

QUALIFICATIONS PACK - OCCUPATIONAL STANDARDS FOR AGRICULTURE

What are Occupational Standards(OS)?

- OS describe what individuals need to do, know and understand in order to carry out a particular job role or function
- OS are performance standards that individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding

Contact Us:

Agriculture Skill Council of India
K 59, South City I,
Gurgaon – 122 018,
Haryana

E-mail:
ceo@asci-india.com



Contents

1. Introduction and Contact	1
2. Qualification Pack	2
3. OS Units	2
4. Glossary of Key Terms / Nomenclature	3

Introduction

Qualifications Pack – Green House Fitter

SECTOR: AGRICULTURE

SUB-SECTOR: Precision Farming

OCCUPATION: Infrastructure Creation

REFERENCE ID: AGR/ Q 0302

Green House Installer: Plays a critical role in the installation and function of a Green House which require specific skills and techniques for the successful functioning of the Green House.

Brief Job Description: The installer is responsible for Installation of Greenhouse Structure as per the structural Layout & bill of materials prepared by supplier which will meet up the crucial requirements for crops to be grown under.

Personal Attributes: This job requires the individual to work specifically as per the plan making certain decisions pertaining to his/her area of work so as to stick to the lay out and the material that are envisioned for the erection of the green house. Requires clarity, skill to basic arithmetic and algebraic principles. The individual should be result oriented and is responsible for his own working and learning. The individual should also be able to demonstrate skills of using various tools and making decision for instant problem solving.

Job Details	Qualifications Pack Code	AGR/ Q 0302		
	Job Role	Green House Fitter Job role is applicable for national scenarios		
	Credits(NVEQF/NVQF/NSQF) [OPTIONAL]		Version number	1.0
	Sector	Agriculture	Drafted on	12/06/13
	Sub-sector	Precision Farming	Last reviewed on	08/08/13
	Occupation	Infrastructure Creation	Next review date	10/02/14

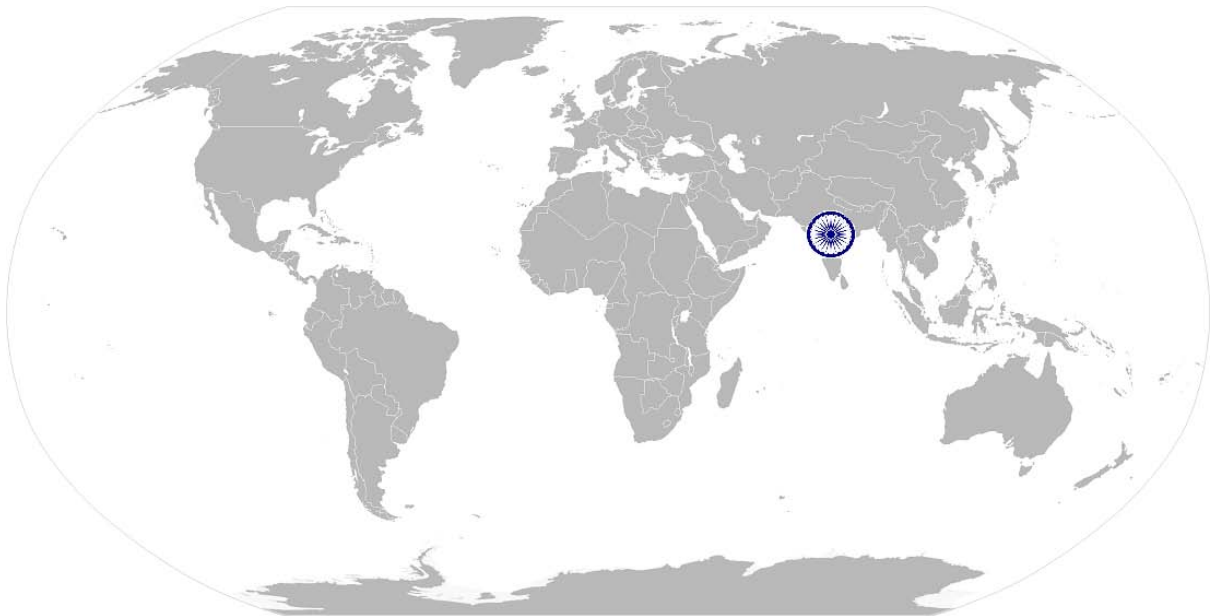
Job Role	Green House Fitter
Role Description	The installer is responsible for Installation of Greenhouse Structure as per the structural Layout & bill of materials prepared by supplier.
NVEQF/NVQF level	4
Minimum Educational Qualifications*	10 th Standard Appeared or Pass
Maximum Educational Qualifications*	Not Applicable
Training (Suggested but not mandatory)	Not Applicable
Experience	One Year of on job experience under supervision / apprenticeship
Applicable National Occupational Standards (NOS)	Compulsory: 1. AGR / N 0034 – Design and Layout of Green House 2. AGR / N 0035 – Installation of Green House Structures 3. AGR / N 0036 – Maintenance of Green House
Performance Criteria	As described in the OS unit

