillance will need to be undertaken periodically to ensure the region remains free of fruit fly. Thus, a low confidence level is attached to this estimate.

The case study states that existing exports are valued at $25 million, but that access to North Rinzandia will increase exports by 200%. Thus, the estimated impact of this option is $50 million, assuming the new production area is sufficient to meet this demand. There remains some uncertainty over the impact of this option on exports and so a medium level of confidence is assigned.

Confirming the fruit fly-free status of the additional production area in Aflandia is not expected to have any impact on agricultural/fisheries productivity; the area is free of this pest. Thus, this option has zero impact. There is high confidence in this estimate.

This option relates to a plant pest that has no significance for public health. Thus, this option has zero impact. There is high confidence in this estimate.

If this option leads to increased pineapple production, it could result in detrimental impacts on the local natural environment, for example in terms of biodiversity, run-off of pesticides, etc. Thus, this option is judged to have a limited negative impact (-1) in terms of environmental protection. There is medium confidence in this estimate, given the uncertainty over impacts on the environment.

There is a lack of quantitative information in the case study to define potential impacts on poverty and on vulnerable groups. It is possible, however, to make inferences based on the information that is provided on the nature of pineapple production. Thus, both estimates have a medium level of confidence.

The case states that pineapple production is on large plantations and is not labour intensive. This suggests limited employment in the sector, and so minimal impacts on poverty.

Given that women are employed in packhouses, we can infer that expanded pineapple production and exports will provide enhanced income-earning opportunities for women. Thus, the impact on women is estimated at +2. The information provided does not suggest significant impacts in terms of marginal areas, children and/or smallholder producers/fishers, so these are all scored as 0. The confidence level is medium given the information provided in the case study is perhaps not comprehensive.

SLIDE 9 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 10 - Residue monitoring for honey

This option establishes a residue monitoring plan for honey that is submitted for approval by the EU. Note that this option excludes the costs of organic certification, that do not relate to an SPS issue.

The up-front investment is specified in the case study; $40,000 to establish the residue monitoring plan and undertake the first survey. The confidence level is high.

The on-going costs is also defined by the case study at $10,000 per year. The confidence level is high.

The possible impact on exports can be estimated from the data provided by the case study. Current exports to regional markets are $500,000. It is estimated, furthermore, that exports to the EU will be $1 million within five years. However, there is some loss in exports to regional markets that needs to be considered. Thus, it is estimated that regional exports will decline by 50%, and that these will be exported to the EU instead at a 50% price premium. This gives a net loss of $125,000. The total impact on exports will be an increase of $875,000. The confidence level is medium; it is plausible, for example, that more exports to regional markets might be diverted to the EU given the premium prices received.

Agricultural/fisheries productivity in honey production will likely be enhanced by the significantly higher prices in EU markets. A score of +1 is assigned. This is not certain and so the confidence level is medium.

There is likely little or no impact on public health and this option relates to production for export, and so a score of 0 is assigned. The confidence level is medium because it is plausible that there may be spillovers into honey production for local markets.

Expanded honey production will likely bring significant benefits to the local natural environment, especially in supporting biodiversity. The estimated impact is +2. There is some uncertainty over the scale of the impact and so the confidence level is medium.

The case study states that 30,000 producers in an area with high levels of poverty are engaged in honey production for export. Thus, this option is likely to have a significant impact on poverty and a score of +2 is applied. The confidence level is high given the data provided in the case study.

In terms of impacts on vulnerable groups, honey production is undertaken in a marginal area with high rates of poverty (+2), involves female producers who have few alternative sources of livelihood (+2) and involves very small producers (+2). Children are not directly impacted (0). This gives a total score of +6. The confidence level is high given the information provided in the case study.

SLIDE 11 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 12 - Pesticide controls for fresh vegetables

This option involves the implementation of good agricultural practice (GAP) in smallholder production of fresh vegetables for export to the EU.

The estimated up-front investment, as stated in the case study, is $250,000. The confidence level is high.

The case study indicates that the cost of maintain the certification programme is $20,000 per year. The confidence level is high.

The estimated impact on the value of exports is $5 million. Current exports to the EU are valued at $50 million. If this option is not pursued, smallholders will likely be excluded from exports to the EU. They account for 20% of exports valued at $10 million. Presumably, these would instead be exported to the Middle East, which has already been explored as a potential export market, but at 50% lower prices. Thus, the net effect is an avoided loss of $5 million. There is a degree of uncertainty here and so the confidence level is medium.

This option will likely enhance the productivity of smallholder production of fresh vegetables for export due to better production controls and efficiency. The impact, however, will likely be quite small and so a score of +1 is applied. There is some uncertainty over the scale of the impact and so a confidence level of medium is applied.

This option implements GAP in smallholder production of fresh vegetables for export. However, there might be limited spillovers into domestic markets in terms of lower levels of pesticide residues if the same producers also sell to local markets. Thus, a score of +1 is applied. There is much uncertainty over this and so a confidence level of low is applied; equally plausible is that there are no spillovers because all the production of these producers goes to export.

There will likely be some positive impact on the local environment due to reduced use of pesticides. A score of +1 is applied. The confidence level is medium.

The case study indicates that 20,000 smallholders are involved in the production of fresh vegetables for export. The scenario applied here is that, should this option not be pursued, they will face prices that are 50% lower (see above). Thus, the projected impact on poverty is significant (+2). There is some uncertainty over this and so the confidence level is medium.

The production of fresh vegetables for exports impacted by this option involves women (+2) and smallholder producers (+4). There is no stated role of children or any indication of whether production is in marginal areas. The overall score is +4. There is some uncertainty here and so the confidence level is medium.

SLIDE 13 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 14 - What you need to do now

This module has worked through the compilation of three of the information cards for the Aflandia case study. Instruct participants to look over this module again to make sure they understand how the information cards were put together. Participants should contact the instructor if they have any questions.

The major task before the next module is to draft the information cards for the next three capacity-building options, namely:

- Option 5: Pest risk assessment for hot peppers.
- Option 6: Aflatoxin controls for maize.
- Option 7: FMD-free areas for beef.

Draft information cards should be sent to the instructor.

Module 8 – Aflandia information cards for Capacity-Building Options 5 to 7

Objectives

The objectives of Module 8 are to:

- Assemble the information cards for trade-related capacity-building options 5 to 7.
- Understand more fully the process by which measures for decision criteria are estimated.

Handouts

For this module, the facilitator will need:

- Slides of Module 8 – DOWNLOAD HERE
- Aflandia case study – DOWNLOAD HERE
- Proforma information cards for Aflandia case study – DOWNLOAD HERE
- Aflandia case study decision criteria measurement – DOWNLOAD HERE

Time required to deliver this module

60-90 minutes

Notes for the facilitator

SLIDE 1 - Module 8: Information sheets for Aflandia: Options 5 to 7

Inform participants about the topic of the module.

SLIDE 2 - Ask participants if they have any questions or comments on what was covered in the previous module

Listen to the questions and/or comments, respond, and engage with participants.

SLIDE 3 - What are we doing now?

In this eighth module the focus is on constructing information cards for the next tranche of trade-related capacity-building options, namely Options 5 to 7.

SLIDE 4 - Stages to the P-IMA process

A reminder that we are at stage four of the P-IMA process, so you can put this stage of the analysis in context.

SLIDE 5 - Aflandia trade-related SPS capacity-building options

We are now looking at the next three of the capacity-building options in the Aflandia case study.

SLIDE 6 - Decision criteria measurement for Aflandia case study

A reminder also that these are the metrics we are using to measure each of the decision criteria.

SLIDE 7 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 8 - Pest risk assessment for hot peppers

This option involves surveillance for quarantine pests to provide data to support a pest risk assessment for hot peppers. The pest is known not to be present.

The cost of surveillance is $10,000 as stated by the case study. We can have high confidence in this estimate.

There are no on-going costs; this option relates to one-off surveillance. However, this is somewhat questionable; presumably surveillance will need to be undertaken periodically to confirm the status over time. Thus, a low confidence level is attached to this estimate.

