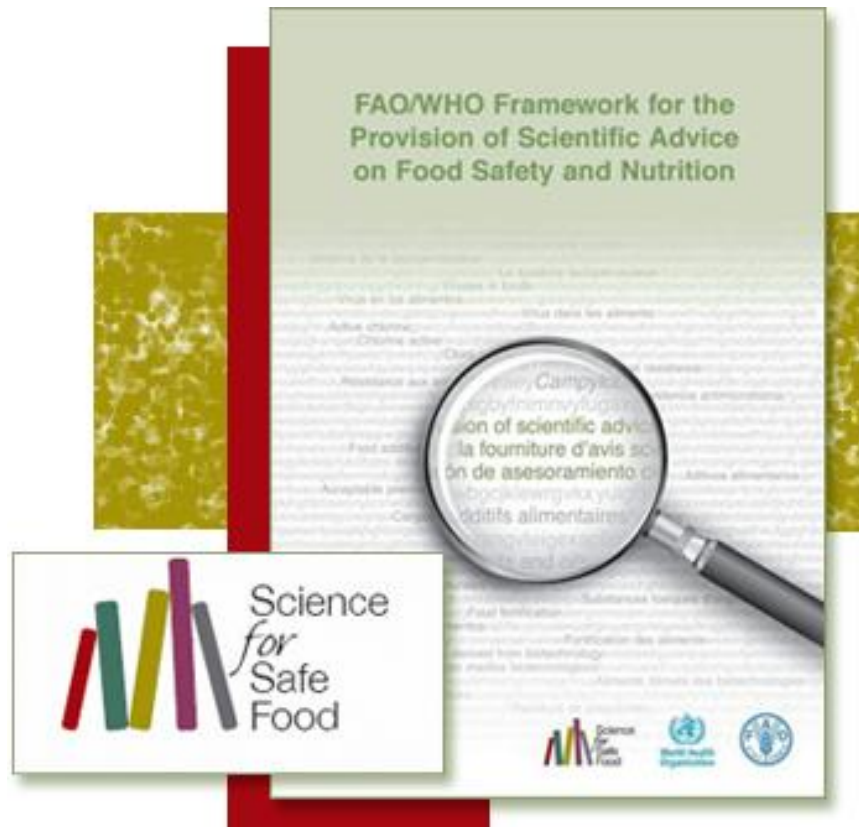




## PROVISION OF SCIENTIFIC ADVICE IN CODEX

# Scientific Advice – Management

The management of the joint FAO/WHO program on scientific advice follows established procedures.



The **coordination** of scientific advice is handled by **relevant units of FAO and WHO**.

The designated staff (which include the joint secretariats) meet regularly to facilitate ongoing collaboration.

# Scientific Advice – Management (2)

Those responsible for the coordination of scientific advice:

1. assure that scientific advice is elaborated in accordance with **core principles**;
2. facilitate the setting of priorities among multiple requests for scientific advice in accordance with **FAO/WHO criteria** and criteria agreed by FAO and WHO and the Codex Alimentarius Commission, taking into account the resources available;
3. maintain an **inventory of ongoing/proposed activities** and to identify new areas of work;
4. identify new funding sources and evaluate annually the activities implemented;
5. regularly review the **framework and guidelines for the provision of scientific advice**;
6. harmonize procedures and approaches; and
7. present **annual reports outlining main achievements** to the Codex Alimentarius Commission.

# Scientific Advice – Mechanisms

The provision of **scientific advice** is provided by FAO/WHO expert bodies to the CAC and its subsidiary bodies.

Scientific advice is provided through **different mechanisms**.  
These range from:

