



FIPAT Guidebook

Food Security Indicator & Policy Analysis Tool

iisd International Institute for Sustainable Development / Institut international du développement durable



UNAH
UNIVERSIDAD NACIONAL AUTÓNOMA DE HONDURAS



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This document is an output from a project funded by the U.K. Department for International Development (DFID) and the Netherlands Directorate-General for International Cooperation (DGIS) for the benefit of developing countries. However, the views expressed and information contained in it are not necessarily those of or endorsed by DFID, DGIS or the entities managing the delivery of the Climate and Development Knowledge Network, which can accept no responsibility or liability for such views, completeness or accuracy of the information or for any reliance placed on them.

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PHOTO CREDITS

Front & back cover: iStockphoto.com

Page 10: Andrea Rivera, 2013.

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1.0 Introduction to FIPAT and This Guidebook

Climate variability and change can disrupt key elements of food systems, affecting the availability of food as well as people's ability to access and use it. To reduce the potential for negative impacts on food security in conditions of growing climate uncertainty, food systems should be made more resilient. Institutions and policies can influence the resilience of food systems. This is not only true for policies that directly target food security or climate change, but also those that affect other parts of the food system, such as energy, water, transport or trade policies.

The relationship between climate resilience, food security and the policies and actions of multiple levels of government is complex. Government decision makers who want to build more climate resilient food systems need an analytical tool to help them identify required resilience actions, monitor food system resilience over time, and assess the extent to which current policies strengthen food system resilience.

The Food Security Indicator & Policy Analysis Tool (FIPAT) has been developed to address this need. It provides a logical sequence of analytical steps that help users to:

- Identify key elements of their food system and their vulnerability to climate shocks and stresses.
- Identify relevant resilience actions to strengthen these vulnerable elements.
- Select indicators to monitor changes in food system resilience over time.
- Assess the extent to which public policies support the implementation of required resilience actions; the capacity of actors to reduce risk and promote resilience; and the creation and maintenance of food system resilience.

FIPAT is mainly targeted at national and sub-national government decision-makers and their support staff. The tool consists of a series of Microsoft Excel spreadsheets. Different users may have different priorities in using FIPAT, and the tool can be used flexibly to accommodate specific objectives. For example, it is possible to only use the first part of the tool to identify resilience actions and/or resilience indicators, without assessing policies. Conversely, if resilience actions are already known, the tool can be used just assess policies.

This guidebook helps the leaders and facilitators of a FIPAT assessment to understand the conceptual foundation of the tool and to prepare for and conduct the assessment process. Users may find it necessary to consult additional sources of information and/or to receive training on the use of the tool.

FIPAT has been developed through the Climate Resilience and Food Security in Central America (CREFSCA) project, in partnership between the International Institute for Sustainable Development (IISD), Action Against Hunger (ACF-E), the Institute for Social and Environmental Transition (ISET), the National Autonomous University of Honduras' (UNAH) Regional University Centre of the Atlantic Coast, and Central American University's Faculty of Economic and Business Sciences and Institute of Development and Applied Research (Nitlapán), with funding from Climate and Development Knowledge Network (CDKN).

The policy assessment section of the tool is adapted from the ADAPTTool, developed in 2010 by the International Institute for Sustainable Development (IISD), Adaptive Resource Management and The Energy and Resources Institute (TERI) with financial and in-kind support from the International Development Research Centre, Natural Resources Canada's Prairie Regional Adaptation Collaborative, Manitoba Conservation, Manitoba Agriculture and Rural Initiatives, and the Saskatchewan Watershed Authority.

2.0 Concepts

FIPAT adopts a food systems and resilience approach in order to understand and reduce the risks climate variability and change pose to community food security. This section illustrates the conceptual framework that gives the tool its analytical structure, and provides definitions for a number of key terms, as they are used in this guidebook and in the tool itself.

Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (World Food Summit, 1996). This definition comprises four dimensions: availability, access, utilization and stability (Schmidhuber and Tubiello, 2007). Other definitions of food security may be used in specific countries or communities of practice.

Food systems describe the processes, required inputs, and generated outputs involved in feeding a population. Understanding food systems is important to understanding how food security can or cannot be achieved, particularly at the local level. The FIPAT analysis is based on a conceptual framework for food systems proposed by Tyler et al. (2013) (see Figure 1 below). This framework, which has the form of a spinwheel, puts food security at its core. The analysis starts in the center by looking at food utilization, i.e. the ability of people to consume and benefit from food, which depends on the diversity and nutritional value of food, health and hygiene aspects as well as social values and practices that shape food consumption.

From there, one can look at food access strategies—the ways households gain access to food through alternative livelihood strategies. Food access options include subsistence production, purchase, barter and food aid. The next ring describes the processes that ensure food availability, such as production, processing, distribution, storage and trading. The two outer rings present the resources and services that support food production and the organizations and policies that influence food availability, access and utilization. Food stability is considered to be a cross-cutting theme that is analyzed in the context of each spinwheel ring.

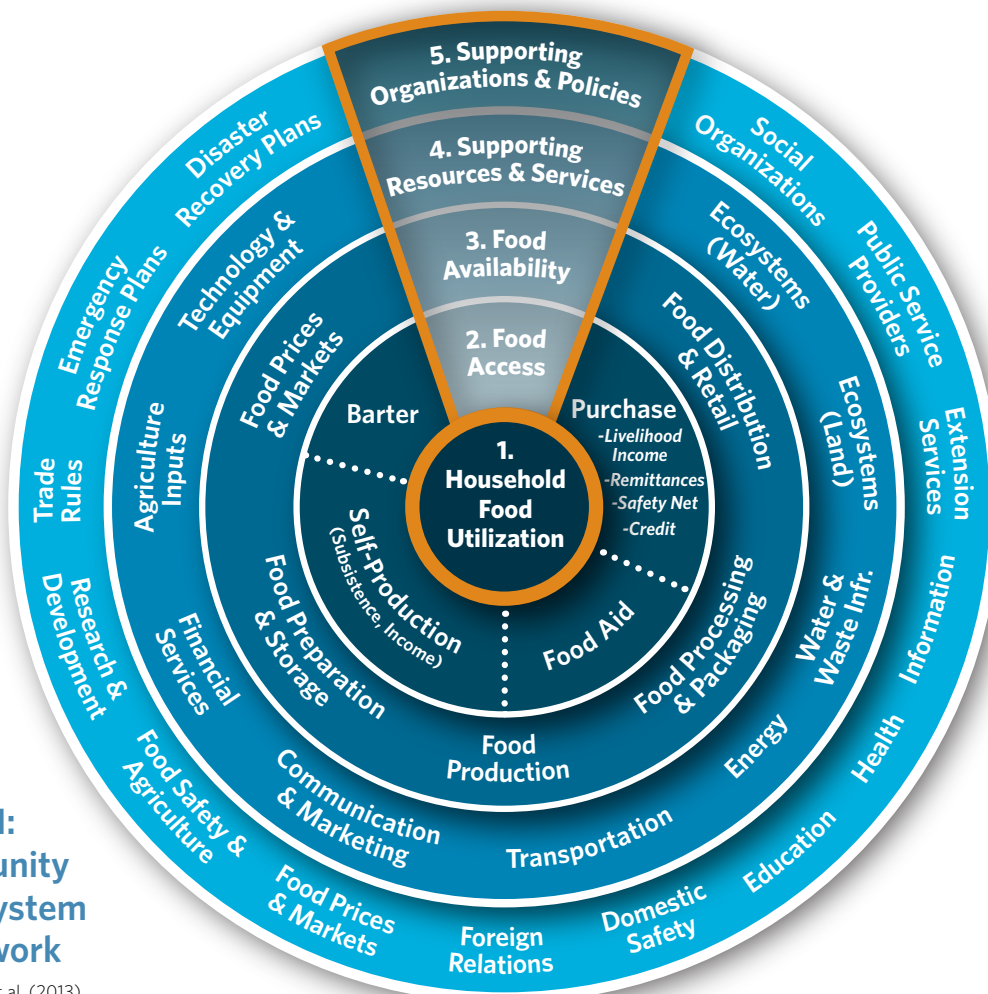


Figure 1:
Community Food System Framework

Source: Tyler et al. (2013)

Climate risk is defined as the probability of harmful consequences or expected loss resulting from the interaction of a climate hazard, exposure to these hazards and conditions of vulnerability. Climate hazards are potentially damaging hydro-meteorological events or trends such as storms, floods, droughts or steady increased of temperatures over several years and decades. Exposure refers to the presence of people and assets in climate hazard-prone areas. Vulnerability is defined as susceptibility to harm and is a function of sensitivity (the degree to which people and assets may be affected by climate hazards) and adaptive capacity (the ability of institutions, systems and individuals to take advantage of opportunities or cope with consequences of potential damages) (adapted from IPCC, 2012; Lim and Spanger-Siegrfried, 2005, and UN ISDR, 2009).