The exporter estimates annual exports of $5 million. We assume this is achieved within five years. However, there are questions over the likely competitiveness of hot pepper exports to the United States; Aflandia faces competition from countries in Latin America with much lower production and transport costs. Given this uncertainty, the confidence level is low.

Hot peppers are a high-value crop for smallholder farmers and so switching to production of this crop will likely enhance productivity. However, the impact is likely to be limited so a score of +1 is applied. There is some uncertainty over this, and so confidence level is medium.

This option relates to a plant pest with no public health significance. There is a score of 0 and high level of confidence.

The plant pest is known not to exist; this option just demonstrates this to be the case. Therefore, the impact on environmental protection is zero and confidence is high.

Production is by 5,000 smallholders with moderate poverty levels. Thus, there is likely to be a positive but relatively small poverty impact, scored as +1. We can likely have high confidence in this estimate.

The impact on vulnerable groups is scored as +1. This option impacts a relatively small number of smallholders (5,000). Other possible impacts are largely unknown, so the confidence level is medium.

SLIDE 9 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 10 - Aflatoxin controls for maize

This option involves the upgrading of production controls for maize in order more effectively to control levels of aflatoxins.

The estimated up-front investment of new postharvest facilities and the implementation of good agricultural practice (GAP) is $1.5 million. Presumably, we can have high confidence in this estimate.

The on-going costs of maintaining this capacity and production practices by farmers is $100,000 per year. Presumably, we can have high confidence in this estimate.

Current exports to local markets are valued at $30 million. Currently, exporters get a price discount of 10% because of persistent levels of aflatoxins. This amounts to an annual loss of $3 million which would be avoided with this option. This option would also facilitate access to two new regional markets that currently won't allow imports because of levels of aflatoxins. The value of these exports is estimated at $20 million per year. This gives a total impact on exports of $23 million. There might be some uncertainty over the exact impacts and so the confidence level is medium.

Reduced rejection levels and higher prices from existing markets, plus better controls on production due to the implementation of GAP, will likely enhance productivity significantly (+2). There is some uncertainty over the scale of this impact, and so the confidence level is medium.

There could be significant spillovers to domestic markets in terms of lower levels of aflatoxins, with potentially significant benefits for public health. The scale of the impact is uncertain and so the confidence level is low.

The is likely to be minimal impacts on the local environment. The confidence level is high.

The case study indicates that 50% of production is by smallholders. The likely scale of production impacts are significant and so appreciable impacts on poverty can be expected. There is some uncertainty over the scale of these impacts and so the confidence level is medium.

The case study indicates that production is in marginal areas (+2) and that 50% of production is by smallholders for which maize is a key source of livelihood (+2). Thus, the total score is +4. There is likely to be uncertainty over the precise impact and so the confidence level is medium.

SLIDE 11 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 12 - FMD-free area for beef

This option establishes a production area that is free of food and mouth disease (FMD). This requires that fences are erected, livestock is moved, controls on pastoralism are implemented, etc. A buffer zone will be established around the FMD-free area.

The estimate up-front investment is $7 million. This is a very large investment and the actions needed are complex, so there will likely be some uncertainty over the actual cost. Thus, a confidence level of medium is appropriate.

The estimated on-going costs are $250,000 including vaccination costs, etc. Again, there is likely some uncertainty over these costs and so a confidence level of medium is applied.

The case study states that estimated exports are $10 million within five years. It is estimated that exports will increase to $50 million within 10 years, but this is outside the five-year time window of the current analysis. There may be questions over the feasibility of achieving FMD-free status and this being recognized by importing countries within five years, in which case the impact on exports will be zero. Thus, the level of confidence associated with this estimate is low.

This option will likely increase agricultural productivity by reducing the level of animal disease because of enhanced controls, reducing veterinary costs, etc. These impacts will likely be quite small and variable. Thus, a score of +1 and a confidence level of medium are applied.

This option relates to an animal disease with no public health consequences. Thus, a score of zero is applied. The confidence is high.

This option will increase beef production on large farms, which could lead to environmental damage, for example due to the clearance of wildlife. Thus, a score of -2 is applied. The scale of this impact is somewhat uncertain so a level of confidence of medium is applied.

This option relates to production that is mainly on large farms. There may be significant negative impacts on the livelihood of pastoralists. Thus, a score of -2 is applied. There is limited information in the case study on the number of pastoralists likely to be impacted, and so the confidence level is medium.

This option likely has a negative impact on pastoralists and so a score of -2 is applied. Any possible impacts in terms of the other dimensions to this decision criterion are not specified in the case study and so there is some uncertainty over these impacts. Thus, a confidence level of medium is applied.

SLIDE 13 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 14 - What you need to do now

This module has worked through the compilation of three of the information cards for the Aflandia case study. Instruct participants to look over this module again to make sure they understand how the information cards were compiled. Participants should contact their instructor if they have any questions.

The major task before the next module is to draft the information cards for the remaining three capacity-building options, namely:

- Option 8: Pest treatment for mango.
- Option 9: Antibiotic controls for aquaculture shrimp.
- Option 10: Aflatoxin testing for groundnuts.

Draft information cards should be sent to the instructor/facilitator of the virtual training.

Module 9 – Aflandia information cards for Capacity-Building Options 8 to 10

Objectives

The objectives of Module 9 are to:

- Assemble the information cards for trade-related SPS capacity-building Options 8 to 10.
- Understand more fully the process by which measures for decision criteria are estimated.

Handouts

For this module, the facilitator will need:

- Slides of Module 9 – DOWNLOAD HERE
- Aflandia case study – DOWNLOAD HERE
- Proforma information cards for Aflandia case study – DOWNLOAD HERE
- Aflandia case study decision criteria measurement – DOWNLOAD HERE

Time required to deliver this module

60-90 minutes

Notes for the facilitator

SLIDE 1 - Module 9: Information sheets for Aflandia: Options 8 to 10

Inform participants about the topic of the module.

SLIDE 2 – Ask participants if they have any questions or comments on what was covered in the previous module

SLIDE 3 - What are we doing now?

In this ninth module, the focus is on constructing information cards for the final tranche of trade-related capacity-building options, namely Options 8 to 10.

SLIDE 4 - Stages to the P-IMA process

A reminder that we are at stage four of the P-IMA process, so you can out this stage of the analysis in context.

SLIDE 5 - Aflandia trade-related SPS capacity-building options

We are now looking at the final three of the trade-related SPS capacity-building options in the Aflandia case study.

SLIDE 6 - Decision criteria measurement for Aflandia case study

A reminder also that these are the metrics we are using to measure each of the decision criteria.

SLIDE 7 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 8 - Pest treatment for mango

This option involves the installation of a hot water treatment facility for the control of fruit fly, to facilitate mango exports to North Rinzandia.

The case study states that the up-front investment associated with the hot water facility is $15,000. However, this estimate seems a little low, and so a medium confidence level is applied.

The estimated ongoing costs are $3,000. Again, this estimate seems a little low and a medium confidence level if applied.

Currently, Aflandia does not export mangoes. The potential market being explored is North Rinzandia, with an estimate of $0.5 million per year. There is low confidence in this estimate, however, given that Aflandia has not exported mango previously and producers are doubting the viability of mango production, especially given the challenging quality requirements of export markets.

There is likely no impact on agricultural productivity. Mango production is already widespread, and the predicted scale of exports is quite small. We can have high confidence in this estimate.

There could be positive spillovers on domestic public health if the establishment of exports makes mango production more viable, with the impact of increasing the supply of better-quality mango on domestic markets. However, there is great uncertainty over this estimate, and a low level of confidence is applied.

Establishing exports of mango could discourage the uprooting of trees, with positive environmental benefits. However, there is great uncertainty over this estimate, and a low level of confidence is defined.