Keywords /Terms	Description
Sector	Sector is a conglomeration of different business operations having similar businesses and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components
Occupation	Occupation is a set of job roles, which perform similar/related set of functions in an industry.
Function	Function is an activity necessary for achieving the key purpose of the sector, occupation, or area of work, which can be carried out by a person or a group of persons. Functions are identified through functional analysis and form the basis of OS.
Job Role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
OS	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the knowledge and understanding they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task.
NOS	NOS are Occupational Standards which apply uniquely in the Indian context.
Qualifications Pack Code	Qualifications Pack Code is a unique reference code that identifies a qualifications pack.
Qualifications Pack	Qualifications Pack comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A Qualifications Pack is assigned a unique qualification pack code.
Unit Code	Unit Code is a unique identifier for an Occupational Standard, which is denoted by an 'N'.
Unit Title	Unit Title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Knowledge and Understanding	Knowledge and Understanding are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
Organizational Context	Organizational Context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical Knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills or Generic Skills	Core Skills or Generic Skills are a group of skills that are key to learning and working in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.

Acronyms

Keywords /Terms	Description
OS	Occupation Standard
NOS	National Occupation Standard
NVEQF	National Vocational Education and Qualification Framework
Agr	Agriculture

National Occupational Standard



Overview

This unit is about a Technician responsible for Design and Layout of green house.

Design and Layout of the Green House

Unit Code	AGR/ N 0034
Unit Title (Task)	Design and Layout of the Green House
Description	This OS unit is about a Installer who is responsible for Designing (in consultation with his seniors) and Laying of the Green House as per the structural Layout & bill of materials prepared by supplier
Scope	This unit /task covers the following: <ul style="list-style-type: none"> • Designing the Green House • Laying the Green House
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria \ Skill Set
Designing the Green House	To be competent, the user / individual on the job must be able to: <ul style="list-style-type: none"> PC1. Aid in the design of the Green House in consultation with the seniors / managers of the company PC2. Do Land survey, Levelling, measuring the angles PC3. Assess structural strength which depends upon foundation. PC4. Select and purchase materials as per standards
Laying the Green House	<ul style="list-style-type: none"> PC5. Survey the land, leveling and measure angles as part of laying out the green house structures PC6. Based on nature / type of soil, decide on the foundation specifications PC7. Make structural drawing / lay out plan for installation of various structures of the green house
Knowledge and Understanding (K)	
A. Organizational Context	The individual on the job needs to know and understand: <ul style="list-style-type: none"> KA1. Effective working relationships and how to work effectively with co workers, customers and seniors KA2. Organizational / farmers / customer's needs and time management
B. Technical Knowledge	The individual on the job needs to know and understand: <ul style="list-style-type: none"> KB1. Various types of green house, their components and functions KB2. Basics of the system design KB3. Standard Procedures to install a green house KB4. Irrigation Products KB5. Operation and maintenance of various equipment for green house installation KB6. Basics of crop cultivation / package of practices
Skills (S) [Optional]	
A. Core Skills/ Generic Skills	Writing Skills
	The individual on the job needs to know and understand how to: <ul style="list-style-type: none"> SA1. Mention the data which are required for record keeping purpose and maintain the process identification sheet SA2. Report problems to the appropriate personnel in a timely manner
	Reading Skills

