

IMPORTANCE OF CERTIFICATIONS FOR EXPORT ORIENTED AQUACULTURE INDUSTRY

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FOOD SAFETY & QUALITY



HAVE YOU EVER BEEN LIKE THIS?



FOOD SAFETY

- PEOPLE HAVE THE RIGHT TO EXPECT THE FOOD THEY EAT TO BE SAFE AND SUITABLE FOR CONSUMPTION.
- FOOD-BORNE ILLNESS AND FOOD-BORNE INJURY SOME TIMES FATAL ARE AT BEST UNPLEASANT: AT WORST THEY CAN BE FATAL.
- OUTBREAKS OF FOOD-BORNE ILLNESS CAN DAMAGE TRADE AND TOURISM, AND LEAD TO LOSS OF EARNINGS, UNEMPLOYMENT AND LITIGATION.

WHAT IS HACCP?

- HAZARD ANALYSIS CRITICAL CONTROL POINT (HACCP) IS A TECHNIQUE THAT INVOLVES EXAMINING THE PRODUCTION PROCESS, IDENTIFYING THE CRITICAL AREAS OF CONCERN (HAZARDS) AND PUTTING MEASURES IN PLACE TO PREVENT POTENTIAL PROBLEMS FROM HAPPENING.
- PREVENTIVE, NOT REACTIVE
- A MANAGEMENT TOOL USED TO PROTECT THE FOOD SUPPLY AGAINST BIOLOGICAL, CHEMICAL AND PHYSICAL HAZARDS

WHY HACCP IS NEEDED?

- TO OFFER SAFE PRODUCTS TO CUSTOMER
- CUSTOMER REQUIREMENT
- RULES, REGULATIONS MAKE HACCP COMPULSORY. EG EU
- COST INVOLVE IN PRODUCT RECALLS, COMPENSATION, IMAGE

THE HAZARDS

- A HAZARD IS A BIOLOGICAL, CHEMICAL OR PHYSICAL AGENT IN, OR CONDITION OF, FOOD WITH THE POTENTIAL TO CAUSE AN ADVERSE HEALTH EFFECT.
- CATEGORIES OF HAZARDS
 - BIOLOGICAL
 - CHEMICAL
 - PHYSICAL, AND
- QUALITY

BIOLOGICAL HAZARDS

- BIOLOGICAL HAZARD INCLUDE HARMFUL:
 - BACTERIA
 - FUNGI
 - VIRUSES
 - PARASITES
 - ALGAE

CHEMICAL HAZARDS

- **CLEANING CHEMICALS – EG. DETERGENTS**
- **PESTICIDES – FUNGICIDES, INSECTICIDES, HERBICIDES, RODENTICIDES**
- ALLERGENS
- TOXIC METALS
- NITRITES, NITRATES AND N-NITROSO COMPOUNDS
- POLYCHLORINATED BIPHENYLS (PCBS)
- PLASTICIZERS AND PACKAGING MIGRATION
- **VETERINARY RESIDUES – ANTIBIOTICS, HORMONES, ECTOPARASITICIDES**
- **CHEMICAL ADDITIVES**
- PHYLLOTOXINS- CYANIDE,ESTROGENS

PHYSICAL HAZARDS

- GLASS
- METAL
- STONES, TWIGS, LEAVES
- WOOD
- PEST
- JEWELRY



QUALITY CONCERNS

- CIGARETTE BUTTS, PAINT FLAKES, GUM OR HAIR FOUND IN FOOD
- WRONG PROTEIN LEVEL IN WHEAT
- ORANGES WITH BLEMISHES
- POTATOES WITH WRONG SIZE
- BREAD THAT HAS BEEN OVERCOOKED
- A MEAL IN A RESTAURANT THAT HAS BEEN POORLY PRESENTED
- THE BOTTOM FALLING OUT A MEAT PIE
- PRODUCT SPECIFICATIONS NOT MET EG. SIZE, SHAPE, TEXTURE, TASTE, SMELL, COLOUR ETC.