Adaptive capacity is closely related to *resilience*, which can be defined as the ability of a system to absorb disturbance and reorganize while undergoing change so as to retain essentially the same function, structure, identity and feedbacks. The resilience approach is based on the understanding that a system is evolving rather than static, and that the type and magnitude of change is not always predictable, which requires a system to be flexible. It also highlights the intrinsic linkages between ecological and social systems (Nelson et al., 2007).

While resilience is a compelling concept for addressing risk and uncertainty, it is also abstract. To make this concept operational and specific, we use a framework developed by Tyler and Moench (2012). This framework describes three elements that are important to resilience: systems (ecosystems and infrastructure systems), agents (people and organizations), and institutions that link agents and systems. For each of these three elements, an extensive multi-disciplinary literature prescribes the key characteristics that lead to resilience in practice (see Table 1 below). This framework points us to a set of simple questions that are used to interrogate different scales of the food system presented in the concentric rings of Figure 1. The questions can be overlaid on those rings as shown in Figure 2 below.

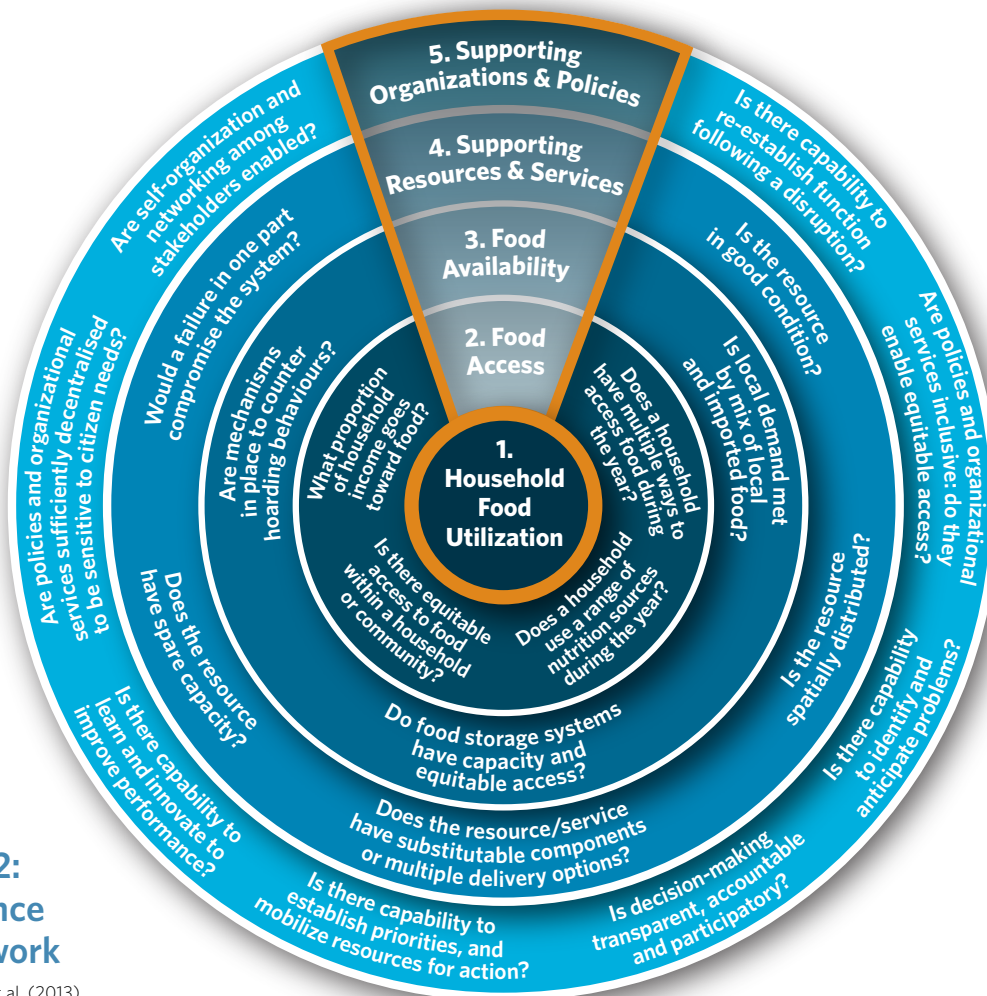


Figure 2:
Resilience Framework

Source: Tyler et al. (2013)

FIPAT looks at the impact of key policies on climate resilience and food security by asking whether or not they support specific resilience actions, whether they support the capacity of key actors to reduce risks and promote resilience, and whether they create and maintain the food system's resilience. The criteria for resilience of systems, agents and institutions, as shown in Table 1, are reflected in analytical steps in the second part of FIPAT.

Table 1: Normative Criteria for Resilience

SYSTEMS	
Flexibility and Robustness	The system can meet service needs under a wide range of climate conditions. Assets can be converted or structures modified under stress to introduce new ways to ensure continued functionality.
Redundancy, Modularity and Diversity	There is spare capacity to accommodate unexpected service demand or extreme climate events. System components and pathways provide multiple options or substitutable components for service delivery and are spatially distributed to avoid concentrated failure.
Safe Failure	Failure in one part of the system is unlikely to compromise the ability of the system as a whole to deliver service. The potential for failures to cascade between systems and system components is small.
AGENTS	
Responsiveness and Re-organization	Agents are motivated and able to plan and organize timely action when required, including re-structuring. Function, structure and order can be restored in a timely fashion after an extreme event.
Resourcefulness	Agents have access to their own resources or the resources and services of other systems and agents. Priority actions for adaptation can be identified and the necessary resources mobilized for implementation.
Capacity to Learn	Agents are able to identify and anticipate potential risks. Lessons from past failures and external feedback are internalized and improvements implemented.
INSTITUTIONS	
Rights and Entitlements	Access to systems and capacities is assured by equitable rights and entitlements. Collective action is enabled, rather than being constrained.
Decision Making	Decision-making processes are transparent, representative, and accountable. Diverse stakeholders have ways to provide input to decisions. Dispute resolution processes are accessible and fair.
Information	Agents have access to necessary information in order to determine effective actions and to make strategic choices for adaptation.

Source: Tyler and Moench, 2012

Users who require more information about the conceptual framework and origins of the tool in order to better understand how to apply it, are strongly encouraged to read the more technical concept note¹, which provides helpful background material.

¹ Climate Resilience and Food Security: A framework for planning and monitoring, available at <http://www.iisd.org/publications/pub.aspx?pno=2831>

3.0 How to Use FIPAT

This section discusses fundamental considerations that will play an important role in the implementation of the tool. In particular, this section highlights the importance of identifying the scope (geographical focus and key audience); provides a quick overview of the analysis sequence; lists methods used for stakeholder participation, data collection and tool application; and clarifies the resources required to conduct the analysis.

3.1 Scoping and Analysis Sequence

In this section, the importance of scoping and the analysis sequence of the tool are described.