AGR/ N 0034

Design and Layout of the Green House

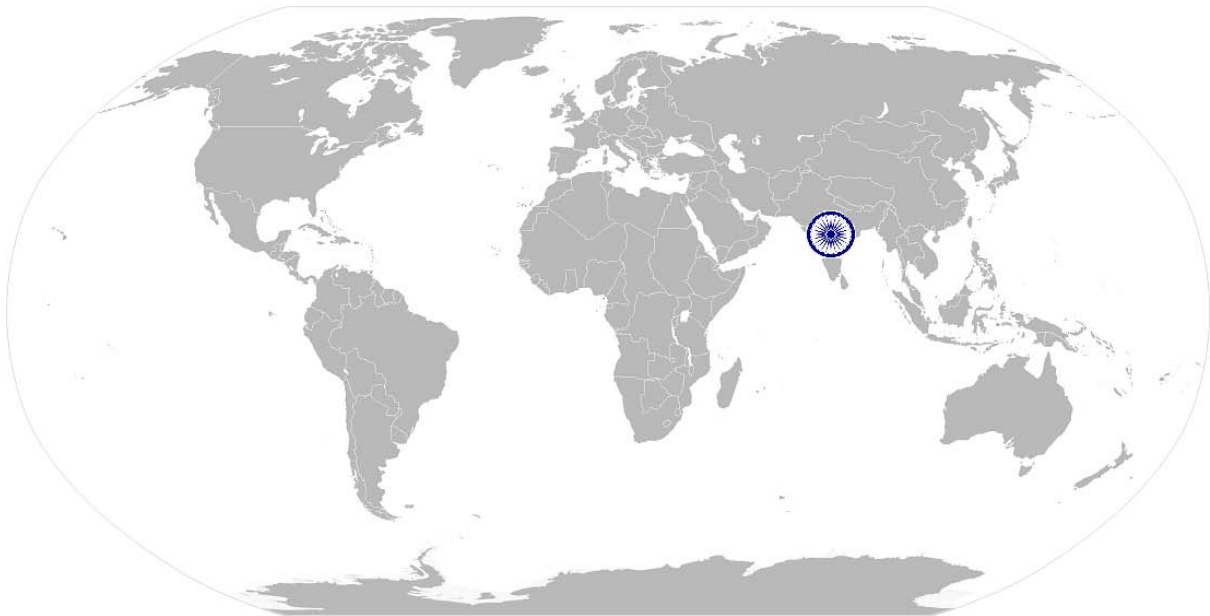
	<p>The individual on the job needs to know and understand how to:</p> <p>SA3. Get updated about the latest technologies used in precision farming by reading the newspaper and magazines</p> <p>SA4. Keep abreast with the latest knowledge by reading brochures, pamphlets, and product information sheets</p>
	Oral Communication (Listening and Speaking skills)
	<p>The individual on the job needs to know and understand how to:</p> <p>SA5. Maintain effective working relationships</p> <p>SA6. Communicate clearly and effectively with others like customers, co workers, company representatives, seniors and various other stakeholders</p> <p>SA7. Understand information and grasp its meaning</p> <p>SA8. Seek advice from seniors</p>
B. Professional Skills	Decision Making
	<p>The individual on the job needs to know and understand how to:</p> <p>SB1. Make decisions pertaining to the concerned area of work</p> <p>SB2. Identify problems that may arise in carrying out tasks and take preventative action following workplace procedures</p>
	Plan and Organize
	<p>The individual on the job needs to know and understand how to:</p> <p>SB3. Plan and design a poly house</p>
	Problem Solving
	<p>The individual on the job needs to know and understand how to:</p> <p>SB4. Think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s)</p> <p>SB5. Deal with others workers lacking the technical knowledge to solve the problem on their own</p> <p>SB6. Identify creative and innovative quick solutions to resolve delays</p>
	Analytical Thinking
	<p>The individual on the job needs to know and understand how to:</p> <p>SB7. Monitor and maintain the condition of tools and equipment for set up, maintaining and running the poly house</p> <p>SB8. Monitor the environment inside the poly house</p> <p>SB9. Apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action</p>

NOS Version Control

NOS Code	AGR / N 0034		
Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	TBD	Version number	1.0
Industry	Agriculture	Drafted on	12/06/13
Industry Sub-sector	Precision Farming	Last reviewed on	08/08/13
		Next review date	10/02/14



National Occupational Standard



Overview

This unit is about a Technician responsible for installation of green house structures.