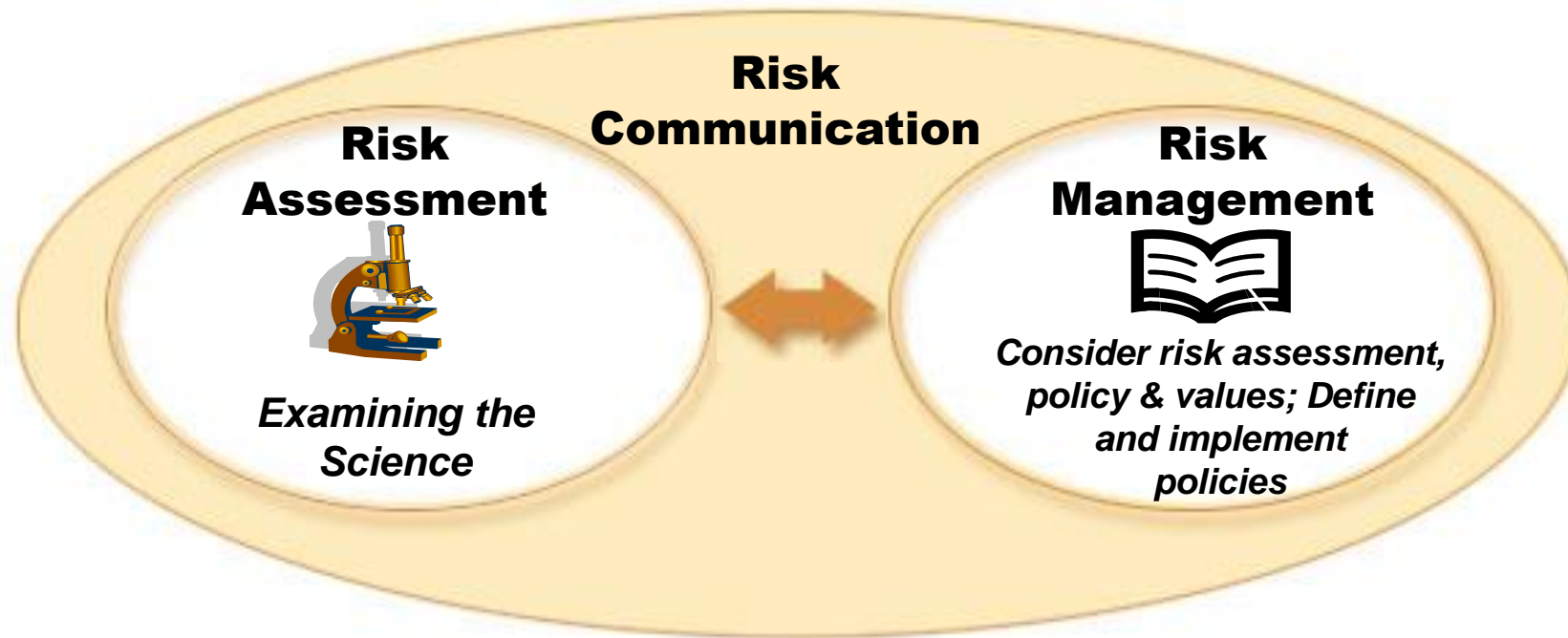


1. formally established expert bodies that have a scheduled programme of work (e.g. JECFA, JMPR); through
2. a series of ongoing ad hoc meetings on a given topic (e.g. JEMRA); to
3. ad hoc expert consultations and meetings that are convened once only to address a specific topic.

# Risk Analysis Framework

The separation of risk assessment activities is in accordance with the risk analysis paradigm which specifies the separation of risk assessment and risk management.

## RISK ANALYSIS FRAMEWORK





# Expert Selection

FAO and WHO follow set procedures for expert selection.

The scientific advice is the product of a group of **experts selected to work in their personal capacity** and not as representatives of their country, or of the institution by which they may be employed.

Selection of experts includes consideration of criteria such as **scientific credibility, relevant experience, and technical skills.**

Efforts are made to maintain **geographical and gender balance.** All experts selected are required to sign a declaration **stating any possible conflicts of interest.**

The actual makeup of an expert body will depend on the nature of the expert advice required.

# Data Requirements

FAO and WHO seek to make use of the best available data for the provision of scientific advice.

While the procedures for data selection may vary across expert bodies and meetings, the basic principles (i.e. quality, reliability, independence) are the same. Generally data required for a specific meeting is indicated in a public **call for data**.

Data from a wide **variety of sources** is used. Publicly available peer-reviewed literature is used, as well as unpublished or proprietary data submitted to the relevant FAO/WHO secretariat for this purpose.

FAO and WHO seek to ensure that the use of data is consistent with intellectual property rights and confidentiality requirements.

