

Federal Democratic Republic of Ethiopia
OCCUPATIONAL STANDARD



**BAMBOO PROCESSING AND
MARKETING MANAGEMENT**



NTQF Level V



*Ministry of Education
April 2011*

Introduction

Ethiopia has embarked on a process of reforming its TVET-System. Within the policies and strategies of the Ethiopian Government, technology transformation – by using international standards and international best practices as the basis, and, adopting, adapting and verifying them in the Ethiopian context – is a pivotal element. TVET is given an important role with regard to technology transfer. The new paradigm in the outcome-based TVET system is the orientation at the current and anticipated future demand of the economy and the labor market.

The Ethiopia Occupational Standards (EOS) is the core element of the Ethiopian National TVET-Strategy and an important factor within the context of the National TVET-Qualification Framework (NTQF). They are national Ethiopian standards, which define the occupational requirements and expected outcome related to a specific occupation without taking TVET delivery into account.

This document details the mandatory format, sequencing, wording and layout for the Ethiopia Occupational Standard which comprised of Units of Competence.

A Unit of Competence describes a distinct work activity. It is documented in a standard format that comprises:

- Occupational title, NTQF level
- Unit code
- Unit title
- Unit descriptor
- Elements and Performance criteria
- Variables and Range statement
- Evidence guide

Together all the parts of a Unit of Competence guide the assessor in determining whether the candidate is competent.

The ensuing sections of this OS document comprise a description of the respective occupation with all the key components of a Unit of Competence:

- chart with an overview of all Units of Competence for the respective level including the Unit Codes and the Unit Titles
- contents of each Unit of Competence (competence standard)
- occupational map providing the technical and vocational education and training (TVET) providers with information and important requirements to consider when designing training programs for this standards and for the individual, a career path

Page 1 of 51	Ministry of Education Copyright	Bamboo Processing and Marketing Management Ethiopia Occupational Standard	Version 1 April 2011
--------------	------------------------------------	--	-------------------------

UNIT OF COMPETENCE CHART

Occupational Standard: Bamboo Processing and Marketing Management

Occupational Code: IND BPM

NTQF Level V

[IND BPM5 01 0411](#)
Manage Processing
Operations

[IND BPM5 02 0411](#)
Develop Bamboo
Harvesting Plan

[IND BPM5 03 0411](#)
Manage Trial and/or
Research Material

[IND BPM5 04 0411](#)
Develop Marketing
Plan

[IND BPM5 05 0411](#)
Market Products

[IND BPM5 06 0411](#)
Evaluate International
Marketing
Opportunities

[IND BPM5 07 0411](#)
Manage Value Chain

[IND BPM5 08 0411](#)
Manage Quality
Assurance System

[IND BPM5 09 0411](#)
Establish and Maintain
Enterprise OHS
Programs

[IND BPM5 10 0411](#)
Facilitate and
Capitalize on Change
and Innovation

[IND BPM5 11 0411](#)
Establish and Conduct
Business Relationship

[IND BPM5 12 0411](#)
Practice Career
Professionalism

[IND BPM5 13 1012](#)
Develop and Refine
Systems for
Continuous
Improvement in
Operations

Occupational Standard: Bamboo Processing and Marketing Management Level V	
Unit Title	Manage Processing Operations
Unit Code	IND BPM5 01 0411
Unit Descriptor	This unit is concerned with the operation of the business and with implementing the business plan. The strategies involve monitoring, managing and reviewing operational procedures.

Elements	Performance Criteria
1. Develop operational strategies	<p>1.1 Action plan is developed to provide a clear and coherent direction in accordance with the business goals and objectives</p> <p>1.2 Occupational health and safety and environmental issues are identified and strategies implemented to minimize risk factors</p> <p>1.3 Strategies for using existing, new or emerging technologies are developed and implemented where practicable to optimize business performance</p> <p>1.4 Performance measures, operational targets and quality assurance issues are developed to conform with the business plan</p> <p>1.5 Structured approach to innovation, including the utilization of existing, new or emerging technologies, is developed to respond to changing customer requirements</p>
2. Implement operational strategies	<p>2.1 Systems and key performance indicators/targets are implemented to monitor business performance and customer satisfaction</p> <p>2.2 Systems to control stock, expenditure/cost, wastage/shrinkage and risks to health and safety are implemented in accordance with the business plan</p> <p>2.3 Staffing requirements, where applicable, are maintained within budget to maximize productivity</p> <p>2.4 Provision of goods/services is carried out in accordance with established technical, legal and ethical standards</p> <p>2.5 Provision of goods/services meets time, cost and quality specifications in accordance with customer requirements</p> <p>2.6 Quality procedures are applied to address product/service and customer requirements</p>
3. Monitor business performance	<p>3.1 The achievement of operational targets is regularly monitored/reviewed to ensure optimum business performance in accordance with the goals and objectives</p>

	<p>of the business plan</p> <p>3.2 Systems and structures are reviewed, with a view to more effectively supporting business performance</p> <p>3.3 Operating problems are investigated and analyzed to establish causes, and changes implemented as required</p> <p>3.4 Operational policies and procedures are changed to incorporate corrective action taken</p>
4. Maintain networks	<p>4.1 Relevant personal and professional networks identified and maintained to support business operation</p> <p>4.2 Strategies developed for use of networks to assist in promoting the business and for monitoring changing business requirements</p>
5. Review business operations	<p>5.1 Business plan is reviewed and adjusted as required to maintain business viability in accordance with business goals and objectives</p> <p>5.2 Proposed changes are clearly recorded to aid future planning and evaluation</p> <p>5.3 Ongoing research into new business opportunities is undertaken and business goals and objectives adjusted as new business opportunities arise</p>

Variables	Range
Business goals and objectives may include:	<ul style="list-style-type: none"> • goals, objectives, plans, systems and processes • short, medium or long term goals • financial projections • customer needs/marketing projections • proposed size and scale of the business, market focus of the business • lifestyle issues
Occupational Health and Safety and environmental issues must include:	<ul style="list-style-type: none"> • establishment and maintenance of procedures for • identifying risks to health and safety • establishment and maintenance of procedures for • assessing and controlling risks • controls may include instructions to workplace personnel • concerning: site hazards and controls, material safety • data sheets, use of personal protective equipment, • vehicle access, signs and barricades, traffic control, • outside contractors • waste and by-products
Operational strategies/ procedures may be	<ul style="list-style-type: none"> • business premises (e.g. size, location, layout) • purchase (sole or shared ownership) or leasing • premises, plant and equipment may be new or previously owned

determined by:	<ul style="list-style-type: none"> • requirements may be one-off requirements or recurrent requirements (such as equipment maintenance) specific to the nature of the business • use of existing, new and emerging technologies including e-commerce • plant and equipment , including OHS requirements • physical and natural resources • methods/techniques/technology • management and administrative systems and procedures • technology • raw materials
Operational targets may include:	<ul style="list-style-type: none"> • internal targets which may relate to size, quality, quantity and diversity, wages to sales, sales to area/stock levels/stock turnover/average debtor payment periods and levels • external targets which may relate to market share and positioning and may involve exploring new markets, building national or international trade links • targets which may be short, medium or long term • staffing level and skills mix
Technical standards may include:	<ul style="list-style-type: none"> • any current and generally agreed descriptions of what the product/service is, how it should be produced/delivered and the quality, safety, efficiency or other measures to determine the activity is done effectively
Networks may include:	<ul style="list-style-type: none"> • personal contacts • professional associations • business/ industry association contacts • formal/ informal/ individual/ group/ organizational contacts
And may assist in the provisions of information on:	<ul style="list-style-type: none"> • business trends • changes in business environment • client requirements • technical support • financial advice