Scoping

Before getting started, the user should consider the purpose of the assessment, and how the results will be used—in particular, who are the key audiences who will apply the results (often internal government policy audiences). The purpose should include the geographical scope of the study to clarify whether the proposed food system is defined at the local, regional or national level. The scope of the analysis may depend on the jurisdiction applying the tool. You may also want to identify key informants for your analysis before getting started, although for some specific information requirements you may only be able to identify appropriate information sources after the first analytical steps.

Analysis Sequence

Once the purpose and audience of the assessment are clear, the user will go through a set of questions that follow a logical sequence. The series of questions are divided into sections A (food system resilience actions and indicators) and B (policy analysis), and are arranged in a total of nine different spreadsheets, as described in detail in the next section. The diagram below illustrates the tool’s analysis sequence.

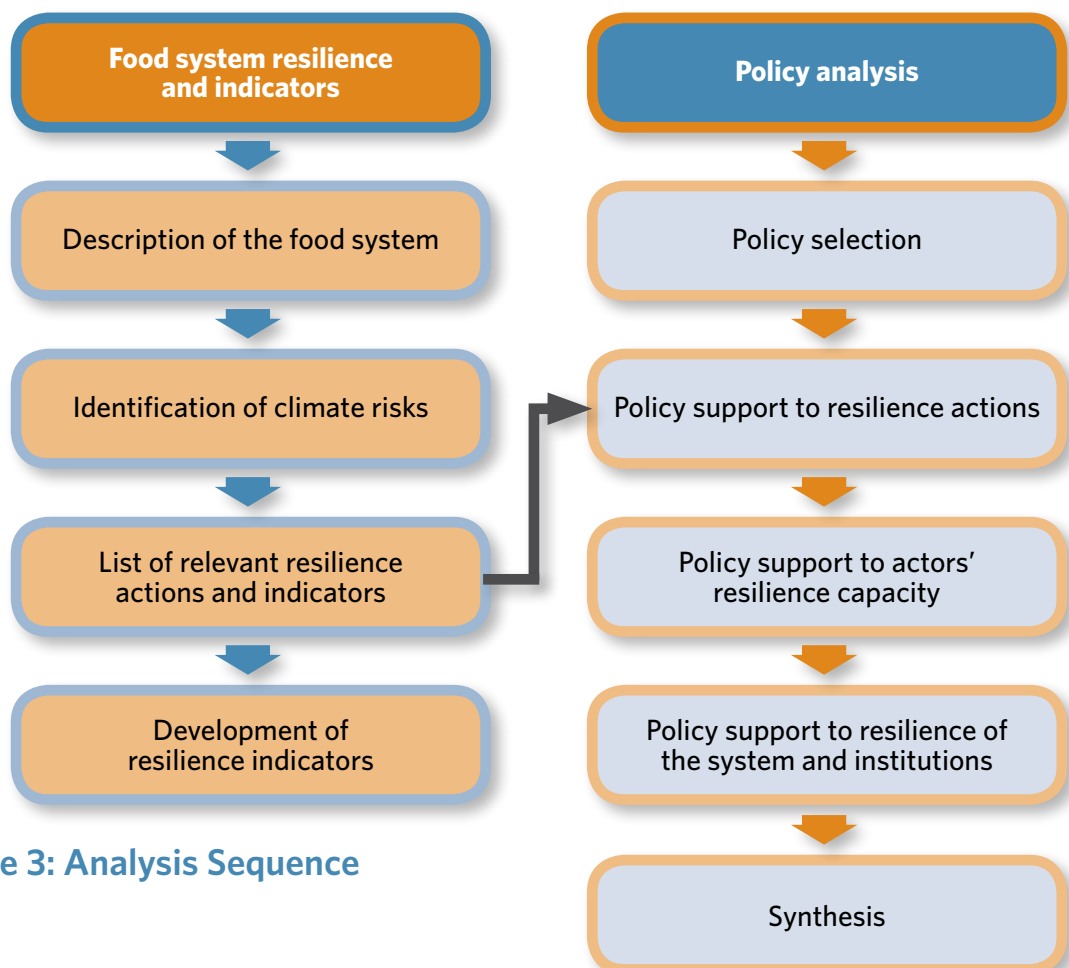


Figure 3: Analysis Sequence

3.2 Methods

Here the user will find guidance on stakeholder engagement as well as data collection and the application of the tool.

3.2.1 Stakeholder Engagement

Answering questions from the tool will most likely rely on the participation of a group of individuals, including (but not limited to) government departments, representatives from non-governmental organizations, and food security or climate change practitioners. In identifying your key stakeholders, it is important to distinguish who will take part in the analysis and who be sources of data or key informants. Having government officials sign off on the final report through their participation in the analysis will add weight to your presentation of the findings and lessons learned to decision makers.

To decide how stakeholders will be involved in the study, we recommend that you map out key actors and their institutions for both components of the tool. This will help identify who will take part in the analysis and how best to obtain the necessary information.²

In preparing to engage with the selected stakeholders, the facilitator or leaders should clearly identify:

- Value added for the stakeholders by participating in the assessment
- A communication strategy to disseminate the results
- How the assessment complements ongoing management processes
- Anticipated sensitivities, including assessment of policies

When engaging with stakeholders, the benefits of the analysis and how the results will be shared should be clearly communicated. If there are national policy commitments to food security, this analysis will help government deliver on those policies effectively under conditions of increasing climate variability and uncertainty. The lead organization in the analysis will need to understand the policy context of key stakeholder organizations in order to address their primary interests and identify value added from their perspective. Openly negotiating the purpose and emphasis of the analysis, how it will benefit the stakeholders, and how the results will be disseminated will make stakeholders more committed to the project and to sharing their knowledge of key policies.

In the policy analysis, the analysts should keep in mind any sensitivity that government stakeholders may have about their program in the broader organizational context. For example, recent program cuts or fiscal restraint policies may cause managers to be wary or suspicious of this study as a threat to their programs. The best approach to bringing people on board is to anticipate such concerns and highlight the opportunities this study may bring to their program, including an improved understanding of the current and potential future vulnerabilities the policy or program may have to climate change impacts. It is important to emphasize that this analysis does not say much about the effectiveness of policies or programs in achieving their intended objectives under current conditions, so it should not be interpreted as an evaluation of the policies or programs, and that program “scores” are not measures of effectiveness or success.

Emphasize in communications with stakeholders that this analysis is a contribution to a conversation about climate resilience and food security that builds on existing understanding and recognizes that some future climate risks will be unanticipated. Use this as an opportunity to showcase knowledge learned, including strengths within the food system and the policies or programs analyzed.

Use the application of the tool as a way to learn from the experience, openly discuss any gaps in policy or program design or implementation identified in the analysis, including reflections about whether the gaps are significant and when might they be problematic. The use of FIPAT can be a good starting point for a conversation about strengths and opportunities and lay the foundation for future collaboration in support of climate resilience and food security.

² Sometimes data collection and analysis will require consultation with various government experts, ranging from field technicians to departmental supervisors to ministers. For public stakeholders, understanding the governmental (municipal, regional, national) panorama and accessibility to information will help identify the people needed to conduct the analysis.

3.2.2 Data Collection and Tool Application

Once the scope of the study has been identified and key stakeholders have been selected, convene the stakeholders in a group session for training and familiarization on the tool and the objective of the study. This will allow them to understand the tool and whether their role will be to take on a lead in the analysis or to supply information and/or data. This will strengthen their understanding of the final results and report. For the policy analysis, it will make it clear that the study will be applied through a resilience lens and not as an evaluation of their policy or program. Once this training has been provided, data collection can proceed in three ways:



FIPAT workshop in Honduras.

- In a workshop setting where participants provide insights and inputs during the event, which are later reviewed, recorded in the workbook and analyzed.
- By a group of analysts responsible for completing the sheets through regular consultations with other key informants who are knowledgeable about technical issues such as food systems, climate vulnerability, indicators and relevant policies and programs.
- Mixed approach. Initiate the process with a workshop to gain insights from stakeholders about the elements of the food system, vulnerabilities, resilience actions, indicators and set of policies. The workbook could be completed by a smaller group of analysts, and the results reviewed in a small workshop or meeting by the original stakeholder group.