PREREQUISITE PROGRAMS

- **BASIC CONDITIONS AND ACTIVITIES** THAT ARE NECESSARY TO MAINTAIN A **HYGIENIC ENVIRONMENT THROUGHOUT THE FOOD CHAIN** SUITABLE FOR THE **PRODUCTION, HANDLING AND PROVISION OF SAFE END PRODUCTS** AND **SAFE FOOD FOR HUMAN CONSUMPTION**
- **EXAMPLES OF EQUIVALENT TERMS: GAP, GVP, GMP, GHP, GPP, GDP, GTP**

PRP CATEGORIES

- PERSONNEL
 - DISEASE CONTROL
 - CLEANLINESS
 - EDUCATION AND TRAINING



BUILDING AND FACILITIES

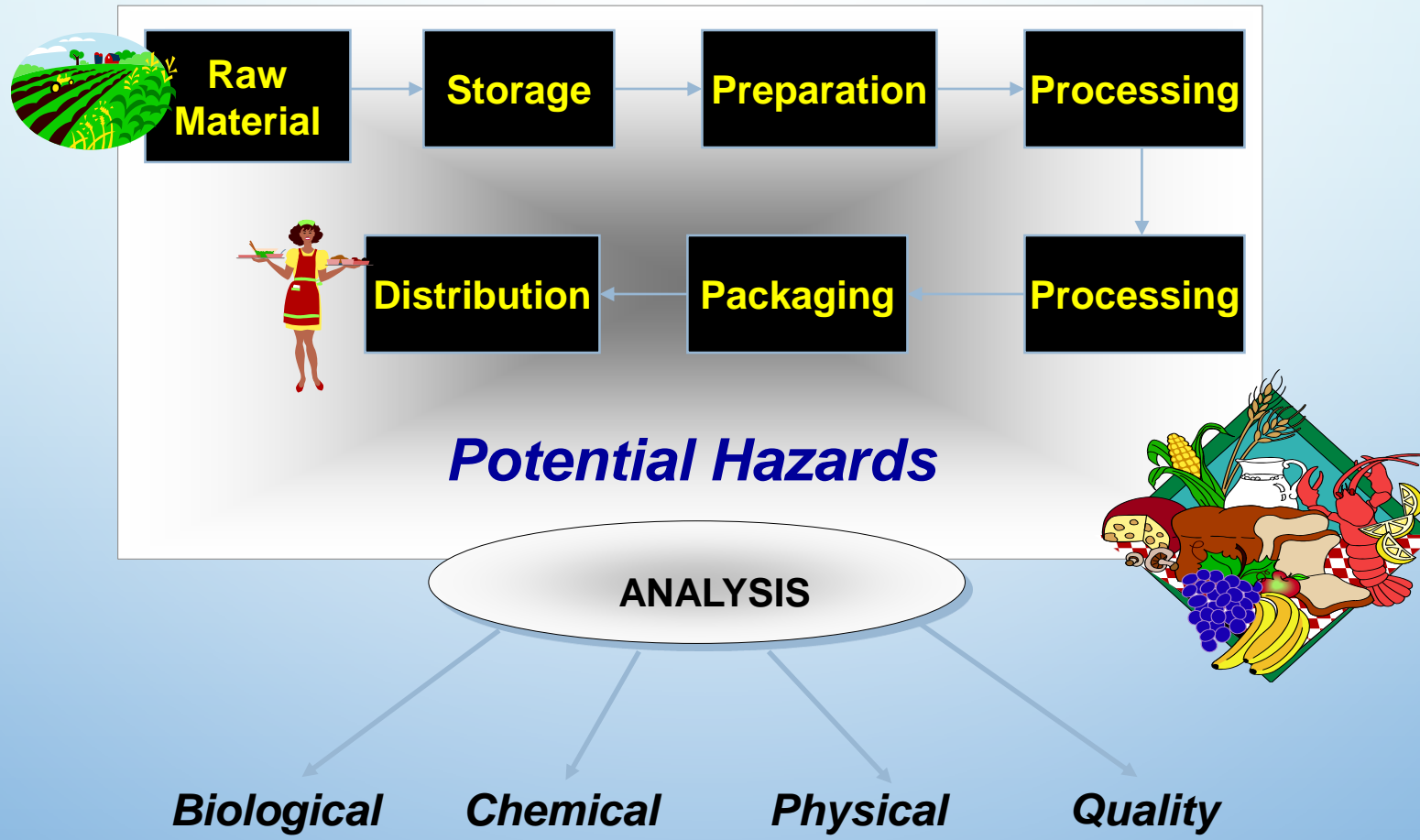
- PLANT & GROUNDS
 - GROUNDS
 - PLANT CONSTRUCTION & DESIGN
- SANITARY OPERATIONS
 - GENERAL MAINTENANCE
 - SUBSTANCES
 - PEST CONTROL
 - SANITATION
- SANITARY FACILITIES AND CONTROLS
 - WATER SUPPLY *TOILET FACILITIES
 - PLUMBING * HAND WASHING FACILITIES
 - SEWAGE * DISPOSAL