Evidence Guide			
Critical Aspects of Competence	<ul style="list-style-type: none"> • Ability to develop strategies to successfully manage the operation of the business by interpreting information • Making appropriate adjustments to the business operations as required 		
Underpinning Knowledge and Attitudes	<ul style="list-style-type: none"> • National and Local Government legislative requirements affecting business operation, especially in regard to Occupational Health and Safety and environmental issues, EEO and industrial relations • OHS responsibilities and procedures for managing hazards • technical or specialist skills relevant to the business operation 		
Page 5 of 51	Ministry of Education Copyright	Bamboo Processing and Marketing Management Ethiopia Occupational Standard	Version 1 April 2011

	<ul style="list-style-type: none"> • relevant industry codes of practice • identification of relevant performance measures • quality assurance principles and methods • role of innovation • principles of risk management relevant to the business, including risk assessment • relevant marketing, sales and financial concepts • methods for implementing operation and revenue control systems • systems to manage staff, control stock, expenditure, services and customer service • methods for monitoring performance and implementing improvements • methods for developing and maintaining networks <p>At this level the individual must demonstrate understanding of a broad knowledge base incorporating theoretical concepts, with substantial depth in some areas.</p>
Underpinning Skills	<ul style="list-style-type: none"> • literacy skills to interpret legal requirements, company policies and procedures • communication skills including questioning, clarifying, reporting • numeracy skills for performance information and financial control • technical skills as relevant to the business • ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities
Resources Implication	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> • Workplace or fully equipped assessment location with necessary documentation and resources normally used in the workplace
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written test • Observation/Demonstration
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting</p>

Occupational Standard: Bamboo Processing and Marketing Management Level V	
Unit Title	Develop Bamboo Harvesting Plan
Unit Code	IND BPM5 02 0411
Unit Descriptor	This unit of competence covers the work required to select, develop and implement bamboo harvesting plan. It involves skills to evaluate the strategy in terms of costs and benefits to the enterprise.

Elements	Performance Criteria
1. Assess harvesting requirements	<p>1.1 Harvesting requirements are assessed and clarified according to enterprise objectives.</p> <p>1.2 Resources to support harvesting requirements are identified and arranged.</p> <p>1.3 Harvesting options are selected to optimize results and consistency according to enterprise objectives.</p> <p>1.4 Economic assessments are undertaken to establish the feasibility of the harvesting objectives.</p> <p>1.5 Harvesting program is formulated to meet enterprise objectives, and is sufficiently flexible to accommodate contingencies.</p>
2. Identify harvesting selection criteria	<p>2.1 Enterprise production records are referenced and enterprise production goals are reaffirmed in harvesting program. .</p> <p>2.2 Criteria for selection are determined and recorded in the production plan.</p> <p>3.1 Bamboo farms are accurately assessed against selection criteria.</p> <p>2.3 Selection criteria are determined for the visual and objective methods of selecting bamboo</p> <p>2.4 Bamboo farms/growing areas for harvesting criteria are agreed</p>
3. Design harvesting plan	<p>3.1 Types, available species and topography are analyzed and documented in accordance with plan and site procedures</p> <p>3.2 Gross area of each coupe is calculated and nett area to be harvested devised</p> <p>3.3 Volume estimates are calculated and reported for each coupe</p> <p>3.4 Operational activities including site preparation, environmental considerations and access are designed</p>

	<p>3.5 Harvesting and cartage requirements are analyzed and calculated</p> <p>3.6 Schedule for harvesting is designed, checked and communicated</p>
4. Monitor harvesting program	<p>4.1 Implementation of the harvesting program is monitored for efficiency and effectiveness.</p> <p>4.2 Allocated resources are monitored and controlled within enterprise budgetary constraints.</p> <p>4.3 Safe workplace and environmentally responsible practices are maintained according to OHS and enterprise requirements.</p> <p>4.4 Relevant legislative requirements associated with bamboo harvesting are observed and complied with.</p>
5. Evaluate harvesting program	<p>5.1 Harvesting program processes and outcomes are reviewed and evaluated against enterprise objectives.</p> <p>5.2 Performance of facilities, resources and equipment are evaluated for effectiveness and efficiency.</p> <p>5.3 Effectiveness of selection criteria is evaluated for contribution to achievement of breeding aims.</p> <p>5.4 Relevant information is documented for continual assessment to inform future practice.</p>

Variables	Range
Harvesting requirements	May include an assessment of enterprise production records to identify property potentials.
Resources	May include: <ul style="list-style-type: none"> • human resources, • facilities and equipment including recording systems, personal protective equipment, • monitoring technology harvesting • machineries and equipment for harvesting
Harvesting options	May include: <ul style="list-style-type: none"> • area and location of harvesting • age and diameter of bamboo
Harvesting program	May include: <ul style="list-style-type: none"> • date and volume of cut • allowable cut per given location
Recorded	May include:- <ul style="list-style-type: none"> • date of bamboo shoot emergence • volume of cut per year per clump
Species	May include native species of one or more type or imported species
Topography	is to include a map of the designated area showing terrain

	levels, contours, elevations, slopes, gullies and adjoining land parcels, rainfall, soil type
Nette area	is to include the total area available for harvesting excluding streamside buffers, filter strips, habitat protection areas, rainforest protection, excluded areas, roads, tracks and landings
Cartage	to include the use of log truck hauling operators to remove felled culms from the site
Environmental	Negative environmental impacts may: <ul style="list-style-type: none"> • result from high density animal activity, particularly in holding or confined areas, • causing increased run-off flows, • loss of ground cover, soil disturbance, pugging, • dust problems, weed seeds in manure, and contamination of ground and surface water supplies • consideration may also be given to the safe use and disposal of veterinarian chemicals and animal residues
OHS requirements	Safe systems and procedures for: <ul style="list-style-type: none"> • maintenance of hygienic and hazard-free facilities and equipment • handling animal • handling of hazardous substances • manual handling, including lifting and carrying • outdoor work including protection from solar radiation • appropriate use of personal protective equipment
Enterprise requirements	<ul style="list-style-type: none"> • Standard operating procedure and industry standards • Total quality management standards • Product labels, manufacturers specifications • MSDS, operators manuals • Enterprise policies and procedures (including waste disposal, recycling and re-use), and reporting requirements
Legislative requirements	This may include: <ul style="list-style-type: none"> • welfare act • OHS legislation • environmental Protection Act, and • regulations and codes of practice with regard to the breeding animal and the transfer of genetic materials
Relevant information	This may include: <ul style="list-style-type: none"> • details of joined animal, • artificial insemination procedures carried out, • health and condition status of animal and details of administered preventative health treatments, and • details of culled and replaced animal