The case study states that 50,000 poor households with few alternative livelihood opportunities produce mango. Although the predicted scale of exports is small, this trade could support the rejuvenation of this sector. An estimate of +2 is applied. There is a lot of uncertainty here and a low level of confidence is defined.

Mango production occurs in marginal areas (+2), involves women (+2) and is undertaken by smallholders (+2). Thus, the predicted impact on vulnerable groups is +6. There is great uncertainty over these impacts, however, and so confidence is low.

SLIDE 9 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 10 - Antibiotic controls for aquaculture shrimp

This option addresses the overuse of antibiotics in aquaculture production of shrimp that has led to rejections of consignments at the EU border due to excess residues. It involves the implementation of a good aquaculture practice programme and the upgrading of a laboratory to undertake testing for antibiotic residues.

The estimated up-front investment of implementing the good aquaculture practice programme is $90,000. The laboratory upgrade is estimated to cost $10,000. This gives a total cost of $100,000. We can likely have high confidence in this estimate.

The estimated ongoing costs are associated with the maintenance and ongoing accreditation of the laboratory at $5,000 per year. We can presumably have high confidence in this estimate.

Annual exports of shrimp are valued at $60 million, of which 40% is from aquaculture production. Thus, the current value of exports is $24 million. The case study states that exports have expanded rapidly in recent years, so we assume that this will continue. Note that exports of wild capture shrimp are not expected to increase over time due to efforts to maintain sustainability, so all growth will come from the aquaculture sector. A conservative estimate of the rate of growth is 5% per year. Applying this growth rate, exports would expand to $30.6 million within five years. This option prevents the loss of exports to the EU, that account for 90% of the total and would be valued at $27.6 million ($30.6 million x 90%) within five years. If exports to the EU were lost, they would be diverted to alternative markets that do not attract the 40% price premium in EU markets. Thus, the averted loss amounts to $27.6 million x 40% = $11 million. There is some uncertainty over the likely rate of growth in exports and the consequences should the EU prohibit imports from Aflandia, but we can probably have medium confidence in this estimate.

This option will likely have a negative impact on the productivity of shrimp production, due to reduced use of antibiotics and the associated need to employ lower stocking densities. The estimated impact is -1. There is some uncertainty here, but we can likely have medium confidence.

The aquaculture production of shrimp is destined entirely for export. Thus, there are not anticipated to be any impacts on domestic markets. Thus, the estimated impact on domestic public health is zero. We can have high confidence in this estimate.

This option will likely support the more rapid expansion of aquaculture production due to the higher prices paid in EU markets. This could have very significant and negative environmental impacts (-2). There is some uncertainty about the likely scale of the growth in production, however, so the confidence level is medium.

The case study states that around 40,000 largely landless people are employed in the aquaculture production of shrimp. If exports expand, this number will increase. This option will prevent loss of exports to the EU, which pay much higher

prices, which likely feeds through to better wages to employees. Thus, there could be significant impacts on poverty (+2), although there is significant uncertainty over the scale and so confidence in this estimate is low.

Aquaculture production provides employment to landless people in more marginal areas (+2). This option will likely impact growth in employment in these areas. There is uncertainty over the scale of impact, however, and so the confidence is medium.

SLIDE 11 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDES 12 and 13 - Aflatoxin testing for groundnuts

This option establishes testing capacity for aflatoxins in Aflandia. The basic facilities are in place, but equipment needs upgrading and the laboratory needs to be accredited. Currently, exporters of groundnuts use mobile testing kits to undertake a qualitative assessment of levels of aflatoxins in groundnuts before export. This is not sufficient for exporters, who undertake tests when consignments are imported into the EU and charge the cost to exporters. This option would enable these tests to be undertaken in Aflandia prior to export.

The case study states that the up-front investment is $40,000. We can presumably have high confidence in this estimate.

Estimating the on-going costs of this option is complicated and a separate spreadsheet is provided to show the calculation (Slide 13). The calculation is also potentially confusing, as the ultimate estimate (-$7,176) indicates that costs decline as a result of this option. Critical here is understanding that this option would bring about a shift in where testing is undertaken and the associated costs, from testing by exporters on importation to testing in Aflandia prior to export. Note that, under both scenarios, the cost is borne by Aflandia. The calculation is as follows:

The current testing costs, which would be maintained if this option is not pursued, are $14,000 according to the case study. Assume that exports continue to grow by 10% per year (the case study says that this has been the rate of growth over the last three to four years), these costs would be $20,497 within five years. This calculation is shown in the second and third columns of Slide 13.

Now to the on-going costs if this option is pursued. The annual cost of maintaining accreditation of the laboratory in Aflandia is $6,000; (as stated in the case study); this is shown in the fourth column of Slide 13. The case study states that the on-going costs of aflatoxin testing in the laboratory would be $5,000 per year. Assuming again that exports increase by 10% per year, this would grow to $7,321 within five years. This is shown in the fifth column of Slide 13. Thus, the total cost of local testing using the laboratory would be $13,321 per year within five years (as shown in the seventh column of Slide 13). The net on-going cost of this option is thus $20,497 - $13,321 = -$7,176. There is a net saving from this option as the cost of local testing is lower than the cost of testing by importers, the cost of which is charged to exporters.

This option will likely have no impact on exports. Exports currently happen despite the lack of testing facilities in Aflandia, it is just that tests are undertaken at the point of importation and the cost is charged to the exporter. Exporters already undertake a qualitative assessment of groundnuts before export. Furthermore, the case study provides no evidence that

consignments have been rejected, or that exporters are not willing to import groundnuts from Aflandia. We can have high confidence in this estimate.[11]

Given the above, all other impacts of this option are zero. We can have high confidence in this estimate.

SLIDE 14 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 15 - What you need to do now

This module has worked through the compilation of three of the information cards for the Aflandia case study. Instruct participants to look over this module again to make sure they understand how this the information cards were put together. Participants should contact their instructor if they have any questions.

Participants should be instructed to look over all 10 information cards before the next module. Do they make sense as a whole?

[11] Note that some participants in the training programme may struggle to understand this conclusion. They may argue that this option averts the loss of exports to the EU, which are valued at $10 million per year. Furthermore, applying the current growth rate of 10% per year, they may argue that an averted loss of $16.1 million is averted. However, this is where the idea of reflecting on plausible impacts is important. The case study does not suggest that imports are under threat should this option not be pursued. Rather, it will just mean that testing will be undertaken prior to export at lower cost.

Module 10 – Reviewing the information cards and preparing for the prioritization

Objectives

The objectives of Module 10 are to:

- Provide an overview the information cards for the Aflandia case study.
- Examine the process by which the information cards are reviewed to ensure consistency of measures across the capacity-building options.
- Explore the fundamental nature of the prioritization process we will be using.

Handouts

For this module, the facilitator will need:

- Slides of Module 10 – DOWNLOAD HERE
- Aflandia case study – DOWNLOAD HERE
- Information cards for Aflandia case study completed with participants
- Access to the D-Sight software – CLICK HERE

Time required to deliver this module

60-90 minutes

Notes for the facilitator

SLIDE 1 - Module 10: Reviewing the information cards and preparing for the prioritization

Inform participants about the topic of the module.

SLIDE 2 – Ask participants if they have any questions or comments on what was covered in the previous module

SLIDE 3 - What are we doing now?

In this tenth module, the focus is on the information cards that participants have compiled with the facilitator's support. Thus, the idea is to look at them side-by-side to see if they are happy with how they look. Participants will also be looking at the prioritization process so that they have a good understanding of what it involves, before looking at how this is done in practice in the next module.

SLIDE 4 - Stages to the P-IMA process

This is the Stage 5 of the P-IMA process. Participants have compiled all the information needed for the prioritization process and now just have to review this to ensure it is rigorous and consistent. This is a very important step in the whole process. There is always the temptation now to jump into the prioritization. However, avoid this temptation for a while will help to ensure that the analysis is robust.

SLIDE 5 - Review of information cards

The purpose of reviewing the information cards is to ensure that the information they contain is robust.