Installation of the Green House Structures

Unit Code	AGR/ N 0035
Unit Title (Task)	Installation of Green house Structures
Description	This OS unit is about a Installer who is responsible for Installation of Greenhouse Structures as per the structural Layout & bill of materials prepared by supplier
Scope	This unit/task covers the following: <ul style="list-style-type: none"> Erection of Green House Structures Covering with nets and sheets Checking the first time leakages through gutters
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria \ Skill Set
Erection Of Green House Structures	To be competent, the user / individual on the job must be able to: <ul style="list-style-type: none"> PC1. Erect various type of profiles provided in the layout of the Green House - Circular, C- profile, thickness, height, length and width and class PC2. Fit various parts of the structure(s) PC3. Join various gutters at locations where leak-proof joint is important PC4. Joint vents at various recommended / specified angles
Covering With Nets And Sheets	<ul style="list-style-type: none"> PC5. Install Insect nets (on the sides of the green house) with the use of steel or plastic profiles without damage and without wrinkles PC6. Install shade nets while checking the spreading and collecting PC7. Covering up the structure with the film without damage and without wrinkles. PC8. Make judgements about climatic conditions like wind speed, temperature etc. while erection and covering with sheets.
Checking The First Time Leakages Through Gutters	<ul style="list-style-type: none"> PC9. Check the gutters while pouring water initially and cross checking with rainy season.
Knowledge and Understanding (K)	
A. Organizational Context	The individual on the job needs to know and understand: <ul style="list-style-type: none"> KA1. Effective working relationships and how to work effectively with co workers, customers and seniors KA2. Organizational / farmers / customer's needs and time management
B. Technical Knowledge	The individual on the job needs to know and understand: <ul style="list-style-type: none"> KB1. Various types of green house, their components and functions KB2. Basics of the system design KB3. Standard Procedures to install a green house KB4. Irrigation Products KB5. Operation and maintenance of various equipment for green house installation KB6. Basics of crop cultivation / package of practices KB7. Familiarity with different types of nut bolts/ joiners with different sizes along with angle measurements
Skills (S) [Optional]	
A. Core Skills/	Writing Skills

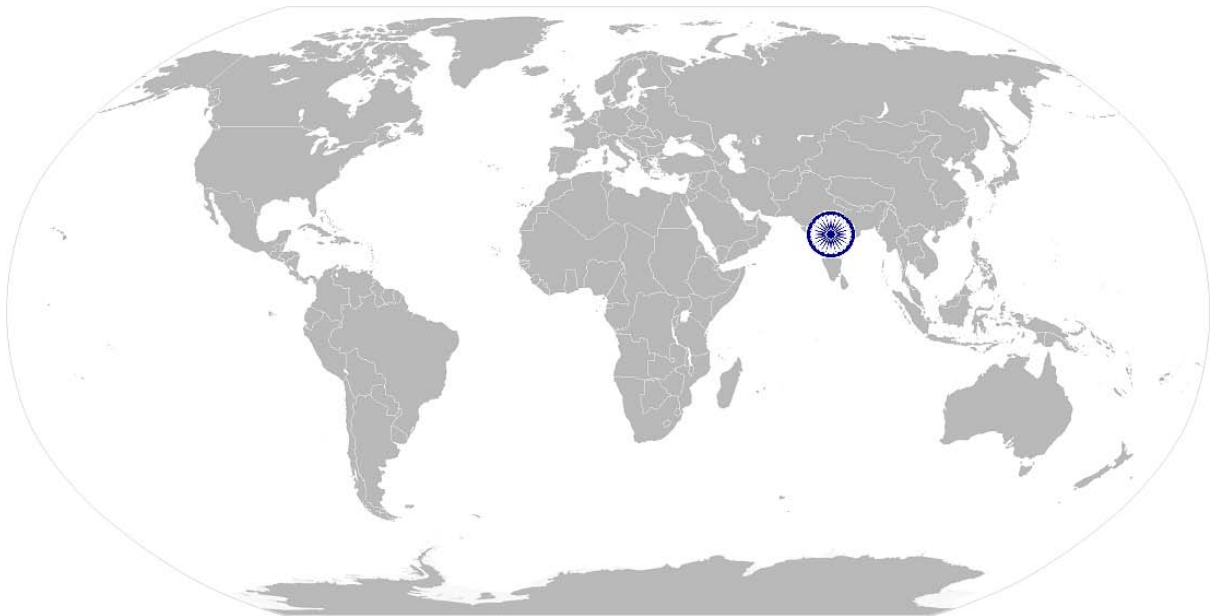
Installation of the Green House Structures

