

# COMPETENCY STANDARD FOR

## FOOD PROCESSING

**LEVEL: 02** 

(AGRO FOOD PROCESSING SECTOR)

Code: CS-AFP-FP-L2-EN-V1



National Skills Development Authority
Prime Minister's Office
Government of the People's Republic of Bangladesh

#### **Copyright**

National Skills Development Authority

Prime Minister's Office

Level: 10-11, Biniyog Bhaban,

E-6 / B, Agargaon, Sher-E-Bangla Nagar Dhaka-1207, Bangladesh.

Email: ec@nsda.gov.bd Website: www.nsda.gov.bd.

National Skills Portal: http://skillsportal.gov.bd

National Skills Development Authority (NSDA) is the owner of this document. Other interested parties must obtain written permission from NSDA for reproduction of information in any manner, in whole or in part, of this Competency Standard, in English or other language.

This Competency Standard for Food Processing is a document for the development of curricula, teaching and learning materials, and assessment tools. It also serves as the document for providing training consistent with the requirements of industry in order to meet the qualification of individuals who graduated through the established standard via competency-based assessment for a relevant job.

This document has been developed by NSDA in association with **Agro Food Processing** Sector ISC, industry representatives, academia, related specialist, trainer and related employee.

Public and private institutions may use the information contained in this standard for activities benefitting Bangladesh.

#### Introduction

The NSDA aims to enhance an individual's employability by certifying completeness with skills. NSDA works to expand the skilling capacity of identified public and private training providers qualitatively and quantitatively. It also aims to establish and operationalize a responsive skills ecosystem and delivery mechanism through a combination of well-defined set of mechanisms and necessary technical supports.

Key priority economic growth sectors identified by the government have been targeted by NSDA to improve current job skills along with existing workforce to ensure required skills to industry standards. Training providers are encouraged and supported to work with industry to address identified skills and knowledge to enable industry growth and increased employment through the provision of market responsive inclusive skills training program. "Computer Operation" is selected as one of the priority occupations of Agro Food Processing Sector. This standard is developed to adopt a demand driven approach to training with effective inputs from Industry Skills Councils (ISC's), employer associations and employers.

Generally, a competency standard informs curriculum, learning materials, assessment and certification of trainees enrolled in Skills Training. Trainees who successfully pass the assessment will receive a qualification in the National Skills Qualification Framework (NSQF) under Bangladesh National Qualification Framework (BNQF) and will be listed on the NSDA's online portal.

This competency standard is developed to improve skills and knowledge in accordance with the job roles, duties and tasks of the occupation and ensure that the required skills and knowledge are aligned to industry requirements. A series of stakeholder consultations, workshops were held to develop this document.

The document also details the format, sequencing, wording and layout of the Competency Standard for an occupation which is comprised of Units of Competence and its corresponding Elements.

#### Overview

A competency standard is a written specification of the knowledge, skills and attitudes required for the performance of an occupation, trade or job corresponding to the industry standard of performance required in the workplace.

The purpose of a competency standards is to:

- provide a consistent and reliable set of components for training, recognising and assessing people's skills, and may also have optional support materials
- enable industry recognised qualifications to be awarded through direct assessment of workplace competencies
- encourage the development and delivery of flexible training which suits individual and industry requirements
- encourage learning and assessment in a work-related environment which leads to verifiable workplace outcomes

Competency standards are developed by a working group comprised of representative from NSDA, Key Institutions, ISC, and industry experts to identify the competencies required of an occupation in Informal Sector.

Competency standards describe the skills, knowledge and attitude needed to perform effectively in the workplace. CS acknowledge that people can achieve technical and vocational competency in many ways by emphasizing what the learner can do, not how or where they learned to do it.

With competency standards, training and assessment may be conducted at the workplace or at training institute or any combination of these.

Competency standards consist of a number of units of competency. A unit of competency describes a distinct work activity that would normally be undertaken by one person in accordance with industry standards.

Units of competency are documented in a standard format that comprises of:

- unit title
- nominal duration
- unit code
- unit descriptor
- elements and performance criteria
- variables and range statement
- curricular content guide
- assessment evidence guides

Together, all the parts of a unit of competency:

- describe a work activity
- guide the assessor to determine whether the candidate is competent or not yet competent. The ensuing sections of this document comprise of a description of the relevant occupation, trade or job with all the key components of a unit of competency, including:
  - a chart with an overview of all Units of Competency for the relevant occupation, trade or job including the Unit Codes and the Unit of Competency titles and corresponding Elements
  - the Competency Standard that includes the Unit of Competency, Unit Descriptor, Elements and Performance Criteria, Range of Variables, Curricular Content Guide and Assessment Evidence Guide.

## Competency Standards for National Skills Certificate – Level-2 in Food Processing in Agro Food Processing Sector

Level Descriptors of NSQF (BNQF 1-6)

Level & Job	Knowledge Domain	Skills Domain	Responsibility Domain
Classification			
6-Mid-Level Manager/ Sub Assistant Engineer	Comprehensive actual and theoretical knowledge within a specific work or study area with an awareness of the validity and limits of that knowledge, able to analyse, compare, relate and evaluate.	Specialised and wider range of cognitive and practical skills required to provide leadership in the development of creative solutions to defined problems. Communicate professional issues and solutions to the team and to external partners/users.	Work under broad guidance and self-motivation to execute strategic and operational plan/s. Lead lower-level management. Diagnose and resolve problems within and among work groups.
5-Supervisor	Broad knowledge of the underlying, concepts, principles, and processes in a specific work or study area, able to scrutinize and break information into parts by identifying motives or causes.	Broad range of cognitive and practical skills required to generate solutions to specific problems in one or more work or study areas. Communicate practice-related problems and possible solutions to external partners.	Work under guidance of management and self-direction to resolve specific issues. Lead and take responsibility for the work and actions of group/team members. Bridge between management.
4-Highly Skilled Worker	Broader knowledge of the underlying, concepts, principles, and processes in a specific work or study area, able to solve problems to new situations by comparing and applying acquired knowledge.	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying the full range of methods, tools, materials and information. Communicate using technical terminology and IT technology with partners and users as per workplace requirements.	Work under minimal supervision in specific contexts in response to workplace requirements. Resolve technical issues in response to workplace requirements and lead/guide a team/ group.
3-Skilled Worker	Moderately broad knowledge in a specific work or study area, able to perceive ideas and abstract from drawing and design according to workplace requirements.	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools. Communicate with his team and limited external partners upholding the values, nature and culture of the workplace	Work or study under supervision with considerable autonomy. Participate in teams and responsible for group coordination.
2-Semi Skilled Worker	Basic understanding of underpinning knowledge in a specific work or study area, able to interpret and apply common occupational terms and instructions.	Skills required to carry out simple tasks, communicate with his team in the workplace presenting and discussing results of his work with required clarity.	Work or study under supervision in a structured context with limited scope of manipulation
1 –Basic Skilled Worker	Elementary understanding of ability to interpret the underpinning knowledge in a specific study area, able to interpret common occupational terms and instructions.	Specific Basic skills required to carry out simple tasks. Interpret occupational terms and present the results of own work within guided work environment/under supervision.	Work under direct supervision in a structured context with limited range of responsibilities.

