

**Verification:** It is the periodic evaluation and review of HACCP plan by the HACCP team of the unit to determine the overall effectiveness of the HACCP plan.

**Record keeping:** Establish record keeping procedure for monitoring deviations, corrective actions and SSOP (Standard Sanitary Operation Procedure).

#### **Benefits of HACCP**

- Systematic and scientific
- Proactive and preventive
- Cost effective
- Identifies all conceivable hazards
- Focuses technical resources on critical activities
- Reduction of losses
- Complements other QA systems
- Internationally acknowledged
- Due diligence support
- Greater confidence in product safety
- Above all, producer and customer satisfaction

CIFT provides technical assistance in preparation and validation of HACCP manual, implementation of HACCP, and auditing in seafood processing plants.

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# **H A C C P**

## **(Hazard Analysis Critical Control Point)**



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## Hazard Analysis Critical Control Point (HACCP)

### NEED FOR FOOD SAFETY

No food processing organisation can function successfully without quality assurance. It is an essential operation needed to guarantee safety, whole-someness and functionality of the product.



*Seafood, a foreign exchange earner*

Traditional food quality control programmes have not been effective to cope up with the requirements of modern foods and food habits. All over the world, an increase in food borne diseases has been noted and large amounts of food are lost due to contamination. As far as seafood is concerned, there has been an increasing consumer and public awareness of its safety. There is also a need for more control and inspection for ensuring safety and quality of the end product.

Traditional food control has relied heavily on end product inspection, which include sampling and testing of end products in laboratories. However, it is well known that this does not guarantee product safety. There is also a chance for unexpected losses.

### What is HACCP Programme ?

It is a systematic approach for the identification and assessment of hazards and risks associated with any food production process and defining the means of their control. It is currently the best system available for improving safety of foods.

### What are hazards and risks ?

It is a biological, chemical, physical or economic aspect of a food, which can cause illness or mental distress for a consumer.

### Examples

Bacteria	: Salmonella, Listeria
Toxins	: Aflatoxins, PSP, DSP
Chemicals	: Pesticides, antibiotic residues
Foreign body	: Glass, metal

Operational malpractices or other operations can also constitute a hazard if they lead to unacceptable contamination or growth and survival of harmful microorganisms.

**Risk** is an estimate of the probability or likely occurrence of a hazard.

**Critical Control Point:** Any step in a manufacturing process, which, if not controlled properly, may result in the occurrence of the risk so that the products are unsafe, unwholesome or a cause for economic fraud.

### MAIN ELEMENTS OF HACCP SYSTEM

**Identification & assessment of hazards :** An appreciation of the type of contaminants in the product that could cause harm to the consumer and a detailed understanding of how these hazards could arise.

**Determination of Critical Control Points (CCPs):** CCPs should be carefully chosen on the basis of the risk and severity of the hazard to be controlled and should be truly critical.

**Critical limits:** Determination of criteria and specified limits or characteristics of a physical, chemical or biological hazard which ensure the product is safe and of acceptable quality.

**Monitoring of CCPs:** The schedule of tests and observations recorded to report the status of a hazard at each critical control point in a production process to ensure that the hazards are kept below the critical limits.

**Corrective actions:** Remedial measures which are adopted, when a critical deficiency is assessed or when a critical limit is exceeded in the food manufacturing process.