Generic Skills	The individual on the job needs to know and understand how to: SA1. Mention the data which are required for record keeping purpose and maintain the process identification sheet SA2. Report problems to the appropriate personnel in a timely manner
	Reading Skills
	The individual on the job needs to know and understand how to: SA3. Get updated about the latest technologies used in precision farming by reading the newspaper and magazines SA4. Keep abreast with the latest knowledge by reading brochures, pamphlets, and product information sheets
	Oral Communication (Listening and Speaking skills)
	The individual on the job needs to know and understand how to: SA5. Maintain effective working relationships SA6. Communicate clearly and effectively with others like customers, co workers, company representatives, seniors and various other stakeholders SA7. Understand information and grasp its meaning SA8. Seek advice from seniors
B. Professional Skills	Decision Making
	The individual on the job needs to know and understand how to: SB1. Make decisions pertaining to the concerned area of work SB2. Identify problems that may arise in carrying out tasks and take preventative action following workplace procedures
	Plan and Organize
	The individual on the job needs to know and understand how to: SB3. Plan and design a poly house SB4. Use ideas in particular situations
	Problem Solving
	The individual on the job needs to know and understand how to: SB5. Think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s) SB6. Deal with others workers lacking the technical knowledge to solve the problem on their own SB7. Identify creative and innovative quick solutions to resolve delays
	Analytical Thinking
	The individual on the job needs to know and understand how to: SB8. Monitor and maintain the condition of tools and equipment for set up, maintaining and running the poly house SB9. Monitor the environment inside the poly house and maintain manually SB10. Apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action

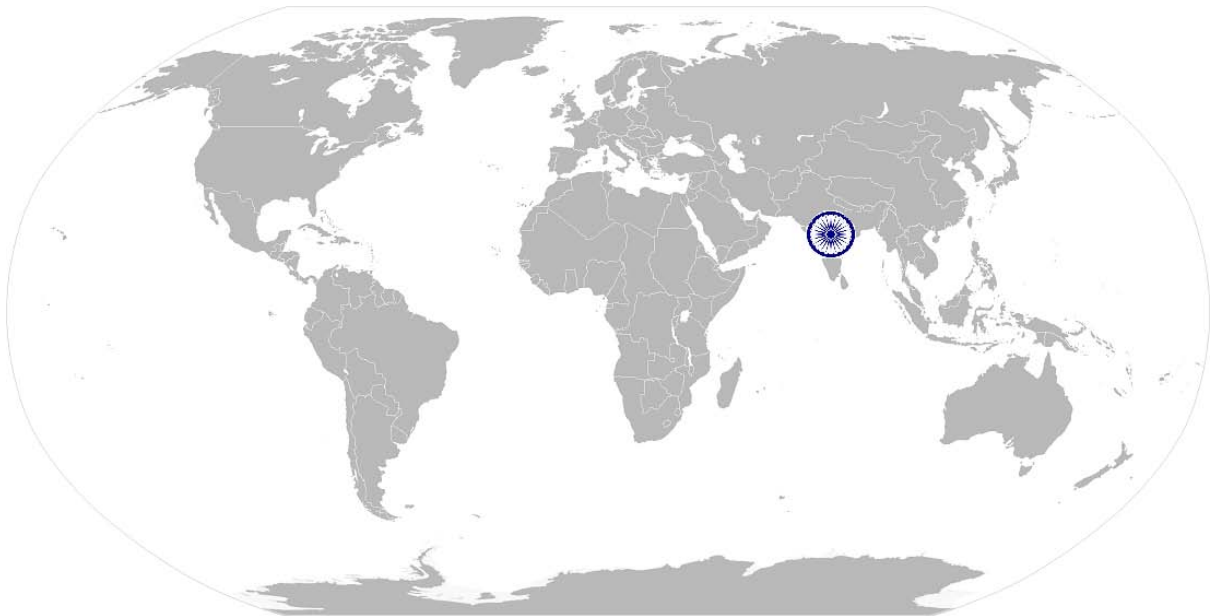
Installation of the Green House Structures