Evidence Guide	
Critical Aspects of Competence	<ul style="list-style-type: none"> • Communicate effectively and work safely with others in the work area • Efficiently design harvesting plans in accordance with regulations and organizational requirements • Effectively design harvesting plans in accordance with site conditions, regulations and organizational requirements
Underpinning Knowledge and Attitudes	<ul style="list-style-type: none"> • applicable legislative, regulatory or certification requirements and codes of practice relevant to the full range of processes for preparing harvesting plans • organizational and site standards, requirements, policies and procedures for harvesting plans • principles of cultural diversity and access and equity • environmental protection requirements, including the safe disposal of waste material • established communication channels and protocols • problem identification and resolution • types of tools and equipment and procedures for their safe use, operation and maintenance • harvesting planning design principles • harvesting methodologies • procedures for the recording, reporting and maintenance of workplace records and information • appropriate mathematical procedures for estimation and measurement
Underpinning Skills	<ul style="list-style-type: none"> • comply with legislation, regulations, standards, codes of practice and established safe practices and procedures for designing harvesting plans • use and maintenance requirements of relevant tools, machinery and equipment • identify problems and equipment faults and demonstrate appropriate response procedures • use appropriate communication and interpersonal techniques with colleagues and others • accurately record and report workplace information, and maintain documentation • accurately calculate gross and nett coupe areas
Resources Implication	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> • Workplace or fully equipped assessment location with necessary documentation and resources normally used in the workplace
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written test • Observation/Demonstration
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting</p>

Occupational Standard: Bamboo Processing and Marketing Management Level V	
Unit Title	Manage Trial and/or Research Material
Unit Code	IND BPM5 03 0411
Unit Descriptor	This unit covers the process of managing a trial and/or research materials as part of a designated research project. It requires the ability to define the purpose of the trial and the scope and extent of the work, oversee management of trial/research materials, collate data, and complete reports.

Elements	Performance Criteria
1. Identify scope and extent of work	<p>1.1 Trial/research hypothesis and parameters are identified according to researchers requirements.</p> <p>1.2 Trial/research is planned to meet research objectives.</p> <p>1.3 Data relevant to managing trial/research materials is assessed according to research parameters.</p> <p>1.4 Data relevant to managing trial/research materials is assessed according to enterprise policy.</p> <p>1.5 OHS hazards associated with managing trial/research materials are identified, risks assessed, and controls developed according to enterprise guidelines, valued and documented in the survey design.</p> <p>1.6 Tools, equipment and machinery required for managing trial/research materials are identified, valued, and availability confirmed with suppliers, contractors and appropriate personnel.</p> <p>1.7 Research design is determined according to the trial/research plan.</p>
2. Oversee management of trial/research materials	<p>2.1 Trial/research is prepared, maintained and monitored according to project parameters.</p> <p>2.2 Field work is conducted to verify and collect data according to the trial/research design and research parameters.</p> <p>2.3 Work activities are monitored for accuracy, validity and compliance to the parameters of the trial/research design.</p> <p>2.4 Staged data collection is undertaken according to trial/research design, scheduling and access requirements.</p> <p>2.5 Monitoring and data is recorded faithfully, promptly and accurately according to the specifications of the trial/research design.</p>

3. Prepare reports on work completed	<p>3.1 Collected data is recorded according to trial/research requirements and guidelines</p> <p>3.2 Data is statistically analysed to determine significance of research results.</p> <p>3.3 Hypothesis is accepted or rejected based on data collected.</p> <p>3.4 Reports are produced which conform to the structure and content required by the researcher.</p>
--------------------------------------	--

Variable	Range
Trial/research project	Research objectives may relate to the full range of research questions investigated. More common areas will include monitoring and assessing the performance or characteristics of bamboo other materials needed in the production of bamboo-based products.
Constraints that may affect the survey	Constraints may be financial, time, scheduling, labour availability, seasonal, and government legislation and regulations.
Ethical issues to be considered in the conduct of the research	Ethical issues may include those relating to plant welfare, ethical practice in informing other parties of the research in process, or be concerned with intellectual property.
Client	Clients may include the enterprises management or a private individual, company, community group, government agency, or a combination of these entities.
Data that may be assessed	Data may include written or oral records, existing studies, and local and federal government policy. Data may also relate to human intervention.
Relevant data collection process	Processes may include the employment of staged visual assessments and checklists, photo points, aerial photography, plant/animal sampling, transect plant or associated animal counts, surveys and questionnaires, and examination of aerial or other existing photographs.
OHS hazards and control that may be associated with conducting a biological survey	<ul style="list-style-type: none"> • Hazards may include solar radiation, air-, soil- and water-borne micro-organisms, chemicals and hazardous substances, sharp hand tools and equipment, manual handling, slippery and uneven surfaces, and moving vehicles. • Controls should be introduced according to enterprise OHS policies and procedures and may include identifying hazards • assessing and reporting risks; cleaning, maintaining and storing tools, equipment and machinery; appropriate use of personal protective equipment including sun protection; safe operation of tools, equipment and machinery; safe handling, use and storage of chemicals and hazardous

	substances; correct manual handling; basic first aid available on site; personal hygiene, and reporting problems to managers
Tools, equipment and machinery	Tools, equipment and machinery may include: <ul style="list-style-type: none"> • computers and appropriate software • photographic equipment • potentiometer, tape measure, flagging tape, site or district maps, compass • recording implements, survey point markers and drivers • global positioning system (GPS), specimen bags, secateurs, leaf tissue collection equipment, field testing reagents and tools, and binoculars

Evidence Guide			
Critical Aspects of Competence	Assessment need evidence that a person is able to: <ul style="list-style-type: none"> • identify, manage and monitor materials for a research project, and collect appropriate data requirements to research project requirements • Transfer the skills and knowledge required to manage trial/research materials to a different work environment (for example, this could include different research projects and objectives, biological components, data collection methods and reporting requirements). 		
Underpinning Knowledge and Attitude	The knowledge requirements for this competency standard are listed below: <ul style="list-style-type: none"> • scheduling and programming work within timelines • ecological principles and terminology • data collection and reporting, research procedures and best practice techniques • enterprise work team management guidelines • data analysis techniques • research planning and design • research methodologies 		
Underpinning Skills	These include the ability to: <ul style="list-style-type: none"> • communicate and negotiate orally and in writing with the researcher, enterprise staff, managers and consultants • identify scope and extent of work • calculate the cost requirements of managing trial/research materials • produce written reports • oversee management of trial/research materials • comply with legislative requirements 		
Resource Implications	The following resources must be provided: <ul style="list-style-type: none"> • Workplace or fully equipped assessment location with necessary documentation and resources normally used in the workplace 		
Methods of	Competence should be assessed through:		
Page 13 of 51	Ministry of Education Copyright	Bamboo Processing and Marketing Management Ethiopia Occupational Standard	Version 1 April 2011

Assessment	<ul style="list-style-type: none"> • Interview/Written Test • Demonstration/Observation with Oral Questioning
Context of Assessment	Competence assessment may occur in workplace or any appropriate simulated environment

Occupational Standard: Bamboo Processing and Marketing Management Level V	
Unit Title	Develop Marketing Plan
Unit Code	IND BPM5 04 0411
Unit Descriptor	This unit covers the process of designing and co-ordinating a marketing plan. It requires the application of skills and knowledge to analyse market conditions and access and evaluate advice on market and potential distribution options. In addition, it requires an awareness of industry structures and business trends. The functions associated with this standard would be performed independently and under limited supervision.