## **List of Abbreviations**

General	
NSDA	National Skills Development Authority
BMET	Bureau of Manpower Employment and Training
ILO	International Labor Organization
ISC	Industry Skills Council
NPVC	National Pre-Vocation Certificate
NSQF	National Skills Qualifications Framework
PPP	Public Private Partnership
SCVC	Standards and Curriculum Validation Committee
SEIP	Skills for Employment Investment Program
STP	Skills Training Provider
UoC	Unit of Competency
AFP	Agro Food Processing

## **Approval of Competency Standard**

Approved by
29<sup>th</sup> Authority Meeting of NSDA
Held on 18.10.2023

## **Contents**

Copyright	i
Introduction	ii
Overview	iii
Level Descriptors of NSQF (BNQF 1-6)	iv
List of Abbreviations	v
Course Structure	1
Units & Elements at Glance	2
Generic Units of Competencies	4
GU-04-L2-V1: Apply Occupational Safety and Health (OSH) Practices at Workplace	5
GU-06-L3-V1: Receive and Respond to Workplace Instructions	9
GU-08-L2-V1: Work in a Team Environment	12
Sector Specific Units of Competencies	15
SU-AFP-01-L1-V1: Follow Quality and Food Safety Programs	16
SU-AFP-02-L1-V1: Work in the Food Industry	19
Occupation Specific Units of Competencies	21
OU-AFP-FP-01-L2-V1: Interpret Food Processing, Raw Materials and Ingredients	22
OU-AFP-FP-02-L2-V1: Perform Process in a Production System	26
OU-AFP-FP-02-L2-V1Perform Basic Food Packaging	30
Validation of Competency Standard	33
Workshop Minutes	34

## Competency Standards for National Skill Certificate – 2 in Food Processing in Agro Food Processing Sector

### **Course Structure**

SL	Unit Code and Title  UoC Level			Nominal Duration (Hours)
Generic	<b>Units of Competencies</b>			
1.	GU-04-L2-V1	Apply Occupational Safety and Health (OSH) Practices at Workplace	2	20
2.	GU-06-L3-V1	Receive and Respond to Workplace Instructions	3	15
3.	GU-08-L2-V1	Work In a Team Environment	2	20
	•	Sub Total	1	55
Sector S <sub>1</sub>	pecific Units of Compet	encies		
4.	SU-AFP-01-L2-V1	Follow Quality and Food Safety Procedure	2	35
5.	SU-AFP-03-L2-V1	Work in the Food Industry	2	20
		Sub Total		55
Occupati	ion Specific Units of Co	ompetencies		
6.	OU-AFP-FP-01-L2- V1	Interpret Food Processing, Raw Materials and Ingredients	2	60
7.	OU-AFP-FP-02-L2- V1	Perform Process in a Production System	2	150
8.	OU-AFP-FP-03-L2- V1	Perform Basic Food Packaging	2	40
Sub Total			250	
Total Nominal Hours				360

#### **Units & Elements at Glance**

### **Generic Units of Competencies**

Code	Unit of Competency	Elements of Competency	Duration (Hours)
GU-04-L2- V1	Apply Occupational Safety and Health (OSH) Practices at Workplace	<ol> <li>Identify, control and report OSH hazards.</li> <li>Conduct work safely.</li> <li>Follow emergency response procedures</li> <li>Maintain and improve health and safety in the workplace.</li> </ol>	20
GU-06-L3- V1	Receive and Respond to Workplace Instructions	<ol> <li>Interpret and follow verbal instructions</li> <li>Read and interpret workplace documents</li> <li>Receive and follow written instructions</li> <li>Attend meetings and provide inputs</li> </ol>	15
GU-08-L2- V1	Work In a Team Environment	<ol> <li>Identify team goals and processes.</li> <li>Communicate and cooperate with team members</li> <li>Work as a team member</li> <li>Solve problems as a team member</li> </ol>	20

### **Sector Specific Units of Competencies**

Code	Unit of Competency	<b>Elements of Competency</b>	Duration (Hours)
SU-AFP-01- L2-V1	Work in the Food Industry	<ol> <li>Identify job roles and responsibilities in the food industries.</li> <li>Identify and observe OSH in the food industries.</li> <li>Plan work activities.</li> <li>Work with others.</li> </ol>	20
SU-AFP-02- L2-V1	Follow Quality and Food Safety Programs	<ol> <li>Observe OSH.</li> <li>Practice personal hygiene and good grooming standards.</li> <li>Follow safe food handling and sanitation practices.</li> <li>Monitor quality of work outcome</li> <li>Identify and act on quality deficits and/or food safety hazards.</li> </ol>	35

## **Occupation Specific Units of Competencies**

Code	Unit of Competency	Elements of Competency	Duration (Hours)
SEIP-AFP- FP-01-O	Demonstrate Knowledge on Food Processing, Raw Materials and Ingredients	<ol> <li>Interpret Food Processing</li> <li>Identify Raw Material and Ingredients</li> <li>Check physical condition of Raw Material and Ingredients.</li> </ol>	60
SEIP-AFP- FP-02-O	Perform Process in a Production System	<ol> <li>Prepare for work</li> <li>Perform pre-operation activities</li> <li>Operate food processing equipment and machinery.</li> <li>Clean and maintain machines and service area</li> </ol>	150
SEIP-AFP- FP-03-O	Perform Basic Food Packaging	<ol> <li>Prepare for work</li> <li>Carryout basic packaging.</li> <li>Clean workplace</li> </ol>	40

**Generic Units of Competencies** 

	GU-04-L2-V1: Apply Occupational Safety and Health (OSH) Practices at Workplace
Nominal Hours	20 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to apply occupational safety and health (OSH) practices at workplace. It specifically includes identifying, controlling and reporting OSH hazards, conducting work safety, following emergency response procedures and maintaining and improving health and safety in the workplace.
Elements of Competency	Performance Criteria (Bold & Underlined terms are elaborated in the Range of Variables)
Identify, control and report OSH hazards	<ol> <li>1.1 Work area is routinely checked for Occupational Safety and Health (OSH) hazards prior to commencing and during work.</li> <li>1.2 Hazards are identified and corrective action is taken within the level of responsibility.</li> <li>1.3 OSH hazards and incidents are reported to appropriate personnel according to workplace procedures.</li> <li>1.4 Safety signs and symbols are identified and followed.</li> <li>1.5 Preventive Control Measures are identified in accordance with OSH work standards.</li> </ol>
2. Conduct work safely	<ul><li>2.1 OSH practices are applied in the workplace.</li><li>2.2 Personal Protective Equipment (PPE) are used.</li></ul>
3. Follow emergency response procedures	<ul> <li>3.1 Emergency situations are identified and reported according to workplace requirements.</li> <li>3.2 Emergency procedures are followed as appropriate to the nature of the emergency and according to workplace procedures.</li> <li>3.3 Workplace procedures for dealing with accidents, fires and emergencies are followed whenever necessary within scope of responsibilities.</li> </ul>
4. Maintain and improve health and safety in the workplace  Range of Variables	<ul> <li>4.1 Risks are identified and appropriate control measures are implemented in the workplace.</li> <li>4.2 Recommendations arising from risk assessments are implemented within level of responsibility.</li> <li>4.3 Safety records are maintained according to company policies.</li> </ul>
Variables	Range (may include but not limited to):

