



Food Security Strategy: Strategic Food Reserves, Import Risk and Supply Resilience

29 November – 3 December 2026
Dammam - Eastern Province five-star



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Introduction:

A food security strategy fails when import dependence, thin reserves, a single shipping corridor or a sudden price spike is noticed only after shelves empty. This Core Concept course equips planners in food authorities and agriculture and trade ministries, together with strategy and supply chain leaders in food companies, to measure national food security across availability, access, utilisation and stability, size and govern strategic food reserves, stress-test supply routes and prepare crisis responses. Participants produce a Food Security Risk Assessment and Strategy Outline for a hypothetical case state.

Course Objectives:

- Assess national food security against the four dimensions of availability, access, utilisation and stability using balance sheet data and household indicators
- Quantify import dependence and supplier concentration for staple commodities and rank the resulting supply exposures
- Size strategic food reserves in days of consumption and design rotation, storage and release governance rules
- Evaluate trade corridors, port capacity, storage networks, domestic production and water trade-offs to strengthen supply resilience
- Design a price monitoring and early warning dashboard with trigger levels linked to pre-agreed response measures
- Prepare a Food Security Risk Assessment and Strategy Outline with scenarios, loss and waste measures and protection for vulnerable groups

Target Audience:

- Planning managers who prepare national or sector food security strategies and monitor progress against targets
 - Food authority managers responsible for strategic reserve stocks, storage facilities and release decisions
 - Agriculture and trade ministry managers who oversee import policy, domestic production programmes and trade agreements
 - Strategy managers in food manufacturing, milling and retail companies who plan sourcing and continuity of staple supply
 - Supply chain managers who run import logistics, port handling and storage for grains, oils, sugar and other staples
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Course Outline:

Day 1: Food Security Dimensions, Measurement and National Baseline

- FAO Definition and the Four Dimensions: Availability, Access, Utilisation and Stability
- Food Balance Sheet Construction: Production, Imports, Exports and Stock Changes
- Household Indicators: Food Insecurity Experience Scale and Prevalence of Undernourishment
- Dietary Energy Supply per Capita and Self-Sufficiency Ratio Calculation
- National Food Security Baseline Scorecard for a Case State

Day 2: Import Dependence, Supply Concentration and Strategic Food Reserves

- Import Dependency Ratio and Staple Commodity Exposure Mapping
- Supplier Concentration Analysis: Origin Share Index and Single-Source Risk Flags
- Strategic Reserve Sizing Model: Days of Consumption, Lead Times and Buffer Targets
- Reserve Rotation Methods: First-Expiry-First-Out, Swap Agreements and Stock Quality Testing
- Reserve Governance Charter: Ownership, Release Triggers and Public-Private Holding Models

Day 3: Trade Logistics, Domestic Production and Overseas Sourcing

- Trade Corridor Mapping: Maritime Chokepoints, Alternative Routes and Transit Times
- Port and Silo Capacity Assessment: Discharge Rates, Storage Turnover and Inland Distribution
- Domestic Production Versus Imports: Water Footprint and Virtual Water Trade-Off Analysis
- Overseas Agricultural Investment Models: Land Lease, Joint Venture and Offtake Arrangements
- Overseas Investment Risk Screen: Export Bans, Host Community Relations and Contract Security

Day 4: Price Shocks, Early Warning, Loss and Waste and Vulnerable Groups

- Food Price Monitoring: Import Parity Prices, Retail Basket Tracking and Volatility Measures
- Early Warning Dashboard Design: Leading Indicators, Thresholds and Escalation Levels
- Food Loss and Waste Measurement: Food Loss Index, Food Waste Index and SDG 12.3
- Nutrition and Vulnerable Groups: Dietary Diversity Scores, Targeting and Social Protection Links
- Crisis Response Playbook: Reserve Release, Temporary Trade Measures and Supply Coordination Cells

Day 5: Case Study: Food Security Risk Assessment and Strategy Outline

- Case State Data Pack Review: Balance Sheet, Trade Flows, Reserve Levels and Price Series
 - Risk Assessment Matrix Build: Likelihood, Impact and Staple-Level Exposure Ratings
 - Scenario Planning Exercise: Corridor Closure, Harvest Failure and Price Spike Stress Tests
 - Strategy Outline Drafting: Targets, Reserve Policy, Sourcing Mix and Monitoring Indicators
 - Food Security Risk Assessment and Strategy Outline Presentation and Panel Challenge
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Skills You Will Gain:

- Food Balance Sheet Analysis
- Import Dependence Assessment
- Strategic Reserve Sizing
- Supply Corridor Risk Mapping
- Water and Production Trade-Off Analysis
- Food Price Early Warning
- Food Loss and Waste Measurement
- Food Security Scenario Planning

Why Attend This Course:

- Take back a Food Security Risk Assessment and Strategy Outline tested against corridor, harvest and price shock scenarios
- Answer ministerial and board questions on how many days of staple supply are secured and what happens if a route closes
- Replace ad hoc reserve and import decisions with documented triggers, rotation rules and release governance
- Compare reserve, sourcing and early warning practice with peers from food authorities, ministries and food companies

Conclusion:

Food security depends on seeing supply risks early and having reserves, routes and responses ready before a shock arrives. The five days move from the four dimensions, balance sheets and household indicators, through import dependence, supplier concentration and strategic reserve sizing and governance, to trade corridors, port and silo capacity, water trade-offs and overseas sourcing, then price monitoring, early warning, loss and waste and vulnerable groups. The final day produces a Food Security Risk Assessment and Strategy Outline for a case state.