Elements	Performance Criteria
1. Evaluate commercial information	<p>1.1 Relevant information is researched and analysed to identify market trends.</p> <p>1.2 Competing products are identified and evaluated to determine strengths and weaknesses of own products.</p> <p>1.3 Collated information is presented in a manner which provides clear and concise information.</p> <p>1.4 Market and situation analysis is conducted using established techniques in accordance with available budget and the need for external assistance.</p>
2. Identify marketing requirements	<p>2.1 Promotional materials are created that enhance the product and commercial presentation.</p> <p>2.2 Priorities, responsibilities, timelines and budgets are recorded and communicated to appropriate colleagues.</p>
3. Determine promotional strategies	<p>3.1 Detailed plans for promotional activities are prepared and recorded according to enterprise guidelines.</p> <p>3.2 Outlined in the promotional plan are objectives, level of exposure to be achieved and available markets.</p> <p>3.3 Strategies take account of feedback from operational staff, time management and scheduling issues, and resource constraints.</p> <p>3.4 Marketing objectives are established based on new and retained business consistent with product and operational business plans.</p>
4. Organise implementation	<p>4.1 Criteria are established to measure impact and success of promotional activities.</p> <p>4.2 Adjustments to the promotional strategy product distribution are made promptly to ensure consistency of promotion.</p>

	<p>4.3 Required distribution channels are defined and established.</p> <p>4.4 Product documentation is distributed on time in the specified quantities.</p>
--	--

Variable	Range
Information relevant to this standard	Sales data, expected revenues, expenditure, attributable costs, market share figures, trends in consumer purchases, demographic data, borrowing costs, transport costs, and delivery times.
Product	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • bamboo floorboards • bamboo curtains • bamboo panels • bamboo charcoal and derivatives • bamboo furniture • handicrafts
Research information	Through Internet, trade magazines, commercial sources, newspapers, library searches, anecdote, and annual reports of companies
Identify strengths and weaknesses of own products	Packaging and presentation, relative prices, sales outlets and distribution, proximity to markets, customer feedback, complementarity of other products and services, technical support and warranties, availability of consumer information, and the provision of relevant OHS information.
Promotional materials	<ul style="list-style-type: none"> • Mass media advertising, Internet advertising and distribution, leaflets and flyers, trade articles, and seminar materials. • Information may include region branding, promotion of health benefits, celebrity endorsement, industry compliance, and quality certification.
Product documentation	Content and ingredient information, environmental protection information, food standards compliance, labelling, invoices and orders, discount offers and bulk buying options, enterprise profiles, longevity of suppliers, and company endorsements.
Criteria	Achieving or not achieving sales targets, increased access to new markets, customer/client feedback, level of public/purchaser awareness, increased recognition rates of products, and market penetration.

Evidence Guide	
Critical Aspects of Competence	<ul style="list-style-type: none"> • Competence to develop a marketing plan requires evidence of the ability to research, analyse and evaluate market information to compare and contrast data and plan appropriate programs. • Evidence must be demonstrated in the presentation of data on

	<p>markets and the capacity to make decisions.</p> <ul style="list-style-type: none"> • The skills and knowledge required must be transferable to a different work environment. For example, this could include different products, promotional strategies and enterprise procedures and policies.
Underpinning Knowledge and Attitude	<ul style="list-style-type: none"> • Financial management and budgeting • Rural organisations policies and procedures for marketing and promotions • Sales and marketing principles and practices • Sound knowledge of promotional activities including, trade shows, in-house promotions, advertising, public relations, familiarisations, signage and display • Relevant legislative requirements with regard to OHS and risk management procedures for management of promotional activities • Legal issues that affect marketing activities (trade practices, fair trading acts, sales of goods acts) • Industry and marketing knowledge including sales networks and distribution systems, and customer trends and preferences • Demographic studies and their application in the development of a marketing plan
Underpinning Skills	<ul style="list-style-type: none"> • Analyse, research information and develop a marketing plan • Implement and evaluate a marketing plan • Ability to negotiate at all levels • Research and determine the best marketing options in order to achieve the organisations objectives • Problem solve to overcome impediments • Manage time • Evaluate performance targets and recommend modifications or improvements • Collect and analyse data to assess marketing alternatives • Make presentations to groups • Plan to manage promotional activities • Communicate written and oral information, and prepare • Reports and documentation • Calculate data and manage budgets.
Resource Implications	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> • Workplace or fully equipped assessment location with necessary documentation and resources normally used in the workplace
Methods of Assessment	<p>Competence should be assessed through:</p> <ul style="list-style-type: none"> • Interview/Written Test • Demonstration/Observation with Oral Questioning
Context of Assessment	<p>Competence assessment may occur in workplace or any appropriate simulated environment</p>

Occupational Standard: Bamboo Processing and Marketing Management Level V	
Unit Title	Market Products
Unit Code	IND BPM5 05 0411
Unit Descriptor	This unit describes the competences required to segment the market, fix the product price and promote the item.

Elements	Performance Criteria
1. Identify market	1.1 Potential market is identified according to market need assessment 1.2 Identified markets are segmented according to their purchasing power 1.3 Marketing strategies are determined to penetrate new market and expand business based on organizations requirement. 1.4 Potential clients/customer profile is determined based on their needs
2. Determine product price	2.1 Pricing is set based on determining factors and objectives of the organization 2.2 Selling price is estimated taking into consideration the buying power and characteristics of the identified market segment 2.3 Selling price is documented and tested in a selected market segment
3. Conduct product promotion	3.1 Appropriate promotion methods are determined and selected according to enterprise capacity and customers' accessibility 3.2 Promotion is conducted based on the selected methodologies using appropriate fliers/brochures or advertisement medium 3.3 Potential distribution channels are selected based on interest and capacity of the enterprise 3.4 Display areas are identified and established in accordance with enterprise guidelines and standards

Variable	Range
Determining factors	Include but not limited to: <ul style="list-style-type: none"> • cost of production • profit margin • transport cost • promotion cost • labor cost

Promotion methods	<p>May include but limited to:</p> <ul style="list-style-type: none"> • TV / radio commercials • use of fliers and brochures • sample testing • SMS relay • financing options • use of display center • trade fairs
-------------------	--

Evidence Guide	
Critical aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • identifying and market segmentation • determining product price • product promotion
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • market principles, analysis and strategies • customers characteristics and profile • advertising principles and methodology • product specifications and qualities • product introduction and promotion • entrepreneurial activities
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • analyze market • determine product price • introduce and promote product • communicate to customers
Resources Implication	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Assessment Methods	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test / Oral Questioning • Observation / Demonstration
Context of Assessment	<p>Competency may be assessed in the work place or in a simulated work place setting</p>

Occupational Standard: Bamboo Processing and Marketing Management Level V	
Unit Title	Evaluate international marketing opportunities
Unit Code	IND BPM5 06 0411
Unit Descriptor	This unit covers evaluating the international environment, identifying market factors and risks, and assessing the viability of international marketing opportunities.

