

# **Food Safety Risk Analysis and Risk Assessment**

# Food Safety

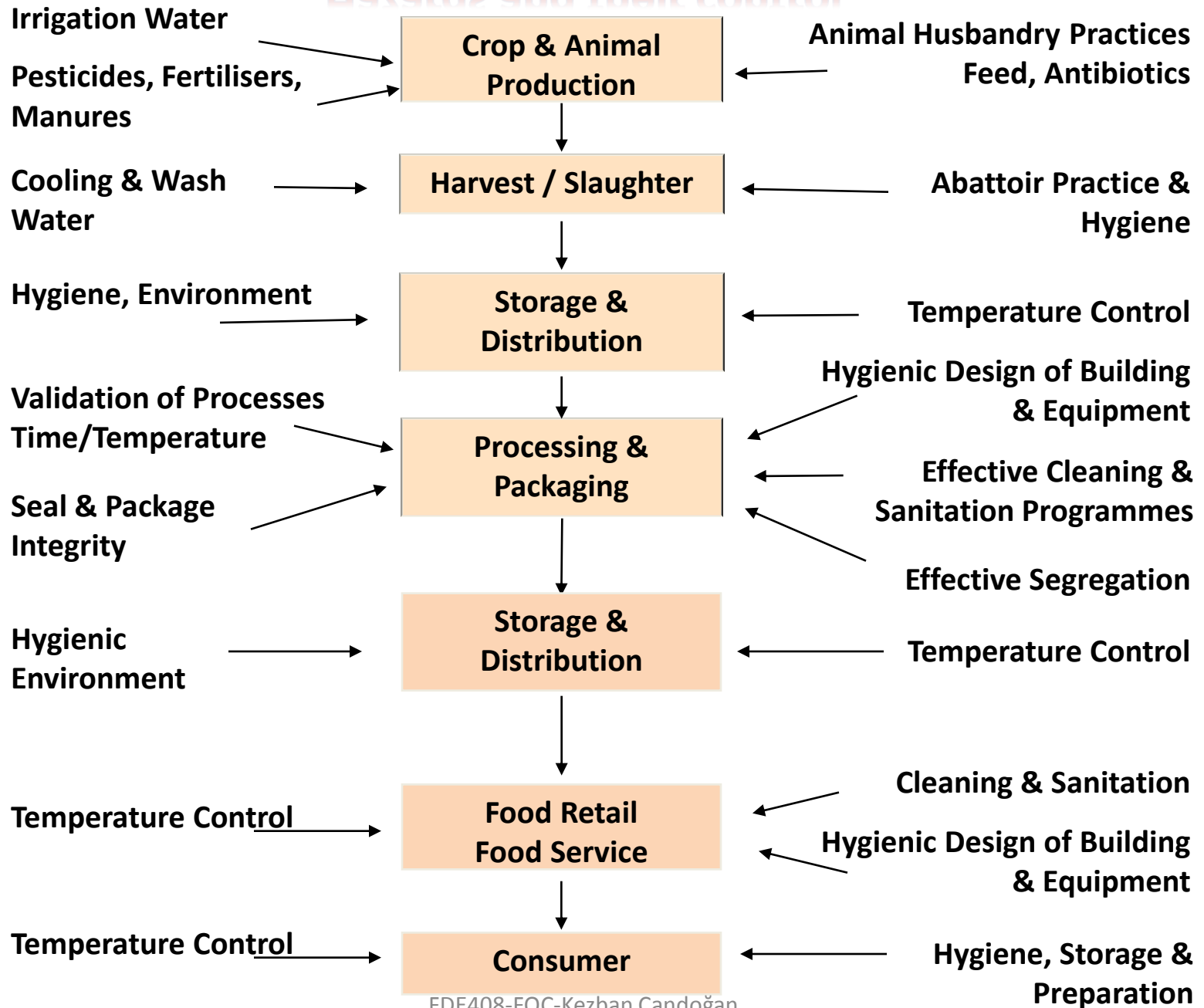
- *‘Stable to Table’*
- *‘Field to Plate’*
- *‘Farm to Fork’*

# Hazard and Risk

**HAZARD:** Biological, chemical or physical agent,  
capable of causing harm

**RISK:** Probability of harm combined with seriousness  
of outcome

# Hazards and their control



# Is there any risk?



# Risk analysis

- ✓ **Risk analysis** is defined for the purposes of the Codex Alimentarius Commission as;
- ✓ *"A process consisting of three components: risk management, risk assessment and risk communication"* (WHO, 2010)



# Why risk analysis?

- ✓ General public concern
- ✓ Absence of systematic framework in international trade
- ✓ Risk assessment principles in national legislation and new legislative conditions
- ✓ Trade agreements

# Risk analysis

- ✓ A structured approach to assessing food safety risks
- ✓ Provides national food safety authorities with a systematic and disciplined approach for making evidence-based food safety decisions



# Risk analysis

- ✓ It is used to
  - ✓ develop an estimate of the risks to human health
  - ✓ to identify and implement appropriate measures to control the risks
  - ✓ to communicate with stakeholders about the risks and measures applied

# Food safety risk analysis

- ✓ Supports international food safety harmonization and thereby trade
- ✓ Provides a scientific evaluation of where in the food chain to take the most effective control steps