NOS Version Control

NOS Code	AGR / N 0035		
Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	TBD	Version number	1.0
Industry	Agriculture	Drafted on	12/06/13
Industry Sub-sector	Precision Farming	Last reviewed on	08/08/13
		Next review date	10/02/14



National Occupational Standard



Overview

This unit is about a Technician responsible for maintenance of green house.

Maintenance of Green House

Unit Code	AGR/ N 0036
Unit Title (Task)	Maintenance of Green House
Description	This OS unit is about a Installer who is responsible for Green House
Scope	This unit/task covers the following: <ul style="list-style-type: none"> Maintenance of Green House
Performance Criteria(PC) w.r.t. the Scope	
Element	Performance Criteria \ Skill Set
Maintenance of the Green House	To be competent, the user / individual on the job must be able to: <p>PC1. Maintain erected structures</p> <p>PC2. Maintain of operational elements of the green house for periodic checking, tightening, greasing etc.</p>
Knowledge and Understanding (K)	
A. Organizational Context	The individual on the job needs to know and understand: <p>KA1. Effective working relationships and how to work effectively with co workers, customers and seniors</p> <p>KA2. Organizational / farmers / customer's needs and time management</p>
B. Technical Knowledge	The individual on the job needs to know and understand: <p>KB1. Various types of green house, their components and functions</p> <p>KB2. Irrigation Products</p> <p>KB3. Operation and maintenance of various equipment for green house installation</p> <p>KB4. Basics of crop cultivation / package of practices</p>
Skills (S) [Optional]	
A. Core Skills/ Generic Skills	Writing Skills
	The individual on the job needs to know and understand how to: <p>SA1. Mention the data which are required for record keeping purpose and maintain the process identification sheet</p> <p>SA2. Report problems to the appropriate personnel in a timely manner</p>
	Reading Skills
	The individual on the job needs to know and understand how to: <p>SA3. Get updated about the latest technologies used in precision farming by reading the newspaper and magazines</p> <p>SA4. Keep abreast with the latest knowledge by reading brochures, pamphlets, and product information sheets</p>
	Oral Communication (Listening and Speaking skills)
	The individual on the job needs to know and understand how to: <p>SA5. Maintain effective working relationships</p> <p>SA6. Communicate clearly and effectively with others like customers, co workers, company representatives, seniors and various other stakeholders</p> <p>SA7. Understand information and grasp its meaning</p> <p>SA8. Seek advice from seniors</p>

Maintenance of Green House

B. Professional Skills	Decision Making
	The individual on the job needs to know and understand how to: SB1. Make decisions pertaining to the concerned area of work SB2. Identify problems that may arise in carrying out tasks and take preventative action following workplace procedures
	Plan and Organize
	The individual on the job needs to know and understand how to: SB3. Plan and design a poly house
	Problem Solving
	The individual on the job needs to know and understand how to: SB4. Think through the problem, evaluate the possible solution(s) and suggest an optimum /best possible solution(s) SB5. Deal with others workers lacking the technical knowledge to solve the problem on their own SB6. Identify creative and innovative quick solutions to resolve delays
	Analytical Thinking
	The individual on the job needs to know and understand how to: SB7. Monitor and maintain the condition of tools and equipment for set up, maintaining and running the poly house SB8. Monitor the environment inside the poly house and maintain manually SB9. Apply, analyze, and evaluate the information gathered from observation, experience, reasoning, or communication, as a guide to thought and action

NOS Version Control

NOS Code	AGR / N 0036		
Credits(NVEQF/NVQF/NSQF) [OPTIONAL]	TBD	Version number	1.0
Industry	Agriculture	Drafted on	12/06/13
Industry Sub-sector	Precision Farming	Last reviewed on	08/08/13
		Next review date	10/02/14