Elements	Performance Criteria
1. Review the global market environment	<p>1.1 International trade patterns are assessed and their likely importance for the business identified</p> <p>1.2 Multinational business and e-commerce markets are researched and opportunities to enter, shape or influence the market are assessed in terms of likely contribution to the business</p> <p>1.3 International markets operating under free trade and/or protectionist arrangements are identified and the likely ease of entering and trading successfully estimated</p> <p>1.4 International trade policies and agreements are identified and their likely impact on international marketing opportunities estimated</p>
2. Assess international business and ecommerce market factor	<p>2.1 Economic and political factors affecting the international market are identified and analysed for their potential impact on international marketing opportunities</p> <p>2.2 Social and cultural factors affecting the international market are identified and analysed for their potential impact on international marketing opportunities</p> <p>2.3 International market trends and developments are investigated to identify market needs relative to the business</p> <p>2.4 New and emerging business and e-commerce markets are identified and opportunities to enter, shape or influence the markets are assessed in terms of their fit with business goals and direction and their likely contribution to the business</p>
3. Identify risk factors for international marketing opportunities	<p>3.1 Political and financial stability and corruption risks for the potential market are analysed and rated as acceptable or not</p> <p>3.2 Legal and regulatory requirements and trade barriers for the potential market are analysed and rated as acceptable or not</p> <p>3.3 Risk factors are related to international business cycles</p>

	in terms of <i>economic conditions</i> , and their impact is estimated for the potential mark
4. Investigate international business and ecommerce marketing opportunities	<p>4.1 Opportunities are identified and analysed in terms of their likely fit with the organisation's goals and capabilities</p> <p>4.2 Each opportunity is evaluated to determine its impact on current business and customer base</p> <p>4.3 An assessment of costs, benefits, risks and opportunities is used to determine the financial viability of each marketing opportunity</p> <p>4.4 Probable return on investment and potential competitors are determined</p> <p>4.5 Marketing opportunities are described and ranked in terms of their viability and likely contribution to the business</p>

Variable	Range
Legislation, codes and national standards relevant to the workplace which may include	<ul style="list-style-type: none"> • award and enterprise agreements and relevant industrial instruments • relevant legislation from all levels of government that affects business operation, especially in regard to Occupational Health and Safety and environmental issues, equal opportunity, industrial relations and anti-discrimination • relevant industry codes of practice
International trade agreements may include	<ul style="list-style-type: none"> • GATT
International business and ecommerce market factors may include	<ul style="list-style-type: none"> • trade relations with Australia • level of economic development • industrial structure • growth factor/s • investment rates • technology and telecommunications infrastructure • cost of funds • currency exchange rates • interest rates • trade restrictions • tariffs • distribution channels • political systems • social and cultural factors • incentives • government assistance • trade groupings • geographical groupings • cultural and political groupings • on-line customer groupings

	<ul style="list-style-type: none"> • virtual communities • customer service factors
Social and cultural factors may include	<ul style="list-style-type: none"> • family role and status • traditions • preferences • behaviours • language • customs • currency • political system • legal system
Risk factors may include	<ul style="list-style-type: none"> • political stability • financial stability • legal and regulatory requirements • work factors • cultural factors • language factors • available technology • telecommunications infrastructure • resource capability and capacity • resource availability, sustainability and management • logistics • transportation systems • communication systems • trade barriers • corruption risks • legal risks in selling goods and services on-line to the international market
Economic conditions may include	<ul style="list-style-type: none"> • prosperity • recession • depression • recovery
International marketing opportunities may include	<ul style="list-style-type: none"> • exporting • licensing • agents • intermediaries • joint ventures • strategic alliances • direct investment • on-line business opportunities

Evidence Guide	
Critical aspects of Competence	<ul style="list-style-type: none"> • Integrated demonstration of all elements of competence and their performance criteria • Supporting evidence for decisions about likely impact of factors, probable return on investment and market • viability of international marketing opportunities
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Relevant legislation from all levels of government that affects business operation, especially in regard to Occupational Health and Safety and environmental issues, equal opportunity, industrial relations and anti-discrimination • Organisation's products and services • Organisation's business and marketing plan • Research processes for international markets • Cross-cultural communication • International business protocols • E-Commerce
Underpinning Skills	<ul style="list-style-type: none"> • Literacy skills to identify and evaluate information, and to interpret cultural issues • Communication including questioning, clarifying and reporting • Research and evaluation skills • Computer technology skills • Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Assessment Methods	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test / Oral Questioning • Observation / Demonstration
Context of Assessment	Competency may be assessed in the work place or in a simulated work place setting

Occupational Standard: Bamboo Processing and Marketing Management Level V	
Unit Title	Manage Value Chain
Unit Code	IND BPM5 07 0411
Unit Descriptor	This unit covers the knowledge and skills needed to manage a value chain, a supply chain or a demand chain including the close liaison with suppliers and customers and even the managing of the supply/demand chain of smaller suppliers/customers (if they wish it). This unit covers the managing of the supply chain, the demand chain as well as the overall value chain and may be applied to the managing of the chain internally/externally within an organisation.

Elements	Performance Criteria
1. Evaluate the value chain	1.1 Identify all members in the value chain for product/s in area of responsibility 1.2 Identify value added by each member of the chain 1.3 Identify acute and chronic issues which impact on the value chain 1.4 Develop priority list of items for improvement
2. Liaise regularly with chain members	2.1 Establish and maintain regular liaison with all chain members 2.2 Identify current and forecast issues with each member 2.3 Work with members to help them address their issues 2.4 Build trust and confidence in the relationship 2.5 Develop a priority list of items for improvement 2.6 Negotiate with all chain members to ensure improvements benefit chain members and improve the benefits/features perceived by the ultimate customer
3. Monitor the value added at each step	3.1 Identify changes in value added by each chain member 3.2 Identify areas where changes to value added are required 3.3 Develop a priority list of items for improvement 3.4 Work with chain member to bring about improvements to value added
4. Continue to reduce waste	4.1 Identify waste in value chain 4.2 Work with chain members to continually reduce waste

Variable	Range
Value chain	Competitive manufacturing organisations encompass the entire supply system, beginning product design, raw material mining and processing and all tiers of the value chain. Any truly 'competitive' system is highly dependent on the demands of its customers and the reliability of its suppliers. No implementation of competitive manufacturing can reach its full potential without including the entire 'enterprise' in its planning.
Value added	Value added is measured against its contribution to the customer benefits/features and may be in the form of: <ul style="list-style-type: none"> • technical benefits/features • location benefits/features • aesthetic benefits/features • information benefits/features
Waste	Waste (also known as muda in the Toyota Production System and its derivatives) is any activity which does not contribute to customer benefit/features in the product. Within manufacturing, categories of waste include: <ul style="list-style-type: none"> • excess production and early production • delays • movement and transport • poor process design • inventory • inefficient performance of a process • making defective items. Waste for this unit may include activities which do not yield any benefit to the organisation or any benefit to the organisations customers.