Data collection will require assigning scores, in particular to vulnerability of food system elements, as well as the capacity for policies to support resilience in identified actions, actors and the system. If there are several individuals in the project team responsible for collecting data, including interviewing several stakeholders, it will be important to develop a plan for version control and data collation.

When analyzing policies, it is important to conduct data collection as a learning process with participating government officials. Those who are already familiar with the policies or programs they administer will be offered a different perspective through the lens of resilience. This will help lessen any initial apprehension in assessing their departments' policies or programs.

Policy experts should be reminded that although it may seem important to them that each policy or program should score "well", there is no need for all programs to be resilient. A low resilience score may be perfectly reasonable for a narrowly targeted program of limited duration. And a high score may increase expectations for performance under stress. Respondents should be discouraged from giving strategic responses intended to make their program "look better". Data collection will involve iteration and discussion. This will require an investment of staff time, but it is also a key benefit and a source of broader organizational learning.

To expedite the process and be mindful of stakeholders' time, the leaders or facilitators of the assessment process may want to compile some answers based on their knowledge of the policy or program in advance, and confirm them with the stakeholders.

3.3 Required Resources

This section provides insights on the resources required to use FIPAT.

Time Management

The time required to conduct the entire analysis will depend on:

- Pre-existing knowledge of the food system
- Pre-existing knowledge of climate change hazards and impact in the focus area
- Number of policies selected
- Availability of staff and stakeholders to participate in the study

It is important to remember that this is an interactive process between the facilitators or leaders and stakeholders, and that the main value of the assessment is in the conversations and development of shared ownership of results. This collaboration takes more time than the analysis itself.

Tips

During the course of the assessment it is important to keep in mind that:

- Time flexibility is important, as it will allow sufficient time for trainings, group meetings and consultation, and to build relationships with the various stakeholders involved.
- Achieving consensus on the focus area and description of its food system can take as much time as data collection and analysis, particularly if the focus area has complex food system dynamics³ and a large number of policies are selected to be analyzed.
- In general, if workshop settings will be used to collect inputs, then the application of the tool will take at least two workshops to obtain inputs for the two components – resilience actions and indicator development, and policy analysis – of the tool. Each workshop should consider one component.
- If the information is readily available, the collection of information needed to complete analysis on resilience and indicators will take approximately two days.
- For the policy analysis, each policy or program will probably take one to two days, if undertaken by an analyst familiar with the FIPAT and the details of the policy.
- More time will be needed if the analyst has to learn FIPAT first, or must spend time tracking down information about the policy.

³ Complex food system dynamics may include different livelihoods, diverse main crops, multiple sources of food supply and significant difference in micro-climates, climate hazards and impacts within the same focus area.

PLEASE NOTE:

Throughout the tool, small comment boxes provide guidance and examples for the user. These comment boxes can be found at the top right hand corner of the individual cells as small red triangles. To read the comments the user should hover the mouse over the red triangles.

A2. What are the main climate risks in the context of the food systems in the focus country or region?

Here you will be asked to choose a hazard, or a number of hazards — such as droughts, hurricanes, pests, irregular precipitation — and then assess the impacts of these hazards on the prioritized elements of the food systems. Once you complete a narrative please rate the severity of the impacts. In order to make the assessment manageable, please limit your hazards up to 3.

0. Key hazard(s) List most important hazards of relevance for resilience analysis (e.g. hurricanes, heavy precipitation, high temperatures, sea level rise)
(1) hurricanes, (2) heavy rain, (3) drought, (4) sudden rainfall

How vulnerable are previously identified elements of the food system to climate hazards?

1. Food Utilization and Consumption

	Food System Description	Describe impacts of above hazards	Rate impact
What are the main food items consumed in the area of focus?	Maize, beans, coffee, rice, dairy products, eggs, meat, vegetables	Prolonged droughts and excess moisture during the winter can have negative impacts on food production during the rainy season the GID incidences increases	-2
What is the general health status and access to health services of the population in the area of focus?	In Zone 3 there is a limited health services. The diseases that are predominant in the region are gastrointestinal (caused by contaminated water)		-2
What percentage of the population in the area of focus has access to water and sanitation?	90% of the population in Zone 3 has access to water, however only 5% has access to sanitation	there is an increase in contamination in water sources, and increase in GIDs	-1

Climate Risks
Describe impacts of above hazards on each food system element and rank impacts on scale from -2 (very negative) to +2 (very positive) (do not use any decimals)

4.0 FIPAT – Step by Step

4.1 Section A: Food System Resilience and Indicators

This section of the tool is designed to help policy-makers and practitioners identify and prioritize key elements of a food system that are highly vulnerable to climate change and climate variability and/or contribute significantly toward the resilience of the food system. Once these are chosen, the tool guides analysts through a series of questions designed to identify resilience indicators.

This section of the tool consists of the following questions:

- A1: What are the key elements of the food system in the area of focus?
- A2: What are the main climate risks to food systems in the area of focus?
- A3: What resilience actions are needed to strengthen vulnerable food system elements and what should they achieve in the medium- to long-term?
- A4: What are the key indicators that best describe the resilience of the food system?

4.1.1 Sheet A1: Food System

In sheet A1 questions are divided under the food system’s five pillars designed to help navigate through the different elements of a food system. The box below summarizes the contents of each question under A1.

Box 1: FIPAT A1 Questions and Worksheet Structure

Scope

- 0) What is the geographic scope of the analysis? (e.g. country, department, region, district)

Food utilization and consumption

- 1) What are the main food items consumed in the area of focus?
- 2) What is the general health status and access to health services of the population in the area of focus?
- 3) What percentage of the population in the area of focus has access to water and sanitation?
- 4) What differences exist between genders and social groups in terms of consumption patterns, health and water services in the area of focus?

Access to food (internal)

- 5) What are the main food access strategies in the population in the area of focus?
- 6) What are the main income sources of the population in the area of focus?
- 7) What share of the average household income in the area of focus is typically used for food purchase?
- 8) What ways exist for the population in the area of focus to access food aid in times of need?

Access to food (external)

- 9) What are the main food access strategies for the area of focus as a whole?
- 10) Where does externally sourced food come from?
- 11) What are the main external revenue streams for the area of focus (e.g. export revenues)?
- 12) What share of the external revenue (e.g. foreign exchange) is used for food purchase?
- 13) What ways exist for the area of focus to access food aid in times of need?

Food availability (internal)

- 14) What food items are produced in the area of focus and in which zones within the area?
- 15) What food storage capacity exists in the area of focus and how is it geographically distributed?
- 16) What food processing, packaging and distribution infrastructure exists in the area of focus?

Food availability (external)

- 17) What quantities of key food items are available through imports from global/regional markets?
- 18) How much do prices of key food items fluctuate on external markets?

Supporting resources and services

- 19) What are the most important supporting resources and services for the food system?

Supporting policies and organizations

- 20) What are the most important supporting policies and organizations for the food system?

Once the food system is described by answering the questions above, the information is linked to sheets A2 and A3 to facilitate the transfer of data collected and the identification of vulnerable elements within the system and applicable resilience actions for these elements. For scoping guidance see section 3.1.

A1. What are the key elements of the food system in the focus country or region?

This sheet aims to guide users through a series of questions in order to describe the key elements of the food system in the specific area by unpacking each of the rings within the framework introduced at the previous sheet. Before answering these questions, please select the geographical scope of the assessment, for example a country/national level, county and/number of counties, regions/regional-level assessment.