1. Hazards	<ul><li>1.1 OSH incidents include near misses, injuries, illnesses and property damage, noise, handling hazardous substances.</li><li>1.2 Biological hazards- bacteria, viruses, plants, parasites, mites, molds, fungi, insects</li></ul>
	1.3 Chemical hazards – dusts, fibers, mists, fumes, smoke, gasses,
	vapors
	1.4 Ergonomics Hazards
	1.5 Physiological factors – monotony, personal relationship, work out cycle
	1.6 Safety hazards (unsafe workplace condition) – confined space, excavations, falling objects, gas leaks, electrical, poor storage of materials and waste, spillage, waste and debris
	1.7 Unsafe workers' act (Smoking in off-limited areas, Substance and alcohol abuse at work)
	1.8 Working with and near moving equipment / load shifting
	equipment.  1.9 Broken or damaged equipment or materials.
	<ul><li>2.1 Direction signs (exit, emergency exit, etc.)</li><li>2.2 First aid signs</li></ul>
2. Safety signs	2.3 Danger Tags
and symbols	2.4 Hazard signs
and symbols	2.5 Safety tags
	2.6 Warning signs
	3.1 Apron
	3.2 Safety Helmet
	3.3 Goggles
	3.4 Ear muffs
	3.5 Ear plugs
3. Personal Protective	3.6 Gloves
Equipment (PPE)	3.7 Clothing
	3.8 Safety Boots
	3.9 Face Protection (Musk & Shield)
	3.10 Scarf
	3.11 Hair Net/cap/bonnet
	3.12 Hard hat
	4.1 Eliminate the hazard (i.e., get rid of the dangerous machine
	4.2 Isolate the hazard (i.e. keep the machine in a closed room and
	operate it remotely; barricade an unsafe area off)
	4.3 Substitute the hazard with a safer alternative (i.e., replace the
4. Preventive Control	machine with a safer one)
4. Preventive Control Measures	4.4 Use administrative controls to reduce the risk (i.e. give trainings
Measures	on how to use equipment safely; OSH-related topics, issue warning signage, rotation/shifting work schedule)
	4.5 Use engineering controls to reduce the risk (i.e. use safety
	guards to machine)
	4.6 Use personal protective equipment
	4.7 Safety, Health and Work Environment Evaluation
	4.8 Periodic and/or special medical examinations of workers
	1

5. Workplace Procedures	<ul><li>5.1 Fire fighting</li><li>5.2 Medical and first aid</li><li>5.3 Evacuation</li><li>5.4 Material Safety Data Sheets (MSDSs) and manufacturers' advice.</li></ul>		
6. Company policies	6.1 Job related Standard Operating Procedures (SOPs). 6.2 Occupational Health and Safety (OSH) specific procedures. Examples of OSH procedures include –consultation and participation, emergency response to specific hazards, incident investigation, risk assessment, reporting arrangement and issue resolution procedures.		
F 11 G 11	1		
	uthentic, valid, sufficient, reliable, consistent, and recent and meet all version of the Unit of Competency.		
Critical aspects of competency	<ol> <li>1.1 Used Personal Protective Equipment (PPE).</li> <li>1.2 Identified hazards.</li> <li>1.3 Took corrective action of different hazards.</li> <li>1.4 Took corrective action for emergency procedure.</li> <li>1.5 Reported emergency situation to the Supervisor / Manager.</li> <li>1.6 Satisfied requirements mentioned in the performance criteria and range of variables.</li> </ol>		
2. Underpinning knowledge	<ul> <li>2.1 OSH Workplace Policies and Procedures.</li> <li>2.2 Work safety procedures.</li> <li>2.3 Fire and emergency procedures.</li> <li>2.4 Types of Hazards (Biological, Chemical and Physical) and their effects.</li> <li>2.5 PPE types and uses.</li> <li>2.6 Personal hygiene practices.</li> <li>2.7 OSH awareness.</li> <li>2.8 Steps of hazard identification.</li> <li>2.9 Principles of hazards control.</li> <li>2.10 Employer's role.</li> <li>2.11 Supervisor's responsibilities.</li> </ul>		
3. Underpinning skills	3.1 Identifying OSH policies and procedures. 3.2 Following personal work safety practices. 3.3 Reporting hazards and risks. 3.4 Responding to emergency procedures. 3.5 Maintaining physical well-being in the workplace. 3.6 Identify tools and equipment related to OSH. 3.7 Improving OSH performance.		
4. Required attitudes	<ul> <li>4.1 Commitment to occupational health and safety.</li> <li>4.2 Sincere and honest to duties.</li> <li>4.3 Promptness in carrying out activities.</li> <li>4.4 Eagerness to learn.</li> <li>4.5 Tidiness and timeliness.</li> <li>4.6 Environmental concerns.</li> <li>4.7 Communicate with peers and seniors in workplace</li> </ul>		

5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated). 5.2 Tools and equipment appropriate to workplace. 5.3 Materials relevant to the proposed activity. 5.4 All tools, equipment, material and documentation required. 5.5 Relevant specifications or work instructions.
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test. 6.2 Demonstration. 6.3 Oral Questioning. 6.4 Portfolio.
7. Context of assessment	<ul> <li>7.1 Competency assessment must be done in an assessment/training center or in an actual or simulated work place after completion of the training module</li> <li>7.2 Assessment should be done by a suitably qualified/certified assessor.</li> </ul>

Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

<b>Unit Code and Title</b>	GU-06-L3-V1: Receive and Respond to Workplace Instructions			
Nominal Hours	15 Hours			
Unit descriptor	This unit covers the knowledge, skills and attitudes required to receive and respond to workplace communication. It specifically includes interpreting and following verbal instructions, reading and interpreting workplace documents, receiving and following written instructions and attending meetings and providing inputs.			
Elements of Competency	Performance Criteria (Bold & Underlined terms are elaborated in the Range of Variables)			
Interpret and follow verbal Instructions	<ul> <li>1.1 Verbal Instructions are interpreted.</li> <li>1.2 Questions are asked to clarify understanding or obtaining more information.</li> <li>1.3 Instructions are followed as per understanding.</li> <li>1.4 Information/ instruction is recorded.</li> </ul>			
2. Read and Interpret Workplace Documents	<ul> <li>2.1 Written instructions are read and interpreted in accordance with workplace guidelines.</li> <li>2.2 Work signage are interpreted.</li> </ul>			
3. Receive and follow written instructions	<ul><li>3.1 Written instructions are interpreted.</li><li>3.2 Routine written instructions are followed in sequence.</li><li>3.3 Feedback is given to workplace supervisor based on workplace guidelines.</li></ul>			
4. Attend meetings and provide inputs	<ul> <li>4.1 Meetings are attended regularly and on time following well- disseminated agenda.</li> <li>4.2 Proper <u>Communication</u> methods are used to transmit instructions</li> <li>4.3 Appropriate non-verbal communication is used.</li> <li>4.4 Inputs are provided consistent with the meeting purpose.</li> <li>4.5 Opinions are expressed without interruption.</li> <li>4.6 Meeting outputs are implemented.</li> </ul>			
Range of Variables				
Variables	Range (may include but not limited to):			
1. Written instructions	<ul> <li>1.1 Supervisor's / Manager's Instructions</li> <li>1.2 Memoranda</li> <li>1.3 Rules and Regulations</li> <li>1.4 Signage</li> <li>1.5 Approved Work Plan</li> <li>1.6 External communications</li> </ul>			