First, that all the capacity-building options are distinct; that there are no significant interdependencies and spill overs between them. If there are, participants need to look at whether any of the capacity-building options need to be combined.

Secondly, that the way in which each of the decision criteria has been measured across the capacity-building options is robust and consistent. Thus, is the justification for the way in which measurements have been made, including the associated assumptions and inferences, sound? Furthermore, do the relative measures for each of the capacity-building options across the 10 capacity-building options make sense? Remember, it is the relative rather than the absolute values assigned to each capacity-building option for each decision criterion that is important to the prioritisation process.

SLIDE 6 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 7 - Are the capacity-building options distinct?

To be able to prioritize the 10 capacity-building options, participants need to be sure that they are separate actions with distinct impacts. It is often not until the information cards are assembled that potential overlaps between the capacity-building options become apparent. Some of the key questions include:

- Are there any interdependencies between the any of the capacity-building options? Thus, is the successful implementation of one capacity-building option dependent (in part or in full) on an action that is integral to another capacity-building option?
- Are there significant spill overs between the capacity-building options? Thus, will the implementation of one capacity-building option potentially alleviate (in part or in full) a trade-related SPS capacity-building need that is addressed by another capacity-building option?

- Are any of the capacity-building options potential substitutes for one another? Thus, would one option directly or indirectly fully address the trade-related SPS capacity-building need addressed by another capacity-building option?

By asking these questions, the need to redefine the trade-related SPS capacity-building options is identified. For example, it may be that capacity-building options need to be combined into a single larger option. Alternatively, a particular capacity-building option may need to be redefined to remove the identified interdependencies, spill overs and/or complementarities.

SLIDES 8 to 10 - Pest status for pineapple and pest treatment for mango

For example, we can examine the two options in the Aflandia case study that relate to controls on fruit fly. One involves surveillance to confirm that a production area for pineapple is free of fruit fly (Slide 8). The other involves the installation of a hot water treatment facility as a control measure for fruit fly to enable exports of mango (Slide 9). What if these two capacity-building options were not distinct? Thus (Slide 10):

- If pineapple and mango production occur in the same area, the surveillance could demonstrate that Aflandia is free of fruit fly and a pest risk assessment could be performed for both products, negating the need for the hot water treatment facility. Of course, this is dependent on the fact that both fruit are indeed produced in the same area and that the target export market for mango will accept a pest risk assessment as a substitute for hot water treatment.
- If the hot water treatment facility was to be installed, it could potentially be used to treat both pineapple and mango prior to export, negating the need for the pest surveillance. Of course, this would be dependent on whether hot water treatment is also suitable for pineapple, that the installed capacity would be sufficient to handle exports of both fruit (which is unlikely given the projected scale of pineapple exports), and if hot water treatment of pineapple would be accepted by North Rinzandia.

SLIDE 11 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 12 - Consistency and robustness of measures

Having confirmed that all the trade-related SPS capacity-building options are indeed distinct, the measures contained in the information cards need to be reviewed. Thus, is the rationale for each measurement ‘sensible’ in terms of the underlying assumption, data used, and calculations made? Furthermore, have these measurements been made in a consistent way across the capacity-building options, especially in terms of the equivalency of the assumptions?

The key focus of this review process is on the relative values for each of the decision criteria across the 10 trade-related SPS capacity-building options. Thus, do capacity-building options have a higher value for a decision criterion than other capacity building options where the impact is greater? Do capacity-building options have the same value for a decision criterion as other capacity building options where the impact is the same? Finally, do capacity-building options have a lower value for a decision criterion than other capacity building options where the impact is less?

SLIDES 13 and 14 - Hygiene controls for wild capture shrimp and test risk assessment for hot peppers

For example, we can look at the capacity-building options Hygiene Controls for Wild Capture Shrimp and Pest Risk Assessment for Hot Peppers side-by-side.

The poverty impact of Hygiene Controls for Wild Capture Shrimp is scored as +2 and for +1 in the case of Pest Risk Assessment for Hot Peppers. Is this sensible? The case study states that 30,000 fishers are engaged in the wild shrimp fishery (as noted in the information card). Also, that 5,000 smallholders with moderate poverty levels are engaged in hot pepper production. Thus, the fact that the score for the poverty impact of Hygiene Controls for Wild Capture Shrimp is higher seems appropriate.

With respect to vulnerable groups, the information in the case study does not suggest any appreciable impact of the Pest Risk Assessment for Hot Peppers option, though it impacts a small number of smallholders (5,000). This is noted in the information sheet and a score of +1 is assigned. Hygiene Controls for Wild Capture Shrimp, however, is expected to impact a marginal area and small fishers. Thus, a score of +4 is assigned. Again, the fact that the measure for Hygiene Controls for Wild Capture Shrimp is higher than for Pest Risk Assessment for Hot Peppers seems appropriate.

SLIDE 15 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDES 16 to 27 - Compilation of radar charts (Slides 16 to 25)

Having looked at the information cards side-by-side, a useful way to double-check if the measures in the cards are sensible is to compile a series of radar charts. These charts allow all of trade-related SPS capacity-building options to be displayed together for any one of the decision criteria. They are a very good way of comparing the capacity-building options across a single decision criterion, and especially in identifying ‘outliers’ options that clearly perform especially well or especially badly with respect to that criterion. It is good practice to go back to the respective information card to ensure these outliers are correct.

The radar charts are also a very good way to communicate the results of the P-IMA process thus far to stakeholders. They provide a way for stakeholders to see easily how the capacity-building options compare to one another with respect to a particular decision criterion. This can facilitate early feedback from stakeholders on the data in the information cards.

The following slides show the radar charts for the 10 trade-related SPS capacity-building options for the eight decision criteria. We can see, for example, that the up-front investment for FMD-Free Areas for Beef is a significant outlier (Slide 17). We can then go back to the information card to check this (Slide 18). Remember, that the up-front investment of this option was $7 million, according to the case study, which is much higher than any of the other capacity-building options. Likewise, the on-going costs of FME-Free Areas for Beef are the highest by far (Slide 19). It is important to note here, however, that we only assigned a medium level of confidence to these estimates; this compares to a high level of confidence for most other capacity-building options when it comes to the up-front investment and on-going costs. This raises a slight ‘red flag’ and we might want to go back and check that these estimates are robust.

With respect to the trade impact of the 10 capacity-building options, Pest Status for Pineapple is by far the greatest (Slide 20). Looking at the respective information card, we see that the estimated trade impact is $50 million (Slide 21).

This is significantly greater than for any other of the capacity-building options. Given that a medium level of confidence is applied to this estimate, we might want to double-check that this is robust.

When it comes to the estimated poverty impact of the 10 trade-related SPS capacity-building options, FMD-Free Area for Beef stands out as having a significantly negative impact on poverty (Slide 23). Looking to the respective information sheet (Slide 24), we see that this is due to the potential disruption to the life of pastoralists due to increased beef production. A medium level of confidence is assigned to this estimate. This is the only option with a negative poverty impact, and we might want to review this to ensure it is robust. The same logic applies when analysing impact on vulnerable groups (Slides 26-27).

SLIDE 28 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 29 - Stages to the P-IMA process

Having reviewed the information cards and confirmed that each of the 10 capacity-building options is distinct and separable, and that the measures are robust, we can proceed to the prioritization itself. This is the penultimate stage of the P-IMA process.

SLIDE 30 - The Aflandia worksheet

This slide shows all the data brought together for the 10 trade-related SPS capacity-building options into a single worksheet. The simple illustrative worksheet that we saw in Module 1 is now completed. Thus, it has the eight decision criteria and the associated weights. Also, the measures for the decision criteria for each of the 10 capacity-building options. Assembling all the data into a single place like this makes it easy to enter these data into the prioritization software we will be using.

SLIDE 31 to 33 - Nature of the prioritisation process

Before we proceed to the prioritization itself, which we will do in the next module, it is important to understand how this process works. The inputs to this process are as follows:

- Decision criteria measures (from the information sheets).
- Decision weights.
- Preferences defining which decision criteria should be maximized and which should be minimized.