0. Geographic Scope

Honduran western region - Zone 3

1. Food Utilization and Consumption

Question	Answer	Remarks	References
What are the main food items consumed in the area of focus?	Maize, beans, coffee, rice, dairy products, eggs, meat, vegetables	Corn and beans are the staple foods in Honduran culture	UNAH-CUROC, EROC, ATRIDEST, ICF, SAG
What is the general health status and access to health services of the population in the area of focus?	In Zone 3 there is a limited health services. The diseases that are predominant in the region are gastrointestinal (caused by contaminated water)	Poor drinking water systems with limited coverage, and shortage of medicines; there are strong disparities in the system.	UNAH-CUROC, EROC, ATRIDEST, ICF, SAG
What percentage of the population in the area of focus has access to water and sanitation?	90% of the population in Zone 3 has access to water, however only 5% has access to sanitation	Due to a lack of well-defined policies, these systems are managed at the community level	UNAH-CUROC, EROC, ATRIDEST, ICF, SAG
What differences exist between genders and social groups in terms of consumption patterns, health and water services in the area of focus?	There is no equity among children, women, men and social classes	The State should support the	UNAH-CUROC, EROC, ATRIDEST, ICF, SAG

Figure 4: Sheet A1 Layout

4.1.2 Sheet A2: Climate Risks

In A2, the focus is on identification of climate hazards and assessment of the impacts of these hazards on the prioritized elements of the food systems.

- The first step under this sheet is to identify the climate-related hazards to which the area of focus is vulnerable, such as hurricanes, heavy precipitation, high temperatures and sea level rise (see diagram below, question 0. Key Hazards)
- Second, by analyzing the information collected in A1, a description should be provided of how each element of the food system is affected by climatic impacts based on the identified climatic hazards.
- Lastly, the user is asked to rate the severity of the impacts from -2 to 2. (Scoring is explained in the appendix .)

A2. What are the main climate risks in the context of the food systems in the focus country or region?

Here you will be asked to choose a hazard or a number of hazards — such as droughts, hurricanes, pests, irregular precipitation — and then assess the impacts of these hazards on the prioritized elements of the food systems. Once you complete a narrative please rate the severity of the impacts. In order to make the assessment manageable please limit your hazards up to 3.

0. Key hazard(s)

(1) landslides (due to heavy rainfall); (2) drought; (3) sudden rainfall

How vulnerable are previously identified elements of the food system to climate hazards?

1. Food Utilization and Consumption		Climate Risks	Rate impact
Food System Description	Describe impacts of above hazards		
What are the main food items consumed in the area of focus?	Maize, beans, coffee, rice, dairy products, eggs, meat, vegetables	Prolonged droughts and excess moisture during the winter can have negative impacts on food production	-2
What is the general health status and access to health services of the population in the area of focus?	In Zone 3 there is a limited health services. The diseases that are predominant in the region are gastrointestinal (caused by contaminated water)	during the rainy season the GID incidences increases	-2
What percentage of the population in the area of focus has access to water and sanitation?	90% of the population in Zone 3 has access to water, however only 5% has access to sanitation	there is an increase in contamination in water sources, and increase in GIDs	-1
What differences exist between genders and social groups in terms of consumption patterns, health and water services in the area of focus?	There is no equity among children, women, men and social classes	increase in inequality and decision making	0

Figure 5: Sheet A2 Layout

Description of Climate Hazard and Impacts

The description of the climate hazard(s) should be developed with the particular context of the analysis in mind. Climate change hazards (e.g. temperature, sea level rise) that are the biggest concern in the relevant geographical area should be listed, and how climate change impacts are or may affect elements of a food system.

4.1.3 Sheet A3: Resilience Actions

Sheet A3 identifies actions that increase resilience of the vulnerable food elements identified in sheet A2.

- Using the scoring provided in sheet A2, focus on the climate impacts that are scored -2 and -1 as these are the most vulnerable elements in the food system in the focus area of the analysis.
- For the most vulnerable elements of the food system provide up to two applicable actions to increase resilience.
- Accompanying each resilience action, provide two indicators that will help to monitor and evaluate progression from a vulnerable element to an element with resilience to change and uncertainty.

A3. What resilience actions are needed to strengthen vulnerable food system elements and what should they achieve in the medium- to long-term?

In this section, we will focus on identifying resilience actions that increase resilience to change and uncertainty of the fundamental food elements, by reducing the climate risks identified earlier. We suggest to focus the analysis on only those elements of the food system that were ranked high in terms of their climate risks on the previous sheet (ranked red and yellow). Once identified the resilience actions please list indicators to monitor the implementation of the resilience actions.

1. Food Utilization and Consumption

Food System Description	Climate Vulnerability	Rate	Resilience Actions	Potential Indicators
What are the main food items consumed in the area of focus?	Maize, beans, coffee, rice, dairy products, eggs, meat, vegetables	-2	Identify the actions of highest risk, using maps, registry, data base (from the government, municipality, community) Strengthen response and prevention in the community by raising awareness and promoting a response and prevention culture	List potential indicators that monitor the implementation of resilience actions, which contribute to increasing system resilience (maximum of two per action) # of committees that integrate community forces contingency plans within community budgets
What is the general health status and access to health services of the population in the area of focus?	In Zone 3 there is a limited health services. The diseases that are predominant in the region are gastrointestinal (caused by contaminated water)	-2	Improve waste management system (latrines, sewage) Water management projects	% of households with latrine infrastructure % of municipalities with sewage systems # of drinking water project executed in a year
What percentage of the population in the area of focus has access to water and sanitation?	90% of the population in Zone 3 has access to water, however only 5% has access to sanitation	-1	Implement water treatment process Improve existing water systems and increase coverage	% of water systems that have water treatment process % of communities with access to safe drinking water
What differences exist between genders and social groups in terms of consumption patterns, health and water services in the area of focus?	There is no equity among children, women, men and social classes	0	Share responsibilities and rights in all activities at home and at work	% of population trained in issues of equity and gender

Figure 6: Sheet A3 Layout

4.1.4 Sheet A4: Resilience Indicators

The main purpose of this sheet is to review the indicator set developed in the previous sheet. More specifically, this sheet creates metadata, or information about the data, for the identified indicators and their details such as where and how to access the data.

Indicators are bits of information that quantify and summarize complex data, and are used to identify trends and assess performance of a system. A good indicator is:

- Clear and easily interpreted
- Relevant to the issue
- Cost effective to apply
- Adequate to assess performance
- Easy to monitor and to independently evaluate

A good indicator has:

- A description of its purpose
- A clearly identified data source
- An indication of monitoring frequency
- A baseline (value, year)

The importance of indicators in FIPAT is to establish a baseline for vulnerable elements of the food system and to monitor and evaluate trends or progress towards a climate resilient state.

The metadata includes the indicators’:

- Data availability**
 Indicates whether the data for the chosen indicator is readily available (score of 3); can be accessed (with some difficulty) (score of 2); or is not collected/not available (score of 1).
- Relevance for food security**
 Indicates to what extent the chosen indicator is relevant for food security: very relevant (score of 3); somewhat relevant (score of 2); or not relevant at all (score of 1).
- Feasibility of indicator use**
 Based on data availability and relevance of food security, the feasibility to use each indicator is calculated automatically, with priority given those indicators that are highly relevant for food security and have access to data. Feasibility is illustrated with shaded areas in a pie icon in the tool. Those that have a 1 for data availability will be generated as an empty pie icon. It is suggested to keep those that are highly relevant but for which data is not available as recommended future indicators.
- Indicator definition**
 List a specific definition of the indicators (for example, amount of irrigated croplands (hectares), revenues spent on food (percent per month), number of people affected by diarrhea (number of people/year).
- Data sources and responsible organization**
 For example, national statistical bureau, agriculture ministry, regional development ministry, and international networks and agencies (such as FEWSnet).
- Access to data**
 Describe how the data can be accessed: for example, if the data is readily available online, listed in statistical yearbooks, or accessible through request to the specific agencies (highlight if fees need to be paid to in order to access the data).
- Indicator value**
 If the indicator is already being monitored, describe its values (e.g. its current score, baseline).
- Indicator frequency**
 Specify potential timeline for indicator collection or use existing frequency, if available (e.g. if the indicator will be obtained over a time period of weeks, months, years).

A4. What are the key indicators that best monitor the resilience of the food system?

The main purpose of this sheet is to review the indicator set developed in the previous sheet, create a final set of indicators and then provide details about these indicators such as where and how to access the data.