2. Workplace guidelines	<ul> <li>2.1 Labor Policies and Guidelines</li> <li>2.2 Written Instructions</li> <li>2.3 Operations Manual</li> <li>2.4 Organizational Manuals</li> <li>2.5 Quality Assurance Handbook</li> </ul>
3. Signage	<ul><li>3.1 On-site direction signs</li><li>3.2 Common site warnings</li><li>3.3 Location signs</li><li>3.4 Traffic signs</li></ul>
4. Communication	<ul><li>4.1 Verbal instructions</li><li>4.2 Written instructions</li><li>4.3 Online communication</li></ul>

**Evidence guide**The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the unit of competency.

requirements of the current version of the unit of competency.		
Critical aspects of competency	<ul><li>1.1 Demonstrated knowledge of workplace procedures in receiving, interpreting read verbal &amp; written instruction and conduct communication.</li><li>1.2 Satisfying the requirements mentioned in the performance criteria and range of variables.</li></ul>	
2. Underpinning knowledge	<ul><li>2.1 Workplace Communication Policies, Standards and Procedures.</li><li>2.2 Verbal and Non-verbal communication.</li><li>2.3 Modes of Communication.</li></ul>	
3. Underpinning skills	<ul> <li>3.1 Receiving verbal instructions</li> <li>3.2 Interpreting verbal and written information/instruction</li> <li>3.3 Conveying instructions using verbal and</li> <li>3.4 Written forms of communication</li> <li>3.5 Participating in work place meetings and Discussions</li> </ul>	
4. Underpinning attitudes	<ul> <li>4.1 Commitment to occupational health and safety</li> <li>4.2 Promptness in carrying out activities</li> <li>4.3 Sincere and honest to duties</li> <li>4.4 Environmental concerns</li> <li>4.5 Eagerness to learn</li> <li>4.6 Tidiness and timeliness</li> <li>4.7 Respect to rights of peers and seniors in workplace</li> <li>4.8 Communicate with peers and seniors in workplace</li> </ul>	
5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated). 5.2 Telephone. 5.3 Writing materials.	

6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio
7. Context of assessment	<ul> <li>7.1 Competency assessment must be done in an assessment/training center or in an actual or simulated work place after completion of the training module</li> <li>7.2 Assessment should be done by a suitably qualified/certified assessor.</li> </ul>

Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

Unit Code and Title	<b>GU-08-L2-V1:</b> Work in a Team Environment
	This unit covers the knowledge, skills and attitudes (KSAs) required in working in a team environment.
Unit Descriptor	It includes defining team role and scope, identifying individual role and responsibility. Participating in team discussions and working as a team member.
Nominal Hours	20 Hours
Elements of Commetency	Performance Criteria
<b>Elements of Competency</b>	<b><u>Bold &amp; Underlined</u></b> terms are elaborated in the Range of Variables
Define team role and scope	<ul><li>1.1. Role and objectives of the team are defined.</li><li>1.2. Team structure, responsibilities and reporting relations are identified from team discussions and other external sources.</li></ul>
Identify individual role     and responsibility	2.1 Individual roles and responsibilities of <b>team members</b> are identified.
	2.2 Reporting relationships among team members are defined and clarified.
	2.3 Reporting relationships external to the team are defined and clarified.
3. Participate in team	3.1 Ideas related to team plans are contributed.
discussions	3.2 Recommendations for improving team work are put forward.
4. Work as a team member	4.1. Effective forms of communication are used to interact with team
	members. 4.2. Communication channels are followed.
	<ul><li>4.2. Communication channels are followed.</li><li>4.3. OHS practices are followed.</li></ul>
Range of Variables	4.5. Offs practices are followed.
Variables	Range (may include but not limited to):
1. Sources of information	<ul><li>1.1 Standard Operating Procedures</li><li>1.2 Job Description</li></ul>
	<ul><li>1.2 Job Description</li><li>1.3 Operations Manual</li></ul>
	1.4 Organizational Structure
2. Team Members	2.1 Coach/mentor
	2.2 Supervisor/Manager
	2.3 Peers/Colleagues
	2.4 Employee representative
3. Workplace context	3.1 National Laws and Statutes
	3.2 Standard Operating Procedures
	3.3 Workplace Rules and Regulations

<b>Evidence Guide</b>			
		d, sufficient, reliable, consistent, recent and meet all requirements	
of current version of the Unit of	of current version of the Unit of Competency		
1 Coldinal accounts of		essment required evidence that the candidate:	
1. Critical aspects of	1.1	demonstrated knowledge in working in a team environment.	
competency	1.2	satisfied the requirements mentioned in the	
	2.1	Performance Criteria and Range of Variables	
	2.1	Team Structure, Role and Responsibility	
	2.2	Individual Members' Roles and Responsibilities	
	2.3	Communication Flow and Reporting Structures	
2. Underpinning knowledge	2.4	Team Planning	
	2.5	Interpersonal Communication Skills	
	2.6	Team Meeting Procedures	
	2.7	OHS Practices	
	3.1	Identifying the role and responsibility of the team	
2. Hadaminaina abilla	3.2	Identifying roles and responsibilities of individual members	
3. Underpinning skills	3.3	Participating in team discussions	
	3.4	Working as a team member	
	4.1	Commitment to occupational health and safety	
	4.2	Environmental concerns	
4 77 1	4.3	Eagerness to learn	
4. Underpinning Attitudes	4.4	Tidiness and timeliness	
	4.5	Respect for rights of peers and seniors in workplace	
	4.6	Communication with peers and seniors in Workplace	
	5.1	Pens	
	5.2	Telephone	
5. Resource implications	5.3	Computer	
	5.4	Writing materials	
	5.5	Online communication	
	Meth	nods of assessment may include but not limited to:	
	6.1.	Workplace observation	
		Demonstration	
6. Methods of assessment		Oral questioning	
	6.4.	1	
	6.5.	Portfolio	
	7.1	Competency assessment must be done in NSDA accredited	
		assessment center	
7. Context of assessment	7.2	Assessment should be done by a NSDA certified/nominated	
		assessor	

Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any NTVQF qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

## **Sector Specific Units of Competencies**

<b>Unit Code and Title</b>	SU-AFP-01-L1-V1: Follow Quality and Food Safety Programs	
Nominal Hours	35 Hours	
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to follow quality and food safety programs. It specifically includes observing OSH practices, practicing personal hygiene and good grooming standards; following safe food handling and sanitation practices; monitoring quality of work outcome; and identifying and acting on quality deficits and/or safety hazards.	
<b>Elements of Competency</b>	Performance Criteria (Bold & underlined terms are elaborated in the Range of Variables)	
1. Observe OSH practices	<ul> <li>1.1 Housekeeping standards are maintained in the workplace following Occupational Safety and Health (OSH) requirements.</li> <li>1.2 Personal hygiene is maintained and Personal Protective Equipment (PPE) worn as per OSH requirements.</li> <li>1.3 Equipment is cleaned for production and hygiene requirements.</li> </ul>	
2. Practice personal hygiene and good grooming standards	<ul> <li>2.1 Personal hygiene and good grooming are practiced in line with workplace health and safety requirements.</li> <li>2.2 Health conditions and/or illness are reported as required by the food safety program.</li> <li>2.3 Clothing and footwear are appropriate for the food handling task and meets the requirements of the food safety program.</li> <li>2.4 Movement around the workplace complies with the food safety program.</li> </ul>	
3. Follow safe food handling and sanitation practices	<ul> <li>3.1 Food handling requirements are identified.</li> <li>3.2 Safe food handling practices are followed in line with workplace sanitation regulations and the food safety code.</li> <li>3.3 The workplace is maintained in a clean and tidy order to meet workplace standards.</li> </ul>	
4. Monitor quality of work outcome	<ul> <li>4.1 Quality requirements are identified.</li> <li>4.2 Inputs are inspected to confirm capability to meet quality requirements.</li> <li>4.3 Work is conducted and monitored to produce required outcomes.</li> </ul>	
5. Identify and act on quality deficits and/or food safety hazards	<ul> <li>5.1 Work area, materials, equipment and product are routinely checked to ensure compliance with quality and / or food safety requirements.</li> <li>5.2 Processes, practices or conditions that are not consistent with quality standards or food safety program are identified.</li> <li>5.3 Quality variations and / or food safety hazards are rectified or removed within the level of responsibility and in accordance with workplace procedures.</li> <li>5.4 Quality variations and / or food safety outside the scope of individual responsibility are reported to appropriate personnel according to workplace reporting requirements.</li> </ul>	
Range of Variables		
Variable	Range (may include but not limited to):	