- EQUIPMENT
 - EQUIPMENT & UTENSILS
- PRODUCTION & PROCESS CONTROL
 - PROCESS & CONTROLS
 - RAW MATERIALS & OTHER INGREDIENTS
 - OPERATIONS
 - WAREHOUSING & DISTRIBUTION



HAZARDS



FOOD CHAIN SHRIMP INDUSTRY

Brood Stock

Water

Human & Animals
Facilities & Equipment

Feed/Drugs



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The background is a light blue gradient. It is decorated with several realistic water droplets of various sizes. Some droplets are at the top left, some are at the bottom right, and others are scattered in the center. They have highlights and shadows, giving them a 3D appearance.

**DO YOU LIKE CHARCOAL
ROASTED CHICKEN?**

EARLY DAWN, STARTS THE DAY BY RIDING AROUND TO COLLECT DEAD CHICKEN



ASKING AROUND FOR DEAD CHICKEN



TOTAL OF 5 RIDERS ARE HIRED BY THE BOSS TO FARMS TO BUY DEAD CHICKEN



A DEAD CHICKEN COST 1 RMB AND WOULD BE SOLD AT 9 RMB AFTER PROCESSING



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STORAGE FOR THE DEAD CHICKEN IN THE COURT YARD



CARCASSES ARE THROWN EVERYWHERE



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AND ON THE FLOOR ...



FOUR EMPLOYEES START DE-FEATHERING THE DEAD FOWL AFTER SOAKING IN BOILING WATER FROM A RUSTY WOK



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ENDURING THE PUNGENT ODOUR, BUT SOMETIME, IT GET SO TERRIBLE
THAT EVEN THE MOST EXPERIENCED OF THE WORKERS WOULD PUKE



WORKERS RUSHING TO GET THE CHICKEN DE-FEATHERED



A DISCARDED BATH TUB BEING USED TO SOAK THE BARE SKIN DEAD CHICKEN ... THE CONTAMINATED WATER WOULD HAVE ACCELERATED THE DECOMPOSITION PROCESS



WEARING SLIPPERS WALKING AMONG THE CHICKEN BEFORE COLOURING PROCESSING



AND NOW PRESENTING THE MOUTH WATERING CHARCOAL ROASTED CHICKEN!



YUMMY! YUMMY!



WHERE IS THE GUARANTEE OR ASSURANCE THAT THE FOOD IS SAFE AND OF GOOD QUALITY?



IN THE ORGANIZATION

- THIS IS WHERE WE NEED MANAGEMENT SYSTEMS
 - ISO 9001 QUALITY MANAGEMENT SYSTEM
 - ISO 22000 FOOD SAFETY MANAGEMENT SYSTEM
- THIS WILL COVER ALL RELEVANT OPERATIONS

THIRD PARTY ASSURANCE YOUR INTERNATIONAL PASSPORT

- THIS IS WHERE WE NEED CERTIFICATION FOR MANAGEMENT SYSTEMS
 - ISO 9001 QUALITY MANAGEMENT SYSTEM
 - ISO 22000 FOOD SAFETY MANAGEMENT SYSTEM
- THIS WILL AUDIT ALL RELEVANT ACTIVITIES OF THE SYSTEM

BENEFITS OF CERTIFICATION

- HELP AN ORGANIZATION PROVIDE CONFIDENCE TO ITS INTERESTED PARTIES THAT
 - A MANAGEMENT COMMITMENT EXISTS TO MEET THE PROVISIONS OF ITS POLICY, OBJECTIVES, AND TARGETS
 - EMPHASIS IS PLACED ON PREVENTION RATHER THAN CORRECTIVE ACTION
 - EVIDENCE OF REASONABLE CARE AND REGULATORY COMPLIANCE CAN BE PROVIDED AND
 - THE SYSTEMS DESIGN INCORPORATES THE PROCESS OF CONTINUAL IMPROVEMENT
 - IMPROVING COST CONTROL
 - REDUCING INCIDENTS THAT RESULT IN LIABILITY
 - DEMONSTRATING REASONABLE CARE
 - FACILITATING THE ATTAINMENT OF PERMITS AND AUTHORIZATIONS
 - IMPROVING INDUSTRY-GOVERNMENT RELATIONS
 - PROVIDE ASSURANCE ON FOOD SAFETY

KING AQUA SERVICES ACHIEVEMENTS