Indicator	Data availability	Relevance for food security	Feasibility of indicator use	Indicator definition (unit of measurement)	Data sources and responsible organization	Access to data	Indicator value	Indicator Frequency
Indicators identified under each subsection in sheet A3 are listed below	Indicate data availability for the chosen indicator: 3 - data readily available; 2 - data can be accessed (with some difficulty); or 1 - data is not collected/not available	Indicate to what extent is the chosen indicator relevant for food security: 3 - very relevant; 2 - somewhat relevant ; or 1 - not relevant at all	Review the feasibility use for each indicator and prioritize those that are highly relevant for food security and have access to data. For those that are highly relevant and access to data is not available, keep them as recommended future indicators.	List a specific definition of the indicators such as amount of irrigated croplands (ha), amount of revenues spent on food (% per month), number of people affected by diarrhea (no. of people/year)	For example national statistical bureau, Ministry of Agriculture, Ministry of Regional Development, International networks and agencies (such as FEWSnet)	Describe how the data can be accessed, for example if the data is readily available online; listed in statistical yearbooks; accessible through request to the specific agencies (highlight if fees need to be paid to in order to access the data)	If the indicator is already being monitored describe its values (e.g. its current score, baseline)	Specify potential timeline for indicator collection or use existing frequency, if available (e.g. if the indicator will be obtained over a time period of weeks, months, years)
1. Food Utilization and Consumption								
develop risk management data base	1	3	○	# of existing risk management data bases	COPECO, PMA, Visión Mundial	Request	2	Annually
# of committees that intergrate community forces	2	3	●	# of committees	COPECO, PMA, Visión Mundial	Request	3	Annually
contingency plans within community budgets	1	3	○	# of contingency plans	COPECO, Municipalidad, CODEM	Request	0	Annually
% of households with latrine infrastructure	3	3	●	% of households with latrine infrastructure	Municipality, SANAA	Request	36	Annually
% of municipalites with sewage systems	2	3	●	% of municipalites with sewage systems	Municipality, SANAA	Request	20%	Annually
# of drinking water project executed in a year	3	3	●	# of water projects built	Municipality, SANAA	Request	0	Annually
% of water systems that have water treatment process	2	3	●	% of systems	SANAA, Juntas de Agua, Municipalidad	Request to municipalites	15%	bi-annually

Figure 7: Sheet A4 Layout

4.2 Section B: Policy Analysis

This section of the tool is designed to analyze a suite of public policies and programs on their ability to:

- support applicable resilience actions.
- support the capacity of key actors within the system to be resilient.
- create and maintain resilient food systems.

References to “policy” include national or regional acts, plans, programs, regulations or strategies.

The sections below provide a detailed explanation of how the assessment of the policies and programs evaluates their capacity to support key food system elements and actors to adapt to the climate risk.

4.2.1 Sheet B1: Policy Selection

B1 provides the space to write about the individual policies and program that will be analyzed in section B. More specifically, these are policies and programs that significantly influence the prioritized elements of the food system. In this sheet the following information should be provided:

- The official name of the policy or program that will be analyzed.
- Brief description of what the policy is intended to do, including its objectives and if the policy or program is a being implemented locally under the directive of a national/regional policy (include the name of this policy).
- References, including online link to policy/program, names of experts who will be consulted (including name, job title, email address if available), and reference supporting documents (i.e. implementing agency, year published/ approved, and official title).

B1. What are the key policies that are significantly influencing the prioritized elements of the food system?

Please choose a set of policies (maximum 7) that have considerable impact on the key elements of the food system that you reviewed in the previous worksheets. Some important policies may have appeared under the "Supporting Organizations and Policies" sections in worksheets A1 to A3 - please transfer those policies/programs that appear to be most relevant manually to this sheet. Continue to work on the same geographical area.

1. What policies/programs will be assessed?

Title	Brief description	References
National Climate Change Strategy (NCCS)	The National Climate Change Strategy responds to efforts in the country, aimed at the fulfillment of international commitments, which commit the country to develop programs containing measures to mitigate and adapt to climate change. The NCCS includes addressing the issue of climate change in different public policies, socially, economically and environmentally, within the national, sectoral and municipal level. The strategy consists of two parts: the first part which describes Honduras current situation and projected future on climate change, and the second part, which describes the desired situation of the country against the threat of climate change, stating the purpose, strategic objectives and policy guidelines for adaptation and mitigation.	Main reference: Ministry of Natural Resources and the Environment (2010). National Climate Change Strategy for Honduras. Tegucigalpa, Honduras: Dirección Nacional de Cambio Climático. Supporting documents: Propuesta de lineamientos para una estrategia nacional de adaptación y mitigación al cambio climático en la República de Honduras (Carlos Talavera, Olivia Guerrero). Variabilidad climática y cambio climático en Honduras (Francisco Argeñal).

Figure 8: Sheet B1 Layout

Policy Selection

It is important to remember that the policies will be analyzed on their capacity to support resilience, and not on broad policy effectiveness relative to its intended purpose and objectives. The policy analysis contributes to the overall conversation and learning process on climate resilience and food security, regardless of whether policies are achieving their intended objectives. In policy selection, the following criteria should be considered:

- significantly influence the prioritized elements of the food system
- intended to be resilient to changing future conditions
- likely to be reviewed or modified soon, where the resilience analysis can feed into other evaluation approaches, or
- still early in the design stage, when broad conclusions from the analysis could have an impact on details of the emerging policy

4.2.2 Sheet B2: Resilience Actions

In this sheet the resilience actions identified in step A3 are automatically copied to the left hand side. Policies are shown in columns. Here the analysis should be based on the degree to which policies support the listed resilience actions. More specifically, for all applicable policies or programs, it should describe how they support the corresponding resilience action and apply a score based on the explanation. See Appendix for scoring details.

B2. To what extent are key resilience actions supported by the policies and programs?

In this section, you will see the series of resilience actions that you listed to address the climate risks on key elements of the food system. You will be asked to review and rank the policies based on how they support the listed resilience actions.

2. List of resilience actions (identified in the workshop - spinwheel 2, layers 1,2,3)	Policy / Program Support to Food System Resilience Actions	
	3. Are the resilience actions supported by the policy / program? (score 2 if action is directly supported by program; 1 if it is indirectly supported; 0 if it is not supported; -1 if it potentially hinders ability to implement the adaptation action, and NA if the action is completely unrelated to the program)	
	Policy/Program A	
Identify the actions of highest risk, using maps, registry, data base (from the government, municipality, community)	Item 14 of the strategic objectives for adaptation, tangentially refers to local governance, institutionally strengthening the legal framework. In the executive summary there is a vulnerability analysis of the different priority systems to climate change	1
Strengthen response and prevention in the community by raising awareness and promoting a response and prevention culture	Immediate action in objective 1 seeks to establish the creation and strengthening of institutional and human capacity, which include training and technical advice on the different relevant dimensions of climate change (municipal, local communities, etc.)	2
Improve waste management system (latrines, sewage)	Within the strategy it exists indirect support for this resilience action in sections that talk about greenhouse gas (methane emission reduction) and human health, primarily in strategic objective for adaptation number 12: decrease the incidence and distribution of human disease	1
Water management projects	The strategy specifically outlines as a strategic adaptation objective the improvement of water supply systems in order to reduce the impact of drought and protect aquifer recharge	2
Implement water treatment process	Prevent and avoid reducing water quality by contaminants (adaptation strategic object number 3), relating to human health (adaptation strategic objective number 11), control spread of water borne diseases	2
Improve existing water systems and increase coverage	Adaptation strategic objective number 3: protect available water volumes against climate change impacts	2
Share responsibilities and rights in all activities at home and at work		N/A

Figure 9: Sheet B2 Layout

4.2.3 Sheet B3: Actors' Capacity

The focus of this sheet is on assessing how the different policies/programs help actors acquire and maintain capacities needed to respond to risks and take resilient actions. Such capacities include access to financial resources, relevant technology, information and skills, infrastructure, institutions and networks. It also includes how these policies/programs support actors' capacity to learn from repeated failures, anticipate failures and re-gain resilience after shock and disruption.