The approach he P-IMA framework uses to prioritize the capacity-building options is called outranking. This works as follows:

- The first decision criterion is selected; in this case the up-front investment (Slide 32).
- Each of the capacity-building options is then compared in a pair-wise fashion according to the up-front investment. Presumably, we want to minimize the up-front investment and so a lower value is preferred over a higher value.
- When a capacity-building option has a ‘better’ value than another option it gets a positive value; what is terms a ‘positive flow’. When a capacity-building option has the same value as another option is gets a zero score what is termed a ‘neutral flow’. When a capacity-building option has a ‘worse’ value than another option is gets

a negative score what is termed a 'negative flow'. These scores are aggregated to get a 'net flow' for this criterion.

- Having compared all the capacity-building options according to the up-front investment, they are compared according to the on-going cost in a similar way (Slide 33).
- Then according to the impact on exports, and so on.

Having compared all 10 trade-related capacity-building according to all eight decision criteria in turn, the scores are aggregated. In so doing, each decision criteria is weighted according to the weights we have defined. Thus, a weight of 15% is applied to up-front investment, 9% to ongoing costs, and so on.

The result of this calculation is the net flow for each of the capacity-building options. This ranges from zero to 100%. A capacity-building option that is the worst for all eight of the decision criteria would be given a net flow of 0%. A capacity-building option that is the best for all eight decision criteria would be given a net flow of 100%. Any net flow in-between these extremes means that a particular capacity-building is better than other options with respect to some decision criteria and outperformed by other capacity-building options with respect to other decision criteria. Thus, the 10 trade-related SPS capacity-building options are ranked from highest to lowest based on their estimated net flow.

SLIDE 34 - Aflandia baseline prioritization

This is the prioritization for the Aflandia case study which will be estimated in the next module. The graph on Slide 34 shows that Aflatoxin Controls for Maize has the highest net flow at 63%. This means that, overall, this capacity-building option performs the best. However, it does not outperform the other capacity-building options with respect to all eight of the decision criteria.

The lowest ranked capacity-building option is FMD-Free Area for Beef with a net flow of only 24.5%. Whilst this option performs worse than the other options with respect to many of the decision criteria, the fact that the net flow is zero means that it performs better with respect to some of these criteria.

SLIDE 35 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 36 - What you need to do now

Remind participants of the key messages of the module:

- Having compiled the information cards for all capacity-building options, these 'draft's need to be reviewed to ensure they are rigorous.
- This review process involves examination of each information card and compilation of radar charts to compare the measures across the capacity-building options for each decision criterion in turn.

Instruct participants to review this module and the information cards ahead of the next module. It would also be good that participants have a quick look at the D-Sight platform that will be used.

Module 11 – Deriving the quantitative priorities

Objectives

The objectives of Module 11 are to:

- Explore the mechanics of the prioritization process.
- Look at the practical use of D-Sight, the software that it used to derive the prioritization.
- Derive the initial prioritization of the capacity-building options in the Aflandia case study.

Handouts

For this module, the facilitator will need:

- Slides of Module 11 – DOWNLOAD HERE
- The Aflandia worksheet completed by participants
- Access to the D-Sight software – CLICK HERE
- Sample report for prioritisation and contribution analysis – DOWNLOAD HERE

Note that it is assumed that the facilitator has experience with the use of the D-Sight software and does not need prior training in the software.

Time required to deliver this module

60-90 minutes

Notes for the facilitator

SLIDE 1 - Module 11: D-Sight Platform

Inform participants about the topic of the module.

SLIDE 2 - Ask participants if they have any questions or comments on what was covered in the previous module

SLIDE 3 - What are we doing now?

The focus of this module is, finally, the prioritization of the trade-related SPS capacity-building options in the Aflandia case study. In so doing, we will explore the practical steps to this process and the use of the D-Sight computer platform.

SLIDE 4 - Stages to the P-IMA process

This is the penultimate stage of the P-IMA process where participants will finally get to prioritize the capacity-building options. Note that this is not the end; having derived this initial prioritization, it is necessary to validate this prioritization to see how robust it is and then engage with stakeholders on the results.

SLIDE 5 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 6 - The Aflandia worksheet

This is the worksheet compiled for the Aflandia case study. The next step is to take the data in this worksheet to put together the prioritization problem.

SLIDE 7 - Inputting the key parameters of the prioritization model

To set up the prioritisation problem we proceed through each parameter in turn:

- Define the capacity-building options.
- Define the decision criteria.
- Input the decision weights.
- Define our preferences; whether each decision criterion should be maximized or minimized.
- Input the data from the information sheets.

SLIDE 8 - A simple example – choosing a new car

To illustrate the way in which the prioritization problem is put together, first we are going to revisit the simple example we saw in the first module - choosing a new car. We are going to go through the process of inputting this problem into D-Sight. The parameters are as follows:

- The capacity-building options are the three cars – Audi, Smart Car and Ferrari.
- The decision criteria are cost, recommended by a friend and fuel consumption.
- The decision weights are 20% for cost, 72% for recommended by a friend and 8% for fuel consumption.
- In terms of our preferences, presumably we want to minimize cost, choose a car that is recommended by a friend and minimize fuel consumption.
- The measures for each of the decision criteria are provided in this worksheet, which we also saw in the first module.

SLIDE 9 - The car choice worksheet

This is the worksheet laid out in the same way as the worksheet put together for the Aflandia case study. Participants will be instructed to input each element of the prioritization problem into D-Sight.

SLIDE 10 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 11 - D-Sight platform

The actual prioritization is estimated using the D-Sight computer software. This is a web-based platform that uses outranking to compare each of the capacity-building options according to each of the decision criteria in turn. It then estimates the net flow and ranks the capacity-building options from highest to lowest priority on this basis.

The D-Sight platform should now be on the screen. The instructor should now set-up the new car choice problem:

1. Press ‘New project’ to set up the worksheet as an empty problem.
2. Enter the three capacity-building options under the Alternatives tab.
3. Enter the three decision criteria under the Criteria tab.
4. Enter the decision weights for the three criteria under the Weights tab.
5. Enter the preferences under the Parameter tab.
6. Under the Evaluations tab the worksheet should now be displayed. The measures can then be entered from the car choice worksheet.
7. Derive the prioritization by pressing the Analysis tab.

The Audi is ranked top with a net flow of 68%. Next is the Ferrari with a net flow of 54%. Last is the Smart Car with a net flow of 28%.

The Audi ranks top because it is recommended by a friend, which has a weight of 72%. But so is the Ferrari! The Audi ranks above the Ferrari, however, because it costs less (which is weighted 20%) and has better fuel efficiency (although this is only weighted 8%).

The Smart Car ranks bottom because the decision criterion on which it performs the best, Fuel consumption, only has a weight of 8%. It also performs well on cost, but this only has a weight of 20%. It is not recommended by a friend, which is weighted 72%.

SLIDE 12 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 13 - The Aflandia worksheet

Now, turn to the Aflandia worksheet. In the same way as with the new car problem, each parameter of the problem is entered in turn.

Note that the instructor/facilitator should enter the Aflandia worksheet into D-Sight in advance (it takes too long and is rather tedious to do this remotely). However, participants will each be entering the problem into D-Sight after the module.

SLIDE 14 - Aflandia Trade-Related SPS capacity-building options

This Slide presents the ten capacity-building options for Aflandia. Show that they have been entered into D-Sight by showing the Alternatives tab.

SLIDE 15 - Decision criteria and weights for Aflandia case study

This Slide displays the eight decision criteria for the Aflandia case study. Show that they have been entered into D-Sight by showing the Criteria tab.

Also, the decision weights. Note that they have been entered into D-Sight by showing the Weights tab.

SLIDE 16 - Preferences for decision criteria in Aflandia case study

Presumably we want to minimize the up-front investment and on-going costs of each of the capacity-building options, and then maximize all their positive impacts. Note that the preferences for the eight decision criteria have been entered into D-Sight by showing the Parameters tab.