1. Personal Protective	1.1 Apron 1.2 Protective clothing 1.3 Gloves
Equipment (PPE)	<ul><li>1.3 Gloves</li><li>1.4 Hair net</li><li>1.5 Other PPE as per OSH requirements</li></ul>
2. Clothing and footwear	<ul> <li>2.1 Purpose designed overalls or uniforms</li> <li>2.2 Hair-nets</li> <li>2.3 Beard snoods</li> <li>2.4 Gloves</li> <li>2.5 Overshoes</li> </ul>
3. Food handled and stored	<ul><li>3.1 Raw materials</li><li>3.2 Consumables</li><li>3.3 Part-processed product</li><li>3.4 Finished product</li><li>3.5 Cleaning materials</li></ul>
4. Processes, practices or conditions	<ul> <li>4.1 Methods of receiving and storing food</li> <li>4.2 Food preparation</li> <li>4.3 Cooking</li> <li>4.4 Holding</li> <li>4.5 Cooling</li> <li>4.6 Chilling and reheating</li> <li>4.7 Packaging</li> <li>4.8 Disposal</li> </ul>
5. Food safety	<ul> <li>5.1 Failure to check delivery temperatures of potentially hazardous chilled food</li> <li>5.2 Failure to place temperature-sensitive food in temperature-controlled storage conditions promptly</li> <li>5.3 Failure to wash hands when required</li> <li>5.4 Use of cloths for unsuitable purposes</li> </ul>
Evidence Guide	
·	valid, sufficient, reliable, consistent and recent and meet all requirements
of current version of the Units of	
Critical aspects of competency	<ol> <li>1.1 Observed OSH practices.</li> <li>1.2 Practiced personal hygiene and good grooming standards.</li> <li>1.3 Followed safe food handling and sanitation practices.</li> <li>1.4 Monitored quality of work outcome.</li> <li>1.5 Identified and acted on quality deficits and/or food safety hazards.</li> </ol>
2. Underpinning knowledge	<ul> <li>2.1 Practice personal hygiene.</li> <li>2.2 Rules and regulations to produce quality and safety in food.</li> <li>2.3 Control measures for food safety.</li> <li>2.4 Food safety hazards.</li> <li>2.5 Cleaning, sanitation and waste storage and disposal practices.</li> <li>2.6 Food safety procedures.</li> <li>2.7 Monitor quality of work outcome.</li> <li>2.8 Job roles, responsibilities and compliance.</li> </ul>

3.1 Practicing personal hygiene and good grooming in line with workplace health and safety requirements.
3.2 Identifying food rules and regulations, food grade preservatives and food additives to meet food production safety requirements according to BSTI.
3.3 Controlling the measures for minimizing food contamination for food safety (for example keeping out micro-organisms, maintenance of anaerobic conditions, use of low temperatures, drying, use of chemical preservatives etc.).
<ul> <li>3.4 Performing waste collection, recycling, handling and disposal.</li> <li>3.5 Performing food safety procedures such as: checking delivery temperatures of potentially hazardous chilled food, placing temperature-sensitive food in temperature-controlled storage conditions promptly, washing hands when required, use of cloths for unsuitable purposes.</li> </ul>
<ul><li>3.6 Performing food safety and quality responsibilities and requirements relating to the work area.</li><li>3.7 Responding quickly and to take safety precautions for different hazardous situations.</li></ul>
4.1 Commitment to occupational health and safety.
<ul><li>4.2 Promptness in carrying out activities.</li><li>4.3 Sincere and honest to duties.</li></ul>
<ul><li>4.4 Eagerness to learn.</li><li>4.5 Tidiness and timeliness.</li><li>4.6 Environmental concern.</li></ul>
<ul><li>4.7 Respect to peers and seniors at workplace.</li><li>4.8 Communicate with peers and seniors at workplace.</li></ul>
The following resources must be provided: 5.1 Workplace (actual or simulated)
<ul><li>5.1 Workplace (actual of simulated)</li><li>5.2 Tools, equipment and facilities appropriate to processes or activities</li><li>5.3 Materials relevant to the proposed activity.</li></ul>
Methods of assessment may include but not limited to:
<ul><li>6.1 Written test</li><li>6.2 Demonstration</li><li>6.3 Oral questioning</li><li>6.4 Portfolio.</li></ul>
<ul> <li>7.1 Competency assessment must be done in a training center or in an actual or simulated workplace after completing of module.</li> <li>7.2 Assessment should be done by a suitably qualified/certified assessor.</li> </ul>

Training providers must be accredited by National Skills Development Authority (NSDA), the national quality assurance body or a body with delegated authority for quality assurance to conduct training and assessment against this Units of Competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

<b>Unit Code and Title</b>	SU-AFP-02-L1-V1: Work in the Food Industry
Nominal Hours	20 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to work in the food industry. It specifically includes identifying job roles and responsibilities in the food industries, identifying and observe OSH in the food industries, planning work activities and working with others.
<b>Element of Competency</b>	Performance Criteria (Bold & underlined terms are elaborated in the Range of Variables)
Identify job roles and responsibilities in the food industry	<ul><li>1.1 Job roles and responsibilities in the food industry are identified.</li><li>1.2 Employee relationships within the food industry are identified.</li></ul>
2. Identify and observe OSH in the food industry	<ul><li>2.1 Occupational Health and Safety (OSH) in the food industry is identified and observed.</li><li>2.2 Safe work practices are followed when using equipment in the work environment.</li></ul>
3. Plan work activities	<ul><li>3.1 Common goals, objectives and tasks are identified and clarified with appropriate persons.</li><li>3.2 Individual tasks are determined and agreed on according to workplace environment.</li></ul>
4. Work with others	<ul> <li>4.1 Effective interpersonal skills are applied to interact with others and to contribute to activities and objectives.</li> <li>4.2 Assigned tasks are performed in accordance with job requirements, specifications and workplace environment.</li> <li>4.3 Work requirements are confirmed with colleagues.</li> </ul>
Range of Variables	
Variable	Range (may include but not limited to):
Effective interpersonal skills	<ul> <li>1.1 Basic listening and speaking skills</li> <li>1.2 Use of terminology and jargon</li> <li>1.3 Communicating and receiving feedback</li> <li>1.4 Interpretation of instructions, and basic principles of effective communication</li> </ul>
2. Requirements	2.1 Requirements as directed in verbal modes or written in specification or procedures
Evidence Guide  The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet all requirements of current version of the Units of Competency.	