Scores should be assigned on the individual policy's ability to support actors' capacity (see Appendix for scoring details). After scores are assigned to the individual policies under each question, an aggregated value is generated to assess how each policy is able to support actors' capacity. Figure 10 illustrates the layout of sheet B3 and, including the overall policy score for supporting actors' capacity to reduce risks and promote resilience.

B3. What are the contributions of policies to improve actors' capacity to reduce risks and promote resilience?

The focus of this sheet is to assess how the policies/programs help actors to acquire and maintain capacities needed to respond to risks and take resilient actions. Such capacities include access to financial resources, relevant technology, information and skills, infrastructure, institutions and networks. It also includes actors' capacity to learn from repeated failures, anticipate failures and be able to re-gain resilience after shock and disruption.

To facilitate scoring you may focus your analysis on a limited set of actors. For example, you can focus on those actors that implement those resilience actions that are supported by the respective policy or programme (as per the ranking on the previous page). You may note whose capacity is supported or not in the text cells provided to the left of each score.

4. Direct Support to Capacity of key food system actors (producers, distributors, service providers)

Policies and Programs	Contribution to Adaptive Capacities and Resilience (2 - yes; 1 - partially; 0 - no)								Value
	Access to Financial Resources	Access to Relevant Technology	Access to Relevant Information and Skills	Access to Relevant Infrastructure	Access to Institutions and Networks	Capacity to Learn, avoid repeated failures and innovate to improve performance	Capacity to identify and anticipate problems and prepare plans	Capacity to Respond and Reorganise after disruption to maintain function	
National Climate Change Strategy (NCCS)	Paragraph 6.2 mentions the management of financial resources, although there is no direct support of the strategy. Only through SICA but indirectly	There is no information outlining how it will be supported	In immediate actions: technical advice, etc.. There is also an NCCS website where interested individuals are able to obtain information on the strategy. Among the immediate measures identified in the strategy for the institutionalization of NCCS include: Establishing permanent social networks sectoral and local consultation (3.1)	There is no information outlining how it will be supported	Among the immediate measures identified in the strategy for the institutionalization of NCCS include: Establishing permanent social networks sectoral and local consultation (3.1.) This information is shared on the NCCS website for stakeholders and interested individuals to obtain further information to the participating actors and	In Part 2, p. 35 the Strategy prioritises proper institutionalization of NCCS, including the development of scientific and technical support to design actual instruments, and obtain social legitimacy of the strategy by the different actors. Also, within the lines of action, strengthening intersectoral spaces and territorial consultation and participation	The strategy outlines the use of meteorological downscaled information for farmers to access information in a way that they will be able to understand and use, as well as how these anticipated weather patterns and climate variations may affect their crop production. Also the strategy seeks to provide technical advice and capacity building for municipalities and communities on climate change related information	Although the strategy sets out local and sectoral consultations, there is no mention of response and emergency committees	1.1

Figure 10: Sheet B3 Layout

4.2.4 Sheet B4: System Resilience

On this sheet, the user answers a series of questions designed to analyze and rank the policies on their ability to support resilience of natural systems, such as water availability or land quality, and infrastructure systems, quality of the services provided and availability to respond to needs over time. Box 2 provides the individual questions in B4 and Figure 11 illustrates the layout of sheet B4.

Box 2: B4 Questions

- 5) Is the policy itself vulnerable to the hazard(s) identified?
- 6) Does the policy enhance the resilience of specific parts of the system relevant for food security?
 - a. Does the policy help restore functionality after a climate related shock or stress?
 - b. Does policy provide equitable access to all stakeholders?
- 7) Is policy decision-making transparent and accountable?
- 8) Does policy design provide for participation of groups most affected by the policy?
- 9) Does policy implementation provide for participation of groups most affected by the policy?
- 10) Does the policy provide mechanisms for identifying and sharing good practices and lessons?
- 11) Does policy support self-organization and networking among citizens?
- 12) Is policy implementation decentralized to the most effective level?
- 13) Is the policy designed to include and support poor and marginal groups?

For guidance on scoring see the Appendix.

B4. What are the key contributions of policies to help creating and maintaining resilient food systems?

In this sheet you will be asked to assess and rank how the policies support resilience of the natural systems such as water availability, land quality and built systems such as quantity of the infrastructure, quality of the services provided and their availability to respond to needs over time. Make sure to comment your scores in the provided text fields.

5. Is the policy or program itself vulnerable to the hazard(s) identified?

Policies and programs may be vulnerable to climate hazards if climate impacts are likely to affect the effectiveness, fiscal capacity, or demand for the program

Policies and Programs	Is the policy itself vulnerable to the hazards(s)? (score 2 if no; 1 if partially; and 0 if yes)	
National Climate Change Strategy (NCCS)	Among the instruments of implementation of the policy legal framework there are governance mechanisms, but do not indicate whether the strategy is vulnerable to threats. The scope of the strategy is left vague, limiting the ability to identify to what extent it is vulnerable.	1

**6. Does the policy enhance the resilience of specific parts of the system relevant for food security?
- Choose up to 3 Supporting Resources / Services to assess**

Resource/Service 1:	Water
Resource/Service 2:	Land
Resource/Service 3:	Forests

Policy Contribution to Resilience of:		Water	
Policies and Programs to be assessed	Does policy help restore functionality after a climate related shock or stress?	Does the policy/program provide equitable access to all stakeholders?	
National Climate Change Strategy (NCCS)	The strategy includes among its objectives to restore the functionality of soil systems (5.1, p.27), water (12.1 p.29), but no direct measures	All stakeholders are able to access the benefits of the strategy, including objectives concerning water	2

Figure 11: Sheet B4 Layout

4.2.5 Sheet B5: Synthesis

This sheet presents an automatic aggregated ranking of resilience of each policy/program analyzed on sheets B2-B4, along with an overall ranking of the suite of policies. It allows for a review of overall policy/program resilience and invites facilitators or leads to provide policy recommendations to increase resilience and address the weaknesses or gaps that the tool helped to identify.

Policy / Program Resilience Summary This sheet presents an aggregated ranking of resilience of each policy/program assessed, along with an overall ranking of the suite of policies. It allows for a review of overall policy / program resilience and invites the user to provide policy recommendations that aim to increase		National Climate Change Strategy (NCCS)	
Resilient Policy Questions		Flag	Recommendation
5	Are designed resilience actions supported by the policies?	0.7	Resilience actions would be better supported if the strategy would clearly outline the level of work it seeks to accomplish (general, experts, institutions). If some actions were more clearly defined, such as establishing meteorological stations and early warning systems- it would strengthen the actions supporting its objectives. There are some important aspects that are missing in the strategy, for example integrating production systems with some focal areas.
6	Does the policy build actors' capacity to reduce risks and promote resilience?	1.1	The strategy should include mechanisms that determine the degree of participation and different aspect in linking relevant actors in its implementation, also it would benefit from emphasizing the participation of the most affected by the negative impacts of climate change, such as indigenous peoples actors ancestral races, peasants, rural population in extreme poverty, urban and suburban poor and marginalized populations inhabiting areas subject to risks
	Does the policy build resilience of food systems and institutions?	0.9	It is recommended to strengthen the establishment of permanent social networks, and sectoral and local consultation; strengthen opportunities for consultation and sectoral and territorial participation, and establish mechanisms to link actions from different strategies that are related to the NCCS.
OVERALL SUMMARY RATING FOR POLICIES		0.9	

Figure 12: Sheet B5 Layout

5.0 Discussing Results of the Analysis

Conversation about climate resilience and food security is an integral component of the analysis, and should also be part of the dissemination of the results. A final meeting with stakeholders to review the draft results and confirm the findings is essential. Such a discussion will almost always result in modifications to scoring or interpretations and require updates to the data in the tool. This is a positive outcome. The discussion will generate feedback or observations on the analysis and its results. These inputs should be integrated into a revised analysis and report. Potential discussion points include:

- Tailored resilience actions and indicators for measurement, reporting and review to strengthen the food system
- Resilience strengths of the food system and of the suite of policies/programs
- Areas within the assessment that provide weak support to the food system's resilience, explore whether the recommendations are appropriate, or other ways in which it could be strengthened
- Distribution of scores for vulnerable food elements and within the policy analysis
- Unexpected results

In any interaction with stakeholders (i.e. meetings and dissemination of information) remind the audience that the tool is an assessment of a food system's resilience to climate change impacts. Findings from the analysis can lead to reduced vulnerability and strengthened food security in the study area.

