



TECHNICAL ASSISTANCE TO BUILD FOOD SAFETY  
CAPACITY  
FOR THE FISHERIES SECTOR



CARIFORUM

# TIBU IMPEX

## Module 2

**Good Manufacturing practices**

**Good Cleaning and Disinfection practices**

**Good Pest Control Practices**

# OUTLINE

## **OVERVIEW OF GOOD MANUFACTURING PRACTICES**

### **GOOD CLEANING AND DISINFECTION PRACTICES**

- **RELEVANCE OF SANITATION PROCEDURES AS A PREREQUISITE OF THE FSMS**
- **CLEANING AND DISINFECTING PROCEDURES**
- **FREQUENCY**
- **RECORD KEEPING**

### **GOOD PEST CONTROL PRACTICES**

- **PEST CONTROL PLAN**
- **PEST CONTROL PROCEDURE**
- **RECORD KEEPING**

# GMPs are

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- Preventative measures to ensure food safety
- Mostly based on practical experience over a long period of time
- The foundation on which to build a HACCP program



# GMP's General Requirements in production

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- Preparation, processing, weighing, sorting, washing, chilling, freezing, packing, expedition and control activities should be done according with good manufacturing practices with the purpose of:
  - To avoid as much as possible any cross contamination of the product, with contamination of the fish (skin) or from the work and establishment environment.
  - To build up logic and practical flow of the products from raw material to finished product.
  - To build up a logical and practical flow of waste products.
  - To organise a logical and practical flow of clean and dirty recipients coming into and leaving the establishment.
- Prevention of the temperature abuse



## Good Cleaning and Disinfection Practices

- Cleaning and sanitising procedures shall assure that:
  - fish contact surfaces are left clean (free of gross contamination) and sanitised (free of pathogenic and most soilage bacteria) and chemical contamination of the fish is avoided
  - all chemicals are properly labelled and stored away in an appropriate manner in the designated place. The personnel involved at the handling of these chemicals use them in the ways directed by the manufacturer



## Scheduling of cleaning and sanitising

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- Food contact surfaces are rinsed before the start-up of operation using a sanitising solution.
- A full cleaning and sanitising is realized after work is completed.
- It may also be performed if required during breaks in the processing (for example between batches from different suppliers).
- All tools and ancillary equipment (including boxes used for internal movement of product) should be cleaned regularly during the workday.
- Water storage tanks should be cleaned quarterly.

AREA	FREQUENCY
Processing Room	Daily (at regular intervals)
Freezer	weekly
Holding Room	Monthly
Display Freezers	Weekly
Equipment, Tools	Daily (at regular intervals)
Dry Storage Room	Monthly
Staff Amenities	Daily
Sanitary Facilities	Daily
Filtration System	Quarterly
Storage Tanks	Monthly
Drains	Daily /monthly chlorinating
Water tanks	Monthly
Surroundings	Daily

All the proposed frequencies are subject to review!!

# Cleaning and sanitising procedure

- The following procedure should be followed for each area/item to be cleaned..
  - Ensure the area/item is free of gross contamination
  - Prewash using a high-pressure wash.
  - Apply detergent and use scrubbing brushes, cleaning sponges etc on all parts, including parts where there is no visible residue
  - Rinse with clean water
  - Apply sanitising solution
  - Leave for minimum 30 minutes
  - Rinse with potable water
  - Allow to air dry

## Stages of cleaning and disinfection

1 Manually remove visible fish waste



2 Clean with soap or detergent



3 Rinse with clean water



4 Disinfect 



5 Final rinse



6 Leave to dry





# Preparation of sanitising solution

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- To make up the sanitising solution in a **10 litre bucket**
  - Add **20g of calcium hypochlorite granules** to the empty bucket
  - Add water up to the 10 litre mark
  - After washing with detergent/water, and rinsing with potable water, rinse the surface/equipment with the chlorinated water to sanitise
  - Leave the surface/equipment in contact with the chlorinated water
  - **Never use chlorinated water for washing fish.** Keep it in containers specially designated for this purpose.
  - Make up a fresh batch for each round of cleaning

## What should be disinfected?

### Food-contact surfaces:

- Food utensils/equipment
- Production surfaces
- Walls adjacent to production surfaces
- Sinks
- Refrigerators

### Hand-contact surfaces:

- Touch points such as handles on doors, drawers, refrigerators
- Taps/hand washbasins
- Nailbrushes

# Tank cleaning and sanitising



1. Each water tank should be **cleaned and sanitized QUARTERLY** to prevent micro-biological accumulation and potential contamination.

2. After emptying, the storage tanks are washed (inside) and scrubbed with detergent and water, rinsed and then sanitised with hypochlorite.

3. The sanitising solution in the tank should be **allowed to flow through all taps**, which are then **closed for 30 minutes** to disinfect the distribution lines.

4. When the disinfecting procedure is completed and the sanitising solution is drained, the tanks may be filled with water and chlorinated for potabilization and subsequent use.

# Checking and record keeping

- The following activities are done to ensure cleaning is effective:
  - Visual inspection
  - Surface swabs to assess viable bacteria
- Upon inspection if the area or equipment is not properly cleaned, the cleaning procedure is reinitiated.
- All cleaning and disinfecting procedures are documented in the cleaning record sheet.

## Cleaning record sheet

Equipment/Location	Dd/mm	Dd/mm
Walls		
Windows		
Floors		
Ceiling		
Drainage		
Sinks		
Towel/hand soap/waste bin		
Social Premises		
Toilets/toilet paper		
Showers		
Sinks		
Lockers		
Towel/hand soap/waste bin		
Canteen		
Ice storage room		
Cooler Units		
Fish waste tubs		
Fish waste bins		
Buckets		
Ice shovel		
Processing tables		
Cutting boards		
Knives/Cleavers/scissors		
Fish scaler Machine		
Water tanks		

# Good Pest Control Practices

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- Good hygienic practices should be employed to avoid creating an environment conducive to pests.
- Pest control programmes could include preventing access, eliminating harbourage and infestations, and establishing monitoring detection and eradication systems.
- Physical, chemical and biological agents should be properly applied by appropriately qualified personnel.



- Rodents – mice, rats
- Insects – flies, wasps, cockroaches
- Birds
- Dogs
- Cats



# Pest control procedure

- **Passive**
  - daily walk around the establishment is done.
  - all windows, doors, ventilation openings and drains are checked.
  - any damage to pest screens and/or air curtains are immediately reported.
  - the problem is then rectified.
- **Active**
  - daily checks are done for pest infestations.
  - If there is any sign of infestation and the exterminator is immediately contacted.
- Should the pest control procedure fail, and pest colonies are seen after treatment the procedure will be reinitiated. If this does not work a new extermination company will be contracted and the procedures and chemical used will be revised.



# Record keeping

Information on trade name, active ingredients, and methods of use, instructions on concentration or dilution and safety instructions on the pesticides should be provided by the company and are kept on record.

Documentation of pest control procedures are kept in a pest control record.

Date	Area	Monitoring	Presence of pest /signs Y / N Identification of pest	Corrective action	Worker initials
		Walk around the establishment			
		Verify windows, doors, ventilation openings and drains			
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Any questions?