Evidence Guide	
Critical Aspects of Competence	Evidence of ongoing improvements in the value chain should be available, along with the waste reductions which flow from it.
Underpinning Knowledge and Attitude	<ul style="list-style-type: none"> • purpose of value chain analysis • methods of value chain analysis • types of waste and methods of reducing it • process used to make product • processes employed by other members of the value chain sufficient to have meaningful dialog with them • methods of value analysis
Underpinning Skills	To achieve the performance criteria, some complementary skills are required. These skills include the ability to: <ul style="list-style-type: none"> • liaison • negotiation • communication • planning • basic value analysis

Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence should be assessed through: <ul style="list-style-type: none"> • Interview/Written Test • Demonstration/Observation with Oral Questioning
Context of Assessment	Competence assessment may occur in workplace or any appropriate simulated environment

Occupational Standard: Bamboo Processing and Marketing Management Level V	
Unit Title	Manage Quality Assurance System
Unit Code	IND BPM5 08 0411
Unit Descriptor	This unit covers the process of planning, implementing and reviewing a quality assurance program for bamboo processing enterprise. It requires the ability to determine quality assurance objectives for the enterprise, plan the quality assurance program, develop implementation strategies, implement the quality assurance program, and review the quality assurance program.

Elements	Performance Criteria
1. Determine quality assurance objectives for the enterprise	1.1 Future market requirements for quality assured products are assessed. 1.2 Premiums for quality assurance products are determined. 1.3 Strategic benefits of a quality assurance program are assessed.
2. Plan the quality assurance program and develop implementation strategies	2.1 Product quality standards are defined. 2.2 Current status of products and operations is audited. 2.3 Industry quality assurance programs are evaluated and cost. 2.4 Required processes and practices are documented in the quality assurance program manual and an implementation plan is prepared.
3. Implement the quality assurance program	3.1 Instructions are documented defining task and process requirements. 3.2 Contractor and staff training is established and implemented. 3.3 Communication takes account of social, cultural and ethnic backgrounds. 3.4 Changes to processes and practices are introduced. 3.5 Processes to monitor and verify product quality are established. 3.6 Recording systems are introduced. 3.7 Operating instructions are validated under conditions to verify their suitability. 3.8 Problems and issues are analysed and resolved appropriately, promptly and decisively.

4. Review the quality assurance program	4.1 Reporting formats are established.
	4.2 Mechanisms for gaining feedback information are implemented.
	4.3 Preparation is made for quality assurance audits.

Variable	Range
future market requirements	The assessment of market requirements for quality products should include trends and directions from regional, domestic and overseas markets.
industry quality assurance programs	Industry quality assurance programs will include programs developed by a range of entities including industry organisations and marketing authorities, processors, wholesalers/retailers and other stakeholders. Relevant programs include Cattle care, Flock care, Fresh agricultural product care, and Proven Perfect.
communication	Communication will be through a range of strategies relevant to the workplace and will include workplace meetings, signage, memoranda, newsletters and interviews.
processes and practices	All processes and practices impacting on the quality of product produced will be relevant.
recording systems	Recording systems will be effective in meeting the quality assurance arrangements established and relevant to the enterprise. They may be computer or non-computer based.
conditions	Validation should be conducted under the full range of workplace operating conditions and cover variations in work throughput, personnel involved and environmental parameters.
reporting formats	Reporting formats will be the responsibility of the enterprise consistent with the quality assurance objectives.
mechanisms for gaining feedback	Feedback will be sourced from customers/purchasers, internal stakeholders, suppliers and other service providers.

Evidence Guide	
Critical Aspects of Competence	Competence in planning, implementing and reviewing a quality assurance program requires evidence that quality assurance programs have been successfully and appropriately established and managed in a bamboo processing enterprise. The skills and knowledge required to plan, implement and review a quality assurance program must be transferable to a range of work environments and contexts. For example, this could include different rural enterprises and commodity areas.

Underpinning Knowledge and Attitude	<p>Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts, and to deal with unplanned events. The knowledge requirements for this unit are listed below:</p> <ul style="list-style-type: none"> • market projections and customer requirements • cost/benefit of quality assurance implementation • system analysis, • enterprise culture and values • leadership and administrative skills • human resources induction practices • human resources performance monitoring practices
Underpinning Skills	<p>To achieve the performance criteria, some complementary skills are required. These skills include the ability to:</p> <ul style="list-style-type: none"> • determine quality assurance objectives for the enterprise • plan the quality assurance program and develop • implementation strategies • implement the quality assurance program • review the quality assurance program
Resource Implications	<ul style="list-style-type: none"> • Materials, equipments, chemicals, reagents, and other needful for quality control • Manuals(guidelines) • Standard regulations • competency standard for consistent performance • assessment guidelines • relevant sector booklet
Methods of Assessment	<p>Competence should be assessed through:</p> <ul style="list-style-type: none"> • Interview/Written Test • Demonstration/Observation with Oral Questioning
Context of Assessment	<p>Competence assessment may occur in workplace or any appropriate simulated environment</p>

Occupational Standard: Bamboo Processing and Marketing Management Level V	
Unit Title	Establish and Maintain Enterprise OHS Programs
Unit Code	IND BPM5 09 0411
Unit Descriptor	This unit covers the process of establishing and maintaining the enterprise Occupational Health and Safety (OHS) program. It requires the ability to develop OHS policies and procedures that demonstrate enterprise commitment to OHS, establish and maintain participative arrangements, develop OHS safety induction and training programs, and evaluate the enterprise OHS system.

Elements	Performance Criteria
1. Develop OHS policies and procedures	<p>1.1 An OHS business plan and program is developed for the enterprise in consultation with designated personnel and/or management.</p> <p>1.2 OHS responsibilities and duties are clearly defined, allocated and included in job descriptions and duty statements for all relevant positions.</p> <p>1.3 Financial and human resources for implementation of OHS policies and procedures are identified, sought and/or provided as required.</p> <p>1.4 Information on the OHS system and procedures for the area of responsibility is provided and explained in a form which is readily understood by employees.</p>
2. Establish and maintain processes to ensure the participation of all employees in the application of OHS	<p>2.1 Consultation processes are established and maintained with employees and their representatives in accordance with relevant legislation and according to enterprise guidelines.</p> <p>2.2 Issues raised through participation and consultation are dealt with and resolved promptly and effectively in accordance with enterprise procedures for issue resolution.</p> <p>2.3 Information about the outcomes of participation and consultation is provided in a manner readily accessible to employees.</p>
3. Establish and maintain procedures for identifying hazards	<p>3.1 Existing and potential hazards within the area of responsibility are identified and confirmed in accordance with legislation, Codes of Practice, and trends identified from the OHS records system.</p> <p>3.2 Procedure for ongoing identification of hazards is developed and integrated within systems of work and procedures.</p>