Critical aspects of competency	<ul><li>1.1 Identified job roles and responsibilities in the food industry.</li><li>1.2 Identified and observe OSH in the food industry.</li><li>1.3 Planed work activities.</li><li>1.4 Worked with others.</li></ul>
2. Underpinning knowledge	<ul> <li>2.1 Positive attitudes for work others.</li> <li>2.2 Identify own task.</li> <li>2.3 Food sector in Bangladesh.</li> <li>2.4 Job opportunity.</li> <li>2.5 Salary structure for food worker.</li> <li>2.6 Written and oral language communication.</li> <li>2.7 Occupational Health and Safety (OSH).</li> </ul>
3. Underpinning skills	<ul><li>3.1 Identifying task</li><li>3.2 Communicating with co workers</li><li>3.3 Communicating with supervisor</li><li>3.4 Writing report</li></ul>
4. Required attitudes	<ul> <li>4.1 Commitment to occupational health and safety.</li> <li>4.2 Sincere and honest to duties.</li> <li>4.3 Promptness in carrying out activities.</li> <li>4.4 Eagerness to learn.</li> <li>4.5 Tidiness and timeliness.</li> <li>4.6 Environmental concerns.</li> <li>4.7 Respect of peers and seniors at workplace.</li> <li>4.8 Communicate with peers and seniors at workplace.</li> </ul>
5. Resource implications	<ul> <li>The following resources must be provided:</li> <li>5.1 Workplace (actual or simulated).</li> <li>5.2 Tools, equipment and facilities appropriate to the process or activity.</li> <li>5.3 Materials relevant to the proposed activity.</li> </ul>
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning 6.4 Portfolio.
7. Context of assessment	<ul> <li>7.1 Competency assessment must be done in a training institute or in an actual or simulated after completion of the training module.</li> <li>7.2 Assessment should be done by a suitable qualified/certified assessor.</li> </ul>

Training providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body or a body with delegated authority for quality assurance to conduct training and assessment against this units of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

## **Occupation Specific Units of Competencies**

<b>Unit Code and Title</b>	OU-AFP-FP-01-L2-V1: Interpret Food Processing, Raw Materials and Ingredients
Nominal Hours	60 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to interpret food processing, raw materials and ingredients. It specifically includes interpreting food processing, identifying raw materials and ingredients and checking physical condition of raw materials and ingredients.
<b>Elements of Competency</b>	Performance criteria (Bold & underlined terms are elaborated in the Range of Variables)
1. Interpret food processing	<ul> <li>1.1 Food Processing is defined.</li> <li>1.2 <u>Steps of Food Processing</u> are identified as per industry requirement.</li> <li>1.3 <u>Food Items</u> are selected based on steps of food processing.</li> </ul>
2. Identify raw material and ingredients	<ul> <li>2.1 OSH is followed</li> <li>2.2 Personal Protective Equipment (PPE) is worn.</li> <li>2.3 Raw materials and ingredients are identified as per job requirement.</li> <li>2.4 Raw materials and ingredients are kept in allocated place.</li> </ul>
3. Check physical condition of raw material and ingredients	<ul> <li>3.1 Physical conditions are identified as per laboratory standard.</li> <li>3.2 Behavior of physical properties is interpreted.</li> <li>3.3 Foreign particles or matters are identified and reported to respective personnel.</li> </ul>
Range of Variables	
Variable	Range (may include but not limited to):
1. Steps of Food Processing	<ul> <li>1.1 Materials Collection</li> <li>1.2 Preparation (Washing, Sieving, Peeling, Grinding)</li> <li>1.3 Mixing /Blending</li> <li>1.4 Heat Processing (Heating, Drying, Cooling, Pasteurization, Sterilization, Ultra Heat Treatment Freezing, Baking)</li> <li>1.5 Filling / Packaging and Cartooning</li> <li>1.6 Storing</li> </ul>

	2.1 Process Food (Jam, Jelly, Pickle, Sauce, Chatney, Fruits Bar, Dry Food)
2. Food Items	2.2 Bakery
	2.3 Beverage
	2.4 Confectionary
	2.5 Dairy & Ice Cream
	2.6 Spices
	2.7 Snacks Food
	3.1 Apron
	3.2 Safety shoe
	3.3 Mask
3. Personal Protective	3.4 Hand Gloves
Equipment (PPE)	3.5 Ear plug
	3.6 Goggles
	3.7 Hair net (Beard net if required)
	4.1 Fruits 4.2 Flour
	4.3 Fruit pulp
	4.4 Sugar
	4.5 Milk
	4.6 Whole Spice
	4.7 Nut
	4.8 Puff rice 4.9 Pea flour
	4.10 Treated Water
	4.11 Salt
	4.12 Stabilizer and Thickening Agent
4. Raw materials and	4.12.1 Xanthan gum
Ingredients	4.12.2 Agar-agar
	4.12.3 Guar gum
	4.12.4 Carrageenan
	4.12.5 Carboxyl Methyl Cellulose (CMC)
	4.12.6 Pectin
	4.13 Sweetening agents
	4.13.1 Sucrose
	4.13.2 Invert Sugar
	4.13.3 Corn Syrup
	4.13.4 Honey
	4.13.5 Dextrose
	1

	4.14 Emulsifying agents
	4.15 Leavening Agent
	4.16 Shortening Agent
	4.17 Preservatives
	4.17.1 Sodium Benzoate,
	4.17.2 Potassium Metabisulphite (KMS)
	4.17.3 Potassium Sorbet
	4.17.4 Calcium propionate
	4.18 Acidity regulator
	4.18.1 Citric Acid
	4.18.2 Ascorbic Acid
	4.18.3 Acetic Acid
	4.18.4 Sodium Acid Pyrophosphate (SAPP)
	4.19 Food grade color
	4.20 Food grade flavor
	5.1 Taste
	5.2 Color
5. Behavior of physical	5.3 Appearance
properties	5.4 Texture
	5.5 Flavor
	5.6 Odor
	<ul><li>6.1 Black particles</li><li>6.2 Hair</li></ul>
	6.3 Metal
6. Foreign particles	6.4 Stone
	6.5 Sand
	6.6 Glass
	6.7 Plastic

#### **Evidence Guide**

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet all requirements of current version of the Units of Competency.

Critical aspects of competency	<ul><li>1.1 Interpreted food processing.</li><li>1.2 Identified raw materials and ingredients.</li><li>1.3 Checked physical condition of Raw Material and Ingredients.</li></ul>
2. Underpinning knowledge	<ul> <li>2.1 Food processing.</li> <li>2.2 Types of food processing items.</li> <li>2.3 Types of food items.</li> <li>2.4 Occupational Safety and Health (OSH) procedures.</li> <li>2.5 Behavior of physical properties.</li> </ul>

3. Underpinning skills	<ul><li>3.1 Identifying steps of food processing.</li><li>3.2 Identifying raw materials and ingredients.</li><li>3.3 Interpreting behavior of physical properties.</li><li>3.4 Identifying and reporting foreign particles or matter.</li></ul>
4. Required attitudes	<ul> <li>4.1 Commitment to occupational health and safety.</li> <li>4.2 Promptness in carrying out activities.</li> <li>4.3 Sincere and honest to duties.</li> <li>4.4 Eagerness to learn.</li> <li>4.5 Tidiness and timeliness.</li> <li>4.6 Environmental concerns.</li> <li>4.7 Respect for rights of peers and seniors at workplace.</li> <li>4.8 Communication with peers and seniors at workplace.</li> </ul>
5. Resource implications	<ul> <li>The following resources must be provided:</li> <li>5.1 Workplace (actual or simulated).</li> <li>5.2 Tools, equipment and facilities appropriate to the process or activity.</li> <li>5.3 Materials relevant to the proposed activity.</li> </ul>
6. Method of assessment	Methods of assessment may include but not limited to: 6.1 Written Test. 6.2 Demonstration. 6.3 Oral Questioning. 6.4 Portfolio.
7. Context of assessment	<ul><li>7.1 Competency assessment must be done in a training center or in an actual or simulated workplace after completing of the training module.</li><li>7.2 Assessment should be done by a suitably qualified/certified assessor.</li></ul>

Training providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this Units of Competency for credit towards the award of any national qualification. Accredited providers assessing against this Units of Competency must meet the quality assurance requirements set by NSDA.