SLIDE 17 - The Aflandia worksheet

The Aflandia completed worksheet has all the data from the information cards. Show that they have been entered into D-Sight by showing the Evaluations tab.

SLIDE 18 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 19 - Aflandia baseline prioritisation

Estimate the prioritisation by pushing the Analysis tab.

Of the 10 trade-related SPS capacity-building options, Aflatoxin Controls for Maize is ranked top, followed closely by Hygiene Controls for Wild Capture Shrimp. The capacity-building options ranked bottom are FMD-Free Area for Beef and Aflatoxin Testing for Groundnuts.

SLIDE 20 - What does the ranking mean?

How are the results of the prioritization interpreted?

First, the results present a prioritization of the 10 capacity-building options. Different parameters and/or different measures may well prioritize the options differently.

Second, all 10 of the capacity-building options are worth doing. They all yield benefits, and all have a positive net flow.

Third, the results suggest that some of the capacity-building options are worth doing before other options. That is, they have a higher net flow.

Fourth, the results show how each capacity-building option performs relative to the other capacity-building options.

It is also possible to see why each option got a high/low net flow and so as ranked as higher or lower priority.

SLIDE 21 – Aflandia contribution analysis

The D-Sight platform provides an analysis of the contribution made by each of the decision criteria to the total net flow of each of the capacity-building options.

Press Criteria Contribution under the Analysis tab.

The stacked bar for each of the capacity-building options shows the importance of each criterion to the overall net flow. This will be influenced by how well the respective capacity-building option performs with respect to each criterion (which was estimated when the respective information card was compiled) and the weight assigned to that criterion. Note that a capacity-building option will only get a positive score for any criterion when it is better than at least one other option. Otherwise, it will get a zero score.

In the case of the top ranked capacity-building option, Aflatoxin Controls for Maize, the decision criteria that contribute most to the relatively high net flow is the impact on exports (accounting for 18.7% of the 63% score for this option). Other key criteria are the impact on agricultural/fisheries productivity (11.2%), impact on domestic public health (10.4%) and poverty impact (9.7%). The up-front investment and on-going cost make almost no contribution; this is a relatively expensive option that is outperformed by almost all others. These results highlight how, even the top-ranked capacity-building option, can perform badly with respect to some of the decision criteria.

Conversely, the bottom ranked capacity-building option, FMD-Free Area for Beef, gets a relatively high score for impact on exports (11.7%); only four other options get a higher score for impact on exports than this option. This option also gets a relatively high score for impact for its impact on agricultural/fisheries productivity. The reason for the low overall net flow for this option is that it gets a zero score for five of the decision criteria; it is outperformed by all other options with respect to these criteria.

A report can be obtained from D-Sight that includes the prioritisation and contribution analysis. Go to the Report tab and press the Automatic Report tab. This report can be printed out or saved as a PDF.

SLIDE 22 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 23 - What you need to do now

Remind participants of the key messages of the module:

- This module has introduced the use of D-Sight to derive the prioritization.
- D-Sight is an easy-to-use platform for undertaking multi-criteria decision analysis.
- In so doing, only the basic functions of D-Sight have been introduced. Some of the other functions will become apparent as participants use D-Sight themselves.

Instruct participants to look over this module again to make sure they understand how the prioritization model is put together. Participants should enter the Aflandia case study into D-Sight themselves and run the prioritization, then, send the prioritization report to their instructor.

The instructor should look over the reports that are submitted to make sure that all participants have successfully run the model and got the correct result.

Module 12 – Validation of the results

Objectives

The objectives of Module 12 are as follows:

- To examine how the baseline prioritization is validated.
- Explore how sensitivity analysis of the prioritization is undertaken using D-Sight.
- Discuss the role of stakeholder consultation in validating the results.

Handouts

For this module, the facilitator will need:

- Slides of Module 12 – DOWNLOAD HERE
- Access to the D-Sight software – CLICK HERE
- Sample report for prioritization and contribution analysis – DOWNLOAD HERE
- Sample report excluding aflatoxin controls for maize – DOWNLOAD HERE
- Sample report excluding poverty impacts – DOWNLOAD HERE
- Sample report with trade impact and cost minimization – DOWNLOAD HERE
- Sample report for equal weights prioritization– DOWNLOAD HERE
- Sample report with zero trade of hot peppers – DOWNLOAD HERE

Time required to deliver this module

60-90 minutes

Notes for the facilitator

SLIDE 1 - Module 12: Validation

Inform participants about the topic of the module.

SLIDE 2 - Ask participants if they have any questions or comments on what was covered in the previous module

SLIDE 3 - What are we doing now?

In this penultimate module, we will be looking at how we can use D-Sight to validate the baseline prioritization that we have estimated. Thus, we will be seeing how we can assess how sensitive these results are to changes in the parameters we have defined. Also, how we consult stakeholders to obtain feedback and confirm broad-based acceptance of the results.

SLIDE 4 - Stages to the P-IMA process

This is the last stage of the P-IMA process!

SLIDE 5 - Aflandia – baseline prioritization

This slide shows the prioritization derived in the last module. You may have noticed that it was labelled 'baseline'. This is because we don't just estimate this prioritization and complete the process. Rather, we still must validate the results we have obtained.

SLIDE 6 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 7 - Validating the baseline prioritization

Having derived the baseline prioritisation, it is critical to assess both its robustness and acceptance to the stakeholder community. First, the robustness of the prioritization is tested using sensitivity analysis. Then, the results of the analysis, including baseline prioritization and sensitivity analysis, are distributed to stakeholders for comments.

The aim here is to identify which, if any, elements of the prioritization exercise need to be revisited. For example, it could be that there are measures in one or other of the information sheets that are critical to the prioritization but where we had less than high confidence. As another example, it could be that there are disagreements over the decision weights, and we want to see if changes in these influences the prioritization.

First, we look at sensitivity analysis of the baseline prioritization.

SLIDE 8 -Sensitivity analysis

To assess the sensitivity of the baseline prioritization we look at each of the key parameters in turn. Thus, we are looking at the extent to which the ranking of the 10 capacity-building options changes as each of the key parameters is adjusted.

First, we look at the 10 capacity-building options. For example, it could be that new information has come available or that one of the options is no longer considered a problem. Alternatively, while the prioritization was being finalized one of the options had been fixed and so was no longer an issue.

Note that, excluding any one option may change the overall ranking of the remaining options, and will impact the net flow assigned to each. It may also affect the size of the difference in the scores between the options.

SLIDE 9 - Aflandia prioritization excluding aflatoxin controls for maize

For example, what if we exclude the capacity-building option that was ranked top in the baseline prioritisation, namely Aflatoxin Controls for Maize?

Open the Aflandia problem in D-Sight and exclude Aflatoxin Controls for Maize. Rerun the prioritisation using the Analysis tab.

The new ranking has Hygiene Controls for Wild Capture Shrimp ranked top (which was second in the baseline prioritization) and its net flow is now higher. FMD-Free Area for Beef is still ranked bottom. However, some of the middle rankings have changed. For example, Pest Risk Assessment for Hot Peppers moves from five of 10 options in the baseline prioritization to third of nine options in this revised prioritization.

SLIDE 10 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 11 - Sensitivity analysis

We now turn to the decision criteria.

Firstly, what if we were to exclude the decision criterion related to the impact on poverty of each of the 10 capacity-building options? Would the ranking of the options change significantly?

SLIDE 12 - Aflandia prioritisation excluding poverty impacts

Open the Aflandia problem in D-Sight and exclude the Poverty Impact decision criterion. Normalise the weights under the Weights tab. Rerun the prioritisation using the Analysis tab. Note that, in re-running the prioritization, we are assuming that the relative weights between the remaining seven decision criteria remain the same.