	<p>3.3 Activities are appropriately monitored to ensure that this procedure is adopted effectively throughout areas of managerial responsibility.</p> <p>3.4 Hazard identification is addressed at the planning, design and evaluation stages of any change in the workplace to ensure that new hazards are not created.</p>
4. Establish and maintain procedures for assessing risks	<p>4.1 Risks associated with identified hazards are assessed in accordance with safe work practices, with information derived from workplace OHS records and industry wide information, and with relevant OHS legislation and Codes of Practice.</p> <p>4.2 A procedure for ongoing assessment of risks is developed and integrated within systems of work and procedures.</p> <p>4.3 Activities are monitored to ensure that risk assessment procedures are adopted effectively throughout the area of managerial responsibility.</p> <p>4.4 Risk assessment is addressed at the planning, design and evaluation stages of any change in the workplace to ensure that the risk from hazards is not increased.</p> <p>4.5 Accident and dangerous occurrences are investigated and recorded according to enterprise and OHS procedures.</p>
5. Implement interim risk control measures	<p>5.1 Measures to control assessed risks are developed and implemented in accordance with the hierarchy of control, relevant OHS legislation, Codes of Practice, and trends identified from the OHS records system.</p> <p>5.2 When measures which control a risk at its source are not immediately practicable, interim solutions are implemented until a permanent control measure is developed.</p> <p>5.3 Process of ongoing hazard identification and risk assessment, and review of effectiveness of control programs is developed and integrated into enterprise management arrangements.</p> <p>5.4 Activities are monitored to ensure that the risk control procedure is adopted effectively throughout the area of managerial responsibility.</p> <p>5.5 Risk control is addressed at the planning, design and evaluation stages of any change in the workplace to ensure that adequate risk control measures are included.</p> <p>5.6 Systems are designed to reduce risk and administrative arrangements to ensure safe OHS work practices are put in place where elimination of a hazard is not possible.</p> <p>5.7 Effective OHS risk management measures are set in</p>

	<p>place during any modification of the buildings and structures, machinery and work activities.</p> <p>5.8 Inadequacies in existing risk control measures are identified and resources enabling implementation of new measures are sought and/or provided according to appropriate workplace procedures.</p>
6. Plan and manage enterprise procedures for dealing with hazardous events	<p>6.1 Potential emergencies posing risk to health and safety of workers and the public are correctly identified.</p> <p>6.2 Plans and procedures which control the risks associated with hazardous events and meet any legislative requirements as a minimum, are developed in consultation with appropriate emergency services.</p> <p>6.3 Appropriate information and training is provided to employees to enable implementation of correct emergency procedures.</p> <p>6.4 Adequate numbers of workers are trained in First Aid to ensure that first aid is applied to preserve life and minimise injury.</p>
7. Establish and maintain an OHS safety induction and training program	<p>7.1 An OHS induction program is developed to meet the occupational health and safety needs of new employees.</p> <p>7.2 An OHS training program is developed as part of supervisors and employee's general training.</p>
8. Establish and maintain system for OHS records	<p>8.1 A system for keeping OHS records is established and monitored to allow identification of patterns of occupational injury and disease in the enterprise.</p> <p>8.2 Records are regularly updated and used to evaluate the effectiveness of the enterprise OHS program.</p>
9. Evaluate the enterprise OHS system and related policies, procedures and programs	<p>9.1 The effectiveness of the OHS system and related policies, procedures and programs is assessed according to enterprise aims with respect to OHS.</p> <p>9.2 Improvements to the OHS system are developed and implemented to ensure more effective achievement of enterprise aims.</p> <p>9.3 Compliance with OHS legislation and Codes of Practice is assessed to ensure that legal OHS standards are maintained as a minimum.</p>

Variable	Range
Processes	OHS committees, consultation with health and safety representatives, issue resolution procedures and participative/consultative procedures conducted by supervisory staff within the area of managerial responsibility.
Hazards	Hazards in the workplace, risks associated with plants and animals, risks associated with bystanders/public, levels of health and fitness, OHS emergencies in land-based workplaces.
Methods to control	General duty of care, following regulations and Codes of Practice, use of protective clothing or equipment, handling hazardous substances carefully.
Procedures for dealing with hazardous events	Provision of clear directions to the location of an emergency using relevant National, State and local references.
Adequate number of workers	By completion of recognised first aid training and maintaining skill levels to ensure that injured workers receive effective treatment while awaiting medical attention.
Records	OHS audits and inspections, action taken to control OHS risk, OHS induction and training of workers, registers of hazardous substances (including pesticides), use of hazardous substances and health surveillance results, workers occupational injury and illness, and Material Safety Data Sheets (MSDS) of hazardous substances.

Evidence Guide	
Critical Aspects of Competence	<ul style="list-style-type: none"> • Competence in establishing and maintaining the enterprise occupational health and safety program requires evidence that knowledge and skills has been applied in the establishment, maintenance and evaluation of an enterprise OHS system as set out in this unit, and according to enterprise guidelines and relevant acts. • The skills and knowledge required to establish and maintain the enterprise occupational health and safety program must be transferable to a range of work environments and contexts.
Underpinning Knowledge and Attitude	<p>The knowledge requirements for this unit are listed below:</p> <ul style="list-style-type: none"> • significant hazards in the workplace • all relevant OHS legislation and codes of practice consistent with the elements of competence, the hierarchy of OHS risk control and its implementation for hazards in land-based industries • risk control measures • hierarchy of control • relevant management systems and procedures • public safety issues

Underpinning Skills	<p>These include the ability to:</p> <ul style="list-style-type: none"> • develop OHS policies and procedures which demonstrate enterprise commitment to OHS • establish and maintain arrangements to ensure the involvement of all employees in the management of OHS • establish and maintain procedures for identifying hazards • establish and maintain procedures for assessing risks • establish and maintain procedures for controlling risks • establish and maintain enterprise procedures for dealing with hazardous events • establish and maintain an OHS induction and training program • establish and maintain a system for OHS records • evaluate the enterprise OHS system and related policies, procedures and programs • analyse recorded data to determine where the OHS program can better meet enterprise and employee needs
Resource Implications	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> • Workplace or fully equipped assessment location with necessary documentation and resources normally used in the workplace
Methods of Assessment	<p>Competence should be assessed through:</p> <ul style="list-style-type: none"> • Interview/Written Test • Demonstration/Observation with Oral Questioning
Context of Assessment	<p>Competence assessment may occur in workplace or any appropriate simulated environment</p>

Occupational Standard: Bamboo Processing and Marketing Management Level V	
Unit Title	Facilitate and Capitalize on Change and Innovation
Unit Code	IND BPM5 10 0411
Unit Descriptor	This unit specifies the outcomes required to plan and manage the introduction and facilitation of change; particular emphasis is on the development of creative and flexible approaches, and on managing emerging opportunities and challenges.