# Scientific Advice – Development

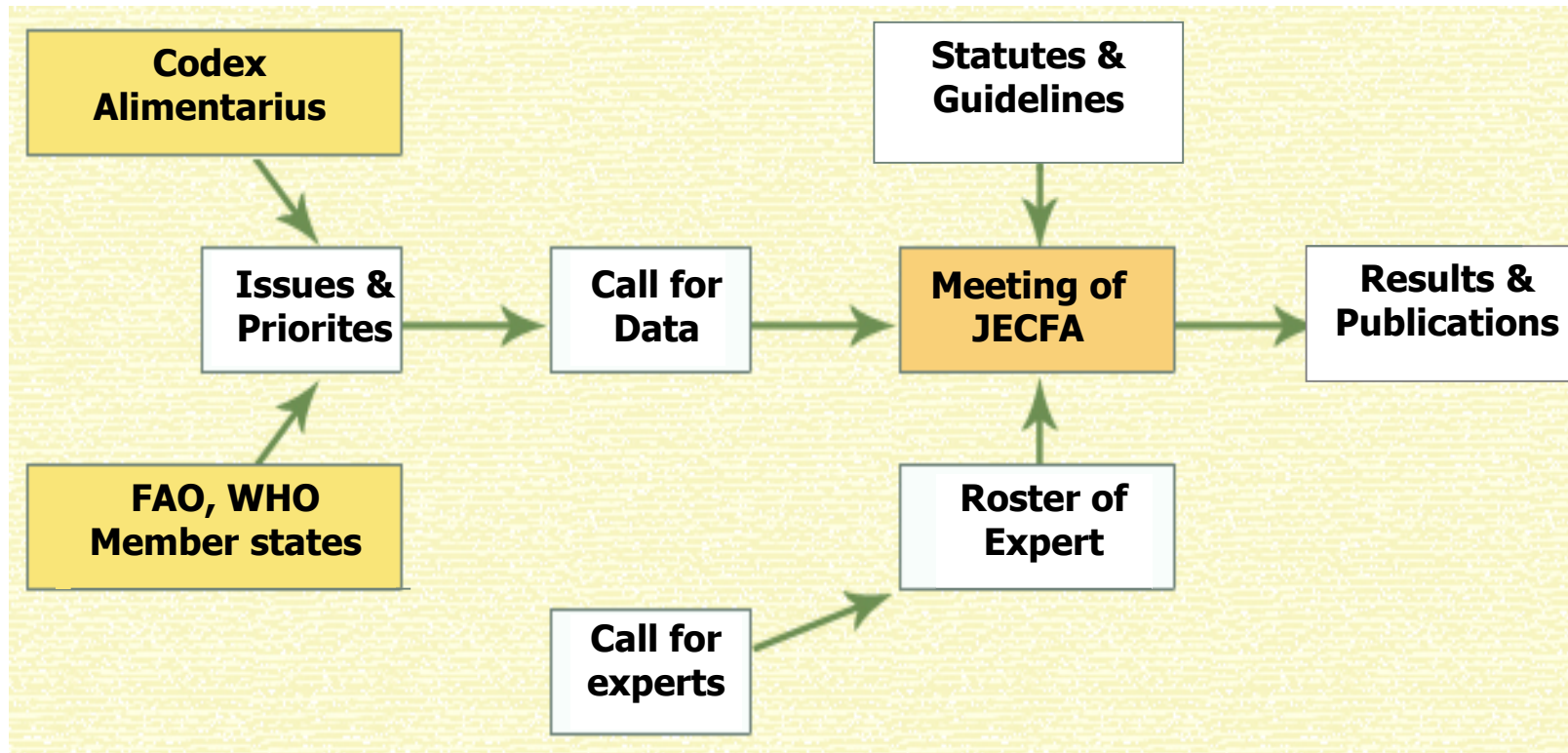
In the provision of scientific advice FAO and WHO normally follow a sequence of steps:

1. A **request for scientific advice** to be provided by an expert body.
2. A **call for data** relevant to the matter under consideration is then issued through FAO and WHO websites and other relevant channels.
3. Experts for the **expert meeting or ad hoc consultation** are selected from the “Roster of Experts”, or a call for experts.
4. **Preparatory work** including data collation, finalizing the agenda, preparing background papers etc. for the meeting is undertaken.
5. The **expert meeting or ad hoc consultation meets and reviews the data** and develops the scientific advice.
6. At the conclusion of its deliberations, the expert meeting or ad hoc consultation **reports its findings and the results are published.**



# Scientific Advice – Development (2)

The diagram is an example of process for the provision of scientific advice by Joint FAO/WHO Expert Committee on Food Additives (JECFA).