Appendix: Scoring Guidelines

Before the scoring exercise, all providers of data should review the questions and ensure that key definitions and interpretation of terms are consistent (see section 1.2). Here is some guidance on scoring for sheets A2, B2, B3, and B4.

Section A - Food System

Sheet A2 - Climate Risk

In this worksheet scores should be based on the severity of the impact to its corresponding food system element. The colour legend for this section indicates the following:

Box 3: A2 - Colour Legend

Score	Description
-2	Very negative
-1	Negative
0	Neutral
+1	Positive
+2	Very positive

The example below identifies the key climate hazards in the area of focus, and identifies the climate risks related to access to food produced internally. Scores of -2 have been assigned to those elements that would greatly suffer by the climate risks, ultimately impeding access to food and jeopardizing food security. Elements that would be negatively affected but still able to access food have been assigned a score of -1. A score of 0 is assigned to elements that would be neutral in impact. For example, while landslides would initially impede distribution of food aid, the aid would still enter the country and reach affected communities.

Key climate hazard(s): (1) landslides (due to heavy rainfall); (2) drought; (3) sudden rainfall

		Climate Risks	
		Describe impacts of above hazards on each food system elements and rank impacts on scale from -2 (very negative) to +2 (very positive) (do not use any decimals)	
2a. Access to Food (Internal)		Describe Impacts of Above Hazards	Rate Impact
	Food System Description		
What are the main food access strategies for the population in the area of focus?	Subsistence production, local markets, barter	Increase in landslides in the area directly impact food production and soil fertility and availability of products to sell and/or barter	-2
What are the main income sources of the population in the area of focus?	Remittances, coffee production, commerce, livestock, day labour	Due to change in temperatures, frost and fungal diseases reduce crop production, affecting primarily coffee production and day labour	-2
What share of the average household income in the area of focus is typically used for food purchase?	Approximately 60% of income is used to buy food	Droughts, irregularity in precipitation, and soil erosion result in an increase in percentage of income used to purchase food	-1
What ways exist for the population in the area of focus to access food aid in times of need?	Donations; humanitarian aid; imports	Distribution could be affected by landslides	0

Examples of a +1 and +2 may include increase in temperatures that allow for crop production in highlands that had previously been too cold, or increases in precipitation that increase soil productivity in arid areas.

Section B – Policy Analysis

The colour legend for this section indicates the following:

Box 4: B2 – Colour Legend

Score	Description
N/A	Not applicable
0	No support
1	Indirect support
2	Direct support

Sheet B2 – Resilience actions

In sheet B2, the purpose of *Question 3*, is to score the level of support a policy provides for a resilience action previously listed in Sheet A3. The sheet provides a space to describe how the policy supports the resilience action and a space for the corresponding score.

For those resilience actions supported by the policy, it is preferable to provide shortened text from the policy or program documentation itself, along with a brief explanation how it directly or indirectly supports the action (scores 2 and 1).

If the policy or program is relevant to the action but provides no support to it, enter 0 and state that the policy does not currently address the action. If the policy may potentially hinder the ability to implement the resilience action, enter -1*. However if the policy does not apply to the action, enter N/A and no explanation is needed (e.g. crop insurance policy does not apply to the action to build more roads to access markets). The box below shows how to apply and justify scores.

Table 2

Resilience action	Climate Change National Strategy	Score
Improve storage practices in storage centres		N/A
Implement drinking water projects	The adaptation objectives of the strategy indicate that it will ensure the integrity of the water supply systems, reduce impact of drought and strengthen aquifers	2
Agricultural best practices (soil conservation, staggered planting)	The strategy seeks to fight soil erosion, production loss, and desertification. No direct action is provided in agricultural best practices	1
Creation of a green fund to finance stakeholder contingencies	This is not addressed in the strategy	0
Use of irrigation system	The strategy seeks to move away from the use of diesel powered pumps, but these are the most affordable and accessible pumps in the area. This limits the ability for producers to afford alternative pump technology and install the irrigation systems. The strategy does not facilitate alternative pump technology or funds.	-1*

*The score of -1 is only used in section B2 within the tool, and does not apply for sections B3 and B4.

The key is to explain scoring rationale to allow other reviewers/readers understand how it supports the action and to explain the corresponding score.

Note: It is important to clearly define in what instances a 0 will be used and when the N/A is appropriate. If more than one individual will be assessing a policy in part B, it is important that the entire project team scores consistently.

Sheet B3 – Actors' Capacity

Similarly to Sheet B2, in *Question 4* scoring should be based on the policy's capacity to directly or indirectly support actors' resilience capacity. If any of the components outlined in this sheet fall within the scope of the policy, but there is no support provided, a score of 0 should be given. For all scores between 0-2, a description should be provided to justify the score. However, if the element in question is not relevant to the policy, a N/A should be provided and no explanation is needed. Individual examples are provided under in the comments under each element.

Sheet B4 – System Resilience

Question 5 asks whether the policy/program itself is vulnerable to the hazard(s) identified (in sheet A2). For example, if the climate risk is increased flooding due to extreme precipitation, policies that provide insurance, compensation or emergency response to flooding may be vulnerable to increased demand or fiscal stress.

Question 6 looks at how the policy enhances resilience of specific parts of the system relevant to food security. After identifying the top three resources or services, each policy should be assessed on its capacity to:

- Restore functionality after a climate related shock or stress
- Provide equitable access to all stakeholders

Similar to previous questions, assign score corresponding to the level of support it provides. Justify your score with a concise, brief description.

Question 7 looks at the level of transparency and accountability in policy decision-making. More specifically, it asks if policy decisions and analyses are made public, and if responsible authorities are accountable for these decisions. Transparency and accountability allows for the public's open access to and increased understanding in the steps in the policy design and implementation processes, and for responsible authorities to own up to any indiscretions or failures of the policy.

In this tool, multi-stakeholder deliberation (*Questions 8 and 9*) means that stakeholders with a range of interests are involved in public deliberations (such as meetings or advisory groups) in which they are asked to consider options, discuss or debate advantages and disadvantages, and suggest solutions. This process goes beyond simple consultation, or requests for feedback, because it involves public deliberation and consensus building, actions that reveal new information and values for decision making.

Question 10 assesses how the policy provides mechanisms to identify and share good practices and lessons learned. The question seeks to assess how a policy facilitates actors' capacity to share experience, for example by incorporating lessons learned into planning and implementation activities, or establishing systems to ensure that required information is collected, analyzed, and made available.

To enable self-organization and social networking (*Question 11*), the indicator is whether program resources support local self-organization, shared learning and networking. A high score means the program goes beyond "encouraging" this activity, and actually provides resources for it.

The question about decentralization (*Question 12*) refers not to the existence of regional offices but to the scope for implementation decisions to be made at a decentralized level, to tweak implementation measures in response to local conditions.

Question 13 asks whether the policy is designed to include and support poor and marginal groups. The highest score should be given to policies specifically designed with the poor and marginal groups in mind. For policies designed for a universal outreach, a score of 1 should be assigned. If there are barriers that bar poor and marginal groups' access to the policy, a score of 0 is appropriate.

The summary box at the bottom of sheet B4 provides the landscape comparison of all the policies or programs in the suite being assessed.

Sheet B5 – Synthesis

This sheet links the completed analysis in all sheets of section B. Here the user should provide tailored recommendations to the overall assessment of the policies and to findings about individual policies, identifying any gaps or weaknesses and suggesting ways these may be addressed.

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