OU-AFP-FP-02-L2-V1: Perform Process in a Production System
150 Hours
This unit covers the knowledge, skills and attitudes required to perform process in a production system. It specifically includes preparing for work, performing pre-operational activities, operating food processing equipment and machinery and cleaning and maintaining machines and service area.
Performance Criteria (Bold & underlined terms are elaborated in the Range of Variables)
1.1 Personal Protective Equipment (PPE) is worn.
<ol> <li>1.2 Occupational Safety and Health (OSH) is followed and Workplace is prepared as per job requirement</li> <li>1.3 Raw materials and other ingredients are collected as per recipe.</li> <li>1.4 Raw materials and other ingredients are measured as per recipe.</li> <li>1.5 Tools and utensil are selected and collected as per job requirements.</li> </ol>
<ul> <li>2.1 Pre-start check is carried out as per SOP.</li> <li>2.2 Food processing equipment and machineries are setup and adjusted as per machine manual.</li> <li>2.3 Machine performance is checked and adjusted as per machine manual.</li> <li>2.4</li> </ul>
<ul> <li>3.1 Machinery is started as per machine manual.</li> <li>3.2 Food processing equipment and machines are operated as per SOP.</li> <li>3.3 Food products are produced according to steps of food processing as per industry requirement.</li> <li>3.4 Finished products' organoleptic taste parameters are checked as per standards.</li> <li>3.5 Product deviation is checked and reported to concern department as per industry standard.</li> <li>3.6 Machine log book is maintained as per industry requirements.</li> </ul>

4. Clean and maintain machines and service area	<ul> <li>4.1 Machines and production area are cleaned as per Standard Operating Procedure (SOP).</li> <li>4.2 Maintenance requirements are identified and reported to the relevant personnel.</li> <li>4.3 Tools and utensil are cleaned and kept in allocated place as per industry standard.</li> </ul>	
Range of Variables		
Variable	Range (may include but not limited to)	
1. Tools and Utensils	1.1 Bowl 1.2 Spoon 1.3 Knife 1.4 Tray 1.5 Trolley 1.6 Scoop 1.7 Shovel 1.8 Bucket 1.9 Scissor	
2. Equipment and machineries	2.1 Weight Machine 2.2 Sieve 2.3 Peeler 2.4 Grinder 2.5 Dryer 2.6 Cooler 2.7 Dissolving machine 2.8 Mixing machine (blending machine) 2.9 Moulding M/C 2.10 Metal Detector 2.11 Freezer 2.12 Homogenizer 2.13 Pasteurizer 2.14 Sterilizer 2.15 Blender M/C 2.16 Chilling machine 2.17 Filling 2.18 Capping 2.19 Sealing 2.20 Oven 2.21 Wrapper	
3. Organoleptic taste parameters	3.1 Taste 3.2 Odor 3.3 Flavor 3.4 Appearance	

4. Product deviation	4.1 Bad Smell
	4.2 Burn
	4.3 Uneven Shape
	4.4 Improper Bake
	4.5 Foreign Particle
	4.6 Texture
	T.O Texture
	ic, valid, sufficient, reliable, consistent, and recent and meet all n of the Units of Competency.
	1.1 Prepared for work.
1. Critical aspects of	1.2 Performed pre-operation activities.
competency	1.3 Operated food processing equipment and machinery.
	1.4 Produced food products as per instruction.
	1.5 Cleaned and maintained machines and service area.
	2.1 OSH policies.
	2.2 Measurements of raw materials and ingredients.
	2.3 Types of tools and utensils.
2. Underpinning knowledge	2.4 Machine performance checking procedures.
	2.5 Food production process.
	2.6 Organoleptic parameters checking procedures.
	2.7 Machine log book maintenance.
	2.8 Cleaning Standard Operating Procedures.
	3.1 Collecting and measuring raw materials and ingredients.
	3.2 Carrying out pre-start checking.
3. Underpinning skills	3.3 Checking and adjusting machine performance.
3. Chacipinning skins	3.4 Operating food processing equipment and machines.
	<ul><li>3.5 Producing food products as per instruction.</li><li>3.6 Checking and reporting product deviation.</li></ul>
	3.7 Cleaning machine and production area.
4. Required attitudes	o.r cleaning machine and production area.
	4.1 Commitment to occupational health and safety.
	4.2 Promptness in carrying out activities.
	4.3 Sincere and honest to duties.
	4.4 Environmental concerns.
	<ul><li>4.5 Eagerness to learn.</li><li>4.6 Tidiness and timeliness.</li></ul>
	4.7 Respect for rights of peers and seniors in workplace.
	A O C

4.8 Communication with peers and seniors in workplace.

5. Resource implications	<ul> <li>The following resources should be provided:</li> <li>5.1 Workplace (actual or simulated).</li> <li>5.2 Tools, equipment and facilities appropriate to the process or activity.</li> <li>5.3 Materials relevant to the proposed activities.</li> </ul>
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written Test. 6.2 Demonstration. 6.3 Oral questioning. 6.4 Portfolio.
7. Context for assessment	<ul><li>7.1 Competency assessment must be done in a training center or in an actual or simulated workplace after completion of the training module.</li><li>7.2 Assessment should be done by a suitably qualified/certified assessor.</li></ul>

Training providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this Units of Competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

Unit Code and Title	OU-AFP-FP-02-L2-V1 Perform Basic Food Packaging
Nominal Hours	40 Hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to perform basic food packaging. It specifically includes preparing for work, carrying out basic packaging and cleaning workplace.
<b>Elements of Competency</b>	Performance Criteria (Bold & underlined terms are elaborated in the Range of Variables)
1. Prepare for work	<ul> <li>1.1 Occupational Safety and Health (OSH) is followed and Personal Protective Equipment (PPE) is worn.</li> <li>1.2 Packaging materials are identified as per job requirement.</li> <li>1.3 Packaging materials are collected as per job requirement.</li> </ul>
2. Carryout basic packaging	<ul> <li>2.1 Finished Product is received from the production line.</li> <li>2.2 Product is feed into the packing machine as per industry standard.</li> <li>2.3 <u>Defective finished products</u> are identified and segregated.</li> <li>2.4 Cartooning is performed as per job requirements.</li> <li>2.5 Palletization is performed as per industry standard.</li> <li>2.6 Packaged product is delivered to store as per industry standard.</li> <li>2.7 Storage procedures of packaging materials are followed as per industry standard.</li> </ul>
3. Clean workplace	<ul><li>3.1 Waste materials are disposed of according to workplace standard.</li><li>3.2 Workplace is cleaned as per industry standard.</li></ul>
Range of variables	
Variable	Range (may include but not limited to):
1. Packaging materials	<ul> <li>1.1 Poly Flim</li> <li>1.2 Foil</li> <li>1.3 Label</li> <li>1.4 Laminate</li> <li>1.5 Bottle</li> <li>1.6 Cap</li> <li>1.7 Shrink film</li> <li>1.8 Carton</li> </ul>