# Standing Versus Ad Hoc Expert Bodies

## **Fixed expert body**

- scheduled program of work;
- planned budget;
- usually last for a number of years.

e.g. Joint FAO/WHO Expert Committee on Food Additives

## **Ad hoc Consultations**

- convened to respond to a very specific topic;
- may be an emerging issue, i.e. not part of a programmed activity
- no set budget;
- time limited;
- usually one meeting.

e.g. Joint Expert Consultation on Acrylamide in Foods.



## **Similarities**

- normally requested/guided by Codex or FAO/WHO countries;
- group of experts develop advice;
- established rules:
  - selection of experts;
  - call for data;
  - declaration of interests;
  - priority setting - management ;
  - role of joint FAO/WHO Secretariats;
  - minority opinion.

# Example: Joint FAO/WHO Expert Committee on Food Additives (JECFA)



The JECFA was established in 1955 to **consider chemical, toxicological and other aspects of contaminants and residues of veterinary drugs in foods** for human consumption.

The *Codex Committees*:

- *on Food Additives* (**CCFA**),
- *on Contaminants in Foods* (**CCCF**); and
- *on Residues of Veterinary Drugs in Foods* (**CCRVDF**);

identify food additives, contaminants and veterinary drug residues that should receive priority evaluation and refer them to JECFA for assessment before incorporating them into Codex standards.

The JECFA normally meets twice a year.

# Risk Managers and Risk Assessors

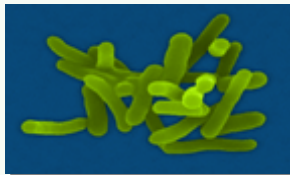
## International Risk Assessment



- **JECFA**  
(food additives, veterinary drug residues, contaminants in food)



- **JMPR**  
(pesticide residues in food)



- **JEMRA**  
(microbiological hazards in food)



- **JEMNU : Nutrition**



- **ad hoc expert consultations**

Scientific  
advice

Requests for  
advice, risk  
assessment

International  
Risk Manager

**CODEX  
ALIMENTARIUS  
COMMISSION**





# JECFA Activities

The activities of JECFA for the two categories are the following:

## **Food additives, contaminants and naturally occurring toxicants**

- elaborates principles for evaluating their safety;
- conducts toxicological evaluations and establishes acceptable daily intakes (ADIs) or tolerable intakes;
- prepares specifications of purity for food additives; and
- assesses intake.

## **Residues of veterinary drugs**

- elaborates principles for evaluating their safety;
- establishes acceptable daily intakes (ADIs) and recommends maximum residue limit (MRL);
- determines criteria for the appropriate methods of analysis for detecting and quantifying residues in food.

# JECFA – Membership

FAO and WHO have complementary functions in selecting members for JECFA:

- **FAO** is responsible for selecting members to deal with the development of specifications for the identity and purity of food additives and the assessment of residue levels of veterinary drugs in food; while
- **WHO** is responsible for selecting members to deal with the toxicological evaluations of the substances under consideration.

Both FAO and WHO invite members who are responsible for assessing intake.



# JECFA – Current Achievements

In 2006, JECFA celebrated its 50 anniversary. Some of the main achievements to date include:

- **JECFA evaluations:**

- > 1600 food additives;
- approx. 90 veterinary drugs;
- approx. 40 contaminants.



- **Consolidation of all current food additive specifications** from 1<sup>st</sup> to 65<sup>th</sup> meeting published:

- Combined compendium of food additive specifications- FAO JECFA monographs 1 2005;
- Volume 1 - 3 – All food additive specifications monographs;
- Volume 4 – Analytical methods, test procedures, laboratory solutions in press.

- **494 current food additive specifications** in the updated and simplifies on-line searchable database on the JECFA website.

**GF**  **RSS** | GLOBAL FOOD REGULATORY  
SCIENCE SOCIETY