Excluding Poverty Impacts does not change the capacity-building options that are ranked top, namely Aflatoxin Controls for Maize and Hygiene Controls for Wild capture Shrimp. FMD-Free Area for Beef and Aflatoxin Testing for Groundnuts also remain the options ranked lowest. However, there are some changes to the mid-ranked options. For example, Pest Risk Assessment for Hot Peppers moves from fifth to third in the prioritization.

SLIDE 13 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 14 - Aflatoxin prioritization based on trade impact cost minimization

Alternatively, what if we just wanted to find out how the 10 trade-related SPS capacity-building options would be ranked if we just wanted to find the cheapest way of having the largest trade impact? For example, this might be the perspective of the ministry responsible for trade. Thus, we exclude all the decision criteria apart from Up-Front Investment, Ongoing Costs, and Impact on Exports. We are going to assume again that the relative weight between these three decision criteria does not change.

Open the Aflandia problem in D-Sight and exclude all the decision criteria except for Up-front Investment, On-Going Costs, and Impact on Exports. Normalise the weights under the Weights tab. Rerun the prioritisation using the Analysis tab.

The prioritization changes dramatically. The top-ranked capacity-building options are Pest Status for Pineapple and Pest Risk assessment for Hot Peppers. Whilst FMD-Free Area for Beef remains the lowest-ranked option, Aflatoxin Testing for Groundnuts moves up the ranking to seventh place. Aflatoxin Controls for Maize, ranked top in the baseline prioritisation, moves way down the ranking. Conversely, Hygiene Controls for Wild Capture Shrimp remains highly ranked.

SLIDE 15 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 16 - Sensitivity analysis

Now we turn to the decision weights. What will happen to the prioritization if these are changed? For example, in the baseline prioritization a heavy weight (of 21%) is put on the Change in Exports decision criterion. What if this was to be reduced?

SLIDE 17 - Aflandia equal weights prioritization (Slide 17)

Let's say that there was disagreement over the weights to be applied to the individual decision criteria. In such a situation, we might estimate a model in which all the decision criteria are weighted equally.

Open the Aflandia problem in D-Sight and set the weights to be equal under the Weights tab. Rerun the prioritization using the Analysis tab.

In this equal weight prioritization, Pest Treatment for Mango and Residue Monitoring for Honey are ranked first and second. Aflatoxin Controls for Maize and Hygiene Controls for Wild Capture Shrimp are ranked third and fourth. FMD-Free Area for Beef is still ranked bottom.

SLIDE 18 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 19 - Sensitivity analysis

Finally, we might want to see how sensitive the prioritization is to changes in the measures in the information sheets. That is our assessments of the costs and impacts of each of the capacity-building options that are reported in the information sheets. This obvious focus here would be on measurements over which we have low (or maybe medium) levels of confidence. In many ways, a low level of confidence is a 'red flag' and we should certainly see if changes in these values has an appreciable impact on the baseline prioritization. If it does, we will need to return to these estimates, collect more and/or better data and revise the estimates (and the associated level of confidence) as appropriate.

SLIDE 20 - Pest risk assessment for hot pepper

For example, when we compiled the information sheet for the capacity-building option Pest Risk Assessment for Hot Peppers we noted that there were questions over the competitiveness of hot pepper exports from Aflandia and assigned a low level of confidence to the associated estimate in the information sheet. The case study states that exporters predicted annual exports of $5 million could be achieved. This was the measure that was used in the baseline prioritization. However, the case study also states that Latin American exporters have lower production and transport costs, which raises questions over whether Aflandia could successfully export hot peppers to the US even if this capacity-building option was implemented.

SLIDE 21 - Aflandia prioritisation with zero trade impact for pest risk assessment for hot peppers

Let's see how the prioritization changes if we change the Impact on Exports of the Pest Risk Assessment for Hot Peppers capacity-building option to zero.

Open the Aflandia problem in D-Sight and change the value for Impact on Exports for the Pest Risk Assessment for Hot Peppers option to zero in the Evaluations tab. Rerun the prioritization using the Analysis tab.

The only change in the prioritization, apart from shifts in the absolute values of some of the net flows, is that the Pest Risk Assessment for Hot Peppers capacity-building position moves down the ranking from fifth to seventh position. Clearly, this value does matter that much!

SLIDE 22 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDES 23 and 24 - Stakeholder consultation

Having concluded the sensitivity analysis, the final stage is to report the results to senior decision-makers in government and to stakeholders. To facilitate this process, the analysis needs to be reported in a concise draft report that uses language that is accessible to non-technical experts on SPS issues. The report should include, at a minimum (Slide 24):

- An overview of the process that has been undertaken.
- Descriptions of each of the trade-related SPS capacity-building options.
- Description of the decision criteria and weights.
- Information cards.
- Baseline prioritization.

- Results of the sensitivity analysis.

Having disseminated this draft report widely, a structured feedback process needs to be employed. It is not sufficient to sit back and wait for comments! Thus, a face-to-face or remote stakeholder workshop might be organized, with the explicit objective of reporting on the analysis and garnering feedback. Alternatively, a feedback survey might be employed, perhaps supported with a recorded video presentation of the results.

Note that the prioritization will often need to be revisited based on feedback from stakeholders. If these adjustments are significant, it may be necessary to engage in a further round of disseminating the (revised) draft report and collecting feedback. Thus, this process should be seen as iterative, with a step-by-step process towards the finalization of the analysis and report.

Based on feedback and following any adjustments to the analysis, the final report is finalized and disseminated widely amongst senior decision-makers and stakeholders.

SLIDE 25 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 26 - What you need to do now (Slide 26)

Remind participants of the key messages of the module:

- The preliminary prioritization of the capacity-building options must be validated before the P-IMA process is complete.
- The preliminary prioritization should be subject to sensitivity analysis, with a particular focus on elements of the information cards over which there is most uncertainty.
- Having concluded the sensitivity analysis, a draft report is compiled and shared with stakeholders. If any stakeholders question and/or disagree with any of the analysis they should be directed to the information cards and asked to identify measures that they judge need revision, or at least reconsideration.
- Having completed the process of stakeholder engagement, the report on the prioritization can be finalized.

Instruct participants to review this module and inform the instructor if they have any questions. Before the final session, participants should reflect on the P-IMA framework and be ready to engage in a discussion on its strengths and weaknesses, and possible implementation challenges.

Module 13 – Practical use of the P-IMA framework

Objectives

The objectives of Module 13 are as follows:

- Discuss the practical implementation of the P-IMA framework and possible related challenges.
- Discuss the strengths and weaknesses of the framework.
- Discuss how the P-IMA framework might be adapted to other contexts.

Handouts

For this module, the facilitator will need:

- Slides of Module 13 – DOWNLOAD HERE
- South Indantia case study – DOWNLOAD HERE
- Proforma South Indantia capacity-building option sheets – DOWNLOAD HERE
- Proforma South Indantia information cards – DOWNLOAD HERE

Time required to deliver this module

60-90 minutes

Notes for the facilitator

SLIDE 1 - Module 13: Using the P-IMA framework

Inform participants about the topic of the module.

SLIDE 2 – Ask participants if they have any questions or comments on what was covered in the previous module

SLIDE 3 - What are we doing now?

In this final module, discuss with participants the practical application of the P-IMA framework, both to the prioritization of trade-related SPS capacity-building needs and to other contexts, for example SPS capacity-building needs not related

to trade. Also, discuss the challenges that might be faced in implementing the framework, and the strengths and weaknesses of the framework for prioritizing trade-related SPS capacity-building.

SLIDE 4 - Stages to the P-IMA process (Slide 4)

This is the P-IMA framework that we have worked through over the previous 12 modules.

SLIDES 5 and 6 - Practical implementation of the P-IMA framework

The practical application of the P-IMA framework can be challenging. It represents a very different way to prioritize trade-related SPS capacity-building options to the norm in many countries. Slide 5 shows some of the critical factors influencing the likely success of applying the framework.

First, the technical working group that will implement the framework needs to be in place from the outset. All members of this group need to have received training in the use of the P-IMA framework. They also need to have the time available to devote to this work; this may well require that they are relieved of other duties.