	1.9 Gum tape		
	1.10 Corrugated paper		
	1.11 Wax paper, oil paper		
2. Defective finished products	2.1 Leakage		
	2.2 Crack		
	2.3 Miss-coding		
	2.4 Labeling defect		
	2.5 Carton defect		

#### **Evidence Guide**

Evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet all requirements of current version of Units of Competency.

requirements of eartent version of emits of competency.					
Critical aspects of competency	<ul><li>1.1 Prepared for work.</li><li>1.2 Carried out basic packaging.</li><li>1.3 Cleaned workplace.</li></ul>				
2. Underpinning knowledge	<ul> <li>2.1 OSH procedures.</li> <li>2.2 Types of packaging materials.</li> <li>2.3 Types of defects.</li> <li>2.4 Storage procedures of packaging materials.</li> <li>2.5 Finish goods packaging products.</li> <li>2.6 Quality standards.</li> <li>2.7 Workplace cleaning procedures.</li> </ul>				
3. Underpinning skills	<ul> <li>3.1 Identifying and collecting packaging materials.</li> <li>3.2 Feeding products into the packaging machine.</li> <li>3.3 Identifying and segregating defective products.</li> <li>3.4 Performing Cartooning and palletization.</li> <li>3.5 Delivering packaging product to store.</li> <li>3.6 Disposing waste materials as per industry standards.</li> </ul>				
4. Required attitudes	<ul> <li>4.1 Commitment to occupational health and safety.</li> <li>4.2 Promptness in carrying out activities.</li> <li>4.3 Sincere and honest to duties.</li> <li>4.4 Environmental concerns.</li> <li>4.5 Eagerness to learn.</li> <li>4.6 Tidiness and timeliness.</li> <li>4.7 Respect for rights of peers and seniors in workplace.</li> <li>4.8 Communication with peers and seniors in workplace.</li> </ul>				
5. Resource implications	<ul><li>The following resources must be provided:</li><li>5.1 Workplace (actual or simulated).</li><li>5.2 Tools, equipment and facilities appropriate to the process or activity.</li><li>5.3 Materials relevant to the proposed activity.</li></ul>				

6. Method of assessment	Methods of assessment may include but not limited to: 6.1 Written Test. 6.2 Demonstration. 6.3 Oral questioning. 6.4 Portfolio.				
7. Context of assessment	<ul><li>7.1 Competency assessment must be done in a training center or in an actual or simulated workplace after completion of the training module.</li><li>7.2 Assessment should be done by a suitably qualified/certified assessor.</li></ul>				

Training providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this Units of Competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

## **Validation of Competency Standard**

The Competency Standard (CS) for National Skills Certificate in **Food Processing, Level-2** for **Agro-Food Processing Sector** is validated by NSDA on 25<sup>th</sup> September, 2023.

#### **List of Members of SCVC**

SL No	Name and Address	Position in the Committee
1.	Mr. Shafiqur Rahman Bhuyan Rahat Tower, 14 Bipanan, Banglamotor, Dhaka. Cell: 01711228747 E-mail: chairman.ceafs@gmail.com	Chairperson
2.	Mr. Shorab Hossain, Additional General Manager (Food Production), SMC Tower, Banani, Dhaka. Cell:01952534822 E-mail: sohrab.hossain@smc-bd.org	Member
3.	Kalyan Brata Das  Quality Assurance Officer  Bangladesh Technical Education Board, Dhaka  Cell: 01711507215  E-mail: kb.das2013@gmail.com	Member
4.	Mr. Taslim Uddin, Instructor, Food Technology, Dhaka Polytechnic Institute, Tejgaon I/A, Dhaka-1208. Cell: 01714304348 E-mail: taslim.polytechnic@gmail.com	Member
5.	Mr. Harun-or-Rashid Akand, CEO, Bangladesh Dairy & Icecream, Savar, Dhaka Cell: 01716137951 E-mail: harun.akand@gmail.com	Member
6.	Mr. Abu Zinnatul Islam, Manager (QC), Rani Food Industry, Gazipur. Cell: 01985554123 E-mail: zinnatul.ranifood@gmail.com	Member
7.	Mr. Md. Ferdous Rahman, Deputy Manager, QC (FSMS), Akij Food & Beverage Limited, Manikgonj. Cell: 01715898658 E-mail: ferdous1@akijfood.com	Member
8.	A. M. Zahirul Islam Specialist-4, NSDA, Dhaka. Mobile: +88 01740920809, E-mail: zahir.nsda@gmail.com	Member

#### **Workshop Minutes**

Government of the People's Republic of Bangladesh Prime Minister's Office

National Skills Development Authority, Biniyog Bhaban, Level: 10-11, E-6 / B, Agargaon, Sher-E-Bangla Nagar Dhaka-1207, Bangladesh. Email: ec@nsda.gov.bd, Website: www.nsda.gov.bd.

Minutes of the Competency Standard Validation Workshop on **Food Processing, Level-2** Occupation.

Chairman	: Mr. Shafiqur Rahman Bhuyan, Chairman, Agro Food Processing ISC
Date	: 25, September, 2023
Time	: 9:00 am - 4:00 pm
Place	: ISC Conference Room, NSDA, Biniyog Bhaban, Agargaon, Dhaka-1207

The Chairman welcomed all those present and started the work of the workshop. During the day-long workshop, the competency standard of **Food Processing**, **Level-2** was reviewed and finalized in detail. The activities related to the finalized standard through validation workshop are presented below:

Serial No.	Content of validation	W	ther it vas opriate No	What actions have been taken if not appropriate?
1	Name and level of occupation		No	The name of the occupation is changed from Food Processing to Food Processing, Level-2
2	Nominal Hour		No	Nominal Hour is decided as 360 hours
3	Unit of Competency		No	Code no of all unit of Competency is changes as per ISC requirement
4	Element		No	The element has been changed as per necessity and some elements are rearrange
5	Performance Criteria		No	Relevant performance criteria were updated as per necessity of the current technology and job requirements.
3	Variables		No	Variables are also changed and added new tools and machinery as per latest technology.
3	Critical Aspect of Competence		No	Appropriate changes have been made in the critical aspect of competency as per the change of element and performance criteria.
3	Underpinning knowledge		No	Necessary addition, changings and refinements have been made accordingly.
9	Underpinning Skills		No	Necessary added, changes and refinements have been made accordingly.
10	Attitude	Yes		
11	Resources	Yes		
12	Assessment methods	Yes		

			■ The nominal hours of the units of competencies have been readjusted for
13	Others		content consideration.
			<ul> <li>Overall, the occupation has been included in</li> </ul>
			Level-3 according to BNQF 1-6.

Through the above activities, the Competency Standard has been finalized and validated as  ${f Food\ Processing, Level-2}$ 

Chairman
Standard and Curriculum Validation Committee,
CEO, Footwear & Lather Goods ISC