

A MULTI-CRITERIA APPROACH FOR BETTER FOOD SAFETY DECISIONS

LOOKING AT THE IMPACT OF UNSAFE FOOD ON HEALTH, TRADE, FOOD SECURITY, SOCIO-ECONOMIC DEVELOPMENT AND CONSUMER CHOICES

INTRODUCTION

In their efforts to promote consumer health and safer food production along the food chain, food safety policy makers need to make complex decisions such as:

- * setting food safety priorities;
- selecting the most appropriate interventions for minimizing food safety risks; and
- * agreeing on resource allocations.

Transparent decision-making is essential for different stakeholders to gain consensus on the best approach to take. This can only be achieved when there is a common understanding of how different issues were considered, what evidence was used and what trade-offs were made, if any.

MEETING THE CHALLENGE

Food safety decision-makers have to consider consequences relating to more than one risk factor at a time. These factors include the impact of food safety policies on public health, trade, food access and food security. Through the programme, several approaches for food safety decision-making - which consider multiple criteria and options - are being tested in different contexts. Based on concrete results, guidance materials for improved food safety risk management through multicriteria decision making are being developed.

"Many
still seem to
consider food safety
as a privilege of wealthier
countries rather than as a basic
requirement for all"

Dr. Renata Clarke, Head of the Food Safety and Quality Unit, FAO

Challenges in multi-criteria decision-making include:

- institutional structures often impede coordination and cross-sectoral decision-making; Food safety decisions are made only within the mandate of the main ministry (health, trade, etc.) involved;
 - ★ in many countries, data is not easily available and systems for collecting and managing data are weak. One way to overcome this is by using verified qualitative data in addition to quantitative data; and
- * skills in comparing diverse issues for making balanced food safety decisions need to be developed.

The Multi-Criteria Decision Analysis (MCDA) Approach

Situation Analysis Understand food safety issues and identify current practices.

Determine decision-making criteria Determine a set of relevant criteria for food safety decision-making.

Define specific metrics & evidence referring to each criteria

Collect and analyze evidence for measuring and comparing criteria related to public health, trade, socio-economic issues, food security, etc.

Select tools for comparing issues & options

Risk management options can be assessed using structured methods that capture any uncertainty concerning the evidence and estimates.

Agree on final decisons Risk managers and stakeholders validate the multicriteria decision analysis (MCDA) approach for food safety and agree on final decisions.

INNOVATION AND RESULTS

Food safety decision-making varies significantly from country to country. Although there is global consensus on how to analyze the impact of unsafe food on health, there is no consensus on how to analyze its impact on trade, food security and other factors.

While multi-criteria decision analysis (MCDA) integrate decision-making across multiple processes have been used extensively in departments and institutions leading to more robust decisions." sectors such as health and the environment, they have rarely been used in the food safety field. Dr. Agaba Friday, Ministry of Health, Uganda The programme is thus adapting the MCDA approach for food safety issues. It does this by facilitating expert consultations as well as field testing in Uganda and Thailand. Both these activities are essential for shaping the guidance materials on the appropriate use of MCDA for food safety decision-making.

FOOD SAFETY AND FOOD SECURITY

Although food safety is an intrinsic part of food security and nutrition, its role and potential impact is poorly understood.

Examples of food safety related issues that have a direct impact on food and nutrition security include:

- * food-borne illnesses that reduce the absorption of ingested nutrients, thereby increasing nutrient requirements and exacerbating ongoing nutrient deficiencies. Chronic malnourishment has a lifelong impact on children and their families;
- * the high incidence of diarrheal diseases due to unsafe food, contaminated water and poor sanitation that have not declined over the last decades in many regions (Fischer & Black, 2010);
- ★ specific food safety issues are gaining increased attention. These include food-borne parasitic infections which have been recognized as needing greater global attention (Torgerson et al. 2014); and aflatoxin contamination which has been linked to stunting (Khlangwiset et al. 2011); and
- **★ lower incomes** and slower national economic **development** due to the negative impact of unsafe food on household food security.

FAO and its partners can play a leading role in making sure that food safety is addressed in global efforts to improve food security and nutrition.

MAKING A DIFFERENCE THROUGH PARTNERSHIPS

Working with partners and a wide group of stakeholders is essential for developing a multi-criteria approach

for food safety decision-making. For example, of a number of competing priorities for limited resources applying the multi-criteria approach has enabled us to improve coordination and

national partners are essential for testing the approach in pilot countries. One of the most successful elements of the technical meeting held in November 2013 was that it facilitated knowledge exchange among global experts from national organizations, academia and the European Commission Directorate General for Health and Consumer Affairs (DG SANCO).

At the country level, in addition to official government sources, data from the World Food Programmme (WFP), the International Livestock Research Institute (ILRI), and the World Health Organization's Foodborne Disease Burden Epidemiology Reference Group (WHO FERG) and other organizations are crucial sources of evidence.

FUTURE PERSPECTIVES

"Food

safety is one

The food safety decision-making methodology and guidance materials are being tested in several countries. The short- and medium-term goals of this work are to:

- * enhance national food safety programmes and decision-making processes to foster the more rational use of food control resources and improve the livelihoods of poor and vulenrable people; and
- ★ contribute to the broader global food safety debate on effective means for providing evidence and balancing trade-offs for food safety decision-making.



FAO and key stakeholders from the national government, the private sector and academia are testing a multi-criteria approach for food safety decision-making in Uganda.