Second, the necessary resources need to be made available. To organise purchase the D-Sight software, organise workshops, gather data, employ analytical help, etc. Attempting to implement the framework 'on the cheap' is not a recipe for success!

Third, there needs to be 'buy-in' at all levels of the decision-making process, and especially amongst senior officials. it is only worth spending the time, effort and resources needed to implement the P-IMA framework if the results are sure to face a receptive audience.

Fourth, successful implementation of the P-IMA framework needs a champion. This is the person who drives the process, keeps it on track and follows-up with colleagues and/or stakeholders when necessary.

Fifth, linkages and discourse with stakeholders is critical. Implementing the P-IMA framework is much easier if officials that are responsible for SPS issues and/or trade already engage with stakeholders.

Finally, give thought to how the output of the P-IMA framework will be used. Is it intended that the prioritization will be used literally; that is, the capacity-building options ranked top will be selected and pursued until the available budget is exhausted? Alternatively, will the prioritization be used as input to decisions over capacity-building options and considered alongside other considerations, for example political considerations?

It is important to reflect on the challenges that are likely to be faced in implementing the P-IMA framework before starting. That way, action can be taken to minimize these ahead of time.

To facilitate a discussion with participants, ask:

What challenges do you think you might face in implementing the P-IMA framework in your own context?

SLIDE 7 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 8 - Challenges in implementing the framework

It is important to recognize that the framework can be challenging at first; for many, it is a new way of thinking about SPS capacity-building and of making related investment decisions. The mechanics of the process can also be difficult, including the collection of data needed to compile the information cards, stakeholder engagement and/or contending with uncertainty over impacts of certain capacity-building options.

Finally, and looking to the longer term, having developed skills and experience in using the P-IMA framework, thought needs to be given to how this will be maintained. Thus, there is a real possibility that expertise in using the P-IMA framework can be lost, for example, with staff turnover.

SLIDE 9 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 10 - Using the outputs of the P-IMA framework

It is important from the outset to give some thought to how the outputs of the P-IMA framework are going to be used. That is, in practical terms, to what uses will they be put? For example, providing evidence to support:

- Prioritization of actions and investments within existing capacity-building projects and/or programmes.
- Development of specific SPS capacity-building projects and programmes.
- Compilation of evidence-based funding requests, for example to the finance ministry.
- Development of a national SPS action plan.

More generally, the focus might be on enhancing efficiency in the use of existing resources for trade-related SPS capacity-building. Also, on identifying gaps in information and data on SPS capacity-building needs.

SLIDE 11 - Routine use of the P-IMA framework

Whilst the P-IMA framework can be used on a one-off basis, it is designed to be employed on an on-going basis to facilitate fundamental changes to the way in which decisions are made over trade-related SPS capacity-building.

Thus, the initial prioritization can be revisited and revised when:

- Capacity-building options identified in the initial analysis have been addressed.
- New or revised SPS requirements are put in place in existing and/or potential export markets.
- New data come available that will enable the analysis to be refined.
- There are changes in government policies and/or priorities related to trade, agri-food sector, SPS management, overall development, etc.

The prioritizations that emerge from the P-IMA framework are designed to be ‘living entities’ that are revisited and revised on an ongoing basis.

SLIDE 12 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDE 13 - Strengths and weaknesses of the P-IMA framework

To get participants to reflect on the strengths and weaknesses of the P-IMA framework ask the following question:

> What do you see as the major strengths and weaknesses of the P-IMA framework?

Act as a moderator for a discussion between the participants with respect to these strengths and weaknesses.

SLIDE 14 - Adapting the P-IMA framework

Whilst the P-IMA framework was designed to prioritize options that address trade-related SPS capacity-building needs, it can be adapted to other contexts. For example, it could be applied to prioritize trade-related capacity needs related to just a sub-set of SPS capacity, such as plant health. Alternatively, it could be used to prioritise SPS capacity-building options that, rather than addressing trade, are focused on public health or tourism. Finally, it can be used to prioritize not only SPS-related needs, but also those related to compliance with other technical requirements, for example labelling and/or food quality.

SLIDE 15 - Stages to the P-IMA process

The fundamental stages to the P-IMA framework that we have looked at in this training remain unchanged if the focus is adjusted in this way.

SLIDES 16 to 19 - Adapting the P-IMA framework

The only adjustments that need to be made to the framework are as follows.

First, to the composition of the technical working group. Thus, it is important from the outset to ensure that the group includes expertise in all aspects of the analysis. At the same time, some expertise may be obsolete if the analysis is reframed; for example, there is no need for a plant health specialist if the analysis is restricted to food safety.

Second, to the framing of the capacity-building options when defining the choice set at Stage 2. For example, if the focus is to be on capacity-building needs related to meeting food safety requirements in both domestic and export markets the question might be (Slide 16):

> What specific problems does your country face in meeting food safety requirements in domestic markets or in exporting agricultural and food products to other countries?

Alternatively, if the focus is on SPS capacity-building needs related both to trade and tourism, the question might be (Slide 17):

> What specific SPS-related problems does your country face in promoting tourism or exporting agricultural and food products to other countries?

Third, there may be differences in the stakeholders with which you need to engage, for example at Stage 2 when defining the capacity-building needs and at the end of the P-IMA process when validating the results. For example, there will likely be no need to include plant health specialists in an exercise that prioritises food safety capacity-building. Alternatively, if the focus is on SPS requirements in both domestic and export markets, stakeholders associated with supply chains to local markets will need to be engaged. And so on.

Finally, the portfolio of decision criteria, and the weights that are assigned to these, will differ according to how the fundamental question that drives the prioritisation process is framed. For example, if the capacity-building options relate at all to tourism, presumably we would want to include at least one decision criterion that relates to the impact on the tourism sector.

SLIDE 20 - Pause and ask participants if they have any questions, comments, or thoughts

SLIDES 21 and 22 - What do you need to do now?

Remind participants of the key messages of the module:

- From its application in numerous countries, the P-IMA framework has been shown to be a practical and robust way in which to prioritize trade-related SPS capacity-building options.
- There are certainly challenges with the implementation of the framework, but experience suggests that these can be overcome with relative ease.
- Whilst the P-IMA framework was developed to prioritize trade-related SPS capacity-building, it can be adapted to prioritize capacity-building related to measures beyond the trade contexts and to compliance with other technical requirements, such as labelling.

Instruct participants to look over this module. Participants should review the training programme to check that they understand the ‘nuts and bolts’ of the P-IMA framework. They should contact the instructor if they need further explanation/guidance.

The final activity in this training is the South Indantia case study (Slide 21). This is another fictitious country case study, just like Aflandia. Again, there are various trade-related SPS capacity-building needs embedded in the case study. Participants need to work through this case study on their own to identify the related capacity-building needs, compile the information sheets for these options, set up the prioritization problem in D-Sight and undertake the analysis.

Once participants have completed the analysis, they must submit the information sheets and report on the prioritization from D-Sight to the instructor. The instructor will provide feedback, which participants will need to incorporate to complete their analysis. The instructor will provide written feedback, but participants should also organize a time to talk with her/him about their analysis.

Good luck!

Distribute to participants:

- South Indantia case study.
- Proforma South Indantia capacity-building option sheets.
- Proforma South Indantia information cards.

SLIDE 24 - Ask participants if they have any final questions, comments, or thoughts

South Indantia case study

Having completed the 13 taught modules, participants are provided with the opportunity to apply the framework themselves to a second fictious country case study, South Indantia. participants should be given a period of two to three weeks to complete this assignment, so that the total training can be completed in around nine weeks.

Participants are provided with the South Indantia case study package. This includes the case study and full instructions on the analysis to be undertaken. Participants are also sent the proforma information sheet for the case study.

Having the completed the case study analysis, participants return their draft analysis to the instructor. The instructor then provides feedback to each participant, who revises their analysis accordingly. The final analysis is then submitted to the instructor for final checking.

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