Elements	Performance Criteria
1. Participate in planning the introduction and facilitation of change	<p>1.1 Manager contributes effectively to the organization's planning processes to introduce and facilitate change</p> <p>1.2 Plans to introduce change are made in consultation with appropriate stakeholders</p> <p>1.3 Organization's objectives and plans to introduce change are communicated effectively to individuals and teams</p>
2. Develop creative and flexible approaches and solutions	<p>2.1 Variety of approaches to managing workplace issues and problems are identified and analyzed</p> <p>2.2 Risks are identified and assessed, and action initiated to manage these to achieve a recognized benefit or advantage to the organization</p> <p>2.3 Workplace is managed in a way which promotes the development of innovative approaches and outcomes</p> <p>2.4 Creative and responsive approaches to resource management improve productivity and services, and/or reduce costs</p>
3. Manage emerging challenges and opportunities	<p>3.1 Individuals and teams are supported to respond effectively and efficiently to changes in the organization's goals, plans and priorities</p> <p>3.2 Coaching and mentoring assist individuals and teams to develop competencies to handle change efficiently and effectively</p> <p>3.3 Opportunities are identified and taken as appropriate, to make adjustments and to respond to the changing needs of customers and the organization</p> <p>3.4 Information needs of individuals and teams are anticipated and facilitated as part of change implementation and management</p> <p>3.5 Recommendations for improving the methods and techniques to manage change are identified, evaluated and negotiated with appropriate individuals and groups</p>

Variables	Range
Manager	a person with frontline management roles and responsibilities, regardless of the title of their position
Appropriate stakeholders may refer to:	those individuals and organizations who have a stake in the change and innovation being planned, including: <ul style="list-style-type: none"> • organization directors and other relevant managers • teams and individual employees who are both directly and indirectly involved in the proposed change • union/employee representatives or groups • OHS committees • other people with specialist responsibilities • external stakeholders where appropriate - such as clients, suppliers, industry associations, regulatory and licensing agencies
Risks may refer to:	<ul style="list-style-type: none"> • any event, process or action that may result in goals and objectives of the organization not being met • any adverse impact on individuals or the organization • various risks identified in a risk management process
Information needs may include:	<ul style="list-style-type: none"> • new and emerging workplace issues • implications for current work roles and practices including training and development • changes relative to workplace legislation, such as OHS, workplace data such as productivity, inputs/outputs and future projections • planning documents • reports • market trend data • scenario plans • customer/competitor data

Evidence Guide			
Critical Aspects of Competence	<ul style="list-style-type: none"> • Planning the introduction and facilitation of change • Developing creative and flexible approaches and solutions • Managing emerging challenges and opportunities 		
Underpinning Knowledge and Attitudes	<ul style="list-style-type: none"> • Relevant legislation from all levels of government that affects business operation, especially in regard to occupational health and safety and environmental issues, equal opportunity, industrial relations and anti-discrimination • the principles and techniques involved in: <ul style="list-style-type: none"> ▪ change and innovation management ▪ development of strategies and procedures to implement and facilitate change and innovation ▪ use of risk management strategies: identifying hazards, • assessing risks and implementing risk control measures <ul style="list-style-type: none"> ▪ problem identification and resolution 		
Page 36 of 51	Ministry of Education Copyright	Bamboo Processing and Marketing Management Ethiopia Occupational Standard	Version 1 April 2011

	<ul style="list-style-type: none"> ▪ leadership and mentoring techniques ▪ management of quality customer service delivery ▪ consultation and communication techniques ▪ record keeping and management methods ▪ the sources of change and how they impact • factors which lead/cause resistance to change • approaches to managing workplace issues
Underpinning Skills	<ul style="list-style-type: none"> • Communication skills • Planning work • Managing risk
Resources Implication	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> • Workplace or fully equipped assessment location with necessary tools, equipment and consumable materials
Assessment Methods	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview • Observation/Demonstration
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting</p>

Occupational Standard: Bamboo Processing and Marketing Management Level V	
Unit Title	Establish and Conduct Business Relationships
Unit Code	IND BPM5 11 0411
Unit Descriptor	This unit covers the skills, attitudes and knowledge required to manage business relationship with customers.

Elements	Performance Criteria
1. Establish contact with customer	1.1 Welcoming customer environment is maintained 1.2 Customer is greeted warmly according to enterprise policies and procedures 1.3 Effective service environment is created through verbal and non-verbal presentation according to enterprise policies and procedures 1.4 Customer data is maintained to ensure database relevance and currency 1.5 Information on customers and service history is gathered for analysis 1.6 Opportunities to maintain regular contact with customers are identified and taken up
2. Clarify needs of customer	2.1 Customer needs are determined through questioning and active listening 2.2 Customer needs are accurately assessed against the products/services of the enterprise 2.3 Customer details are documented clearly and accurately in required format 2.4 Conduct negotiations in a business-like and professional manner 2.5 Maximize benefits for all parties in the negotiation through use of established techniques and in the context of establishing long term relationships 2.6 Communicate the results of negotiations to appropriate colleagues and stakeholders within appropriate timeframes
3. Provide information and advice	3.1 Features and benefits of products/services provided by the enterprise are described/recommended to meet customer needs 3.2 Information to satisfy customer needs is provided 3.3 Alternative sources of information/advice are discussed with the customer

4. Foster and maintain business relationships	<p>4.1 Pro-actively seek, review and act upon information needed to maintain sound business relationships.</p> <p>4.2 Honor agreements within the scope of individual responsibility.</p> <p>4.3 Make adjustments to agreements in consultation with the customer and share information with appropriate colleagues.</p> <p>4.4 Nurture relationships through regular contact and use of effective interpersonal and communication styles.</p>
---	--

Variables	Range
Opportunities to maintain regular contact with customers may include:	<ul style="list-style-type: none"> • informal social occasions • industry functions • association membership • co-operative promotions • program of regular telephone contact
Negotiation techniques	<ul style="list-style-type: none"> • identification of goals, limits • clarification of needs of all parties • identifying points of agreement and points of difference • preparatory research of facts • active listening and questioning • non-verbal communication techniques • appropriate language • bargaining • developing options • confirming agreements • appropriate cultural behavior

Evidence Guide	
Critical Aspects of Competence	<p>It is essential that competence is fully observed and there is ability to transfer competence to changing circumstances and to respond to unusual situations in the critical aspects of:</p> <ul style="list-style-type: none"> • consistently applying enterprise policies and procedures and industry codes of practice in regard to customer service • providing a quality service environment by treating customers in a courteous and professional manner through all stages of the procedure • using effective questioning/active listening and observation skills to identify customer needs • communicating effectively with others involved in or affected by the work • maintaining relevant and current customer databases in

	<p>accordance with enterprise policies and procedures</p> <ul style="list-style-type: none"> • ability to build and maintain relationships to achieve successful business outcomes
Required knowledge	<ul style="list-style-type: none"> • Operational knowledge of enterprise policies and procedures in regard to: <ul style="list-style-type: none"> ▪ customer service ▪ dealing with difficult customers ▪ maintenance of customer databases ▪ allocated duties/responsibilities ▪ General knowledge of the range of enterprise merchandise and services, location of telephone extensions and departments/sections • Basic operational knowledge of legislation and statutory requirements, including consumer law, trade practices and fair trading legislation • Basic operational knowledge of industry/workplace codes of practice in relation to customer service • negotiation and communication techniques appropriate to negotiations that may be of significant commercial value
Underpinning Skills	<ul style="list-style-type: none"> • Use workplace technology related to use of customer database • Collect, organize and understand information related to collating and analyzing customer information to identify needs • Communicate ideas and information • Plan and organize activities concerning information for database entries • Use mathematical ideas and techniques to plan database cells and size • Establish diagnostic processes which identify and recommend improvements to customer service
Resources Implication	<p>The following should be made available:</p> <ul style="list-style-type: none"> • a workplace or simulated workplace • documentation, such as enterprise policy and procedure manuals relating to customer service
Assessment Methods	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation/Demonstration with Oral Questioning
Context of Assessment	<p>Elements of competence contain both knowledge and practical components. Knowledge components may be assessed off the job. Practical components should be assessed on the job or in a simulated work environment.</p>

Occupational Standard: Bamboo Processing and Marketing Management Level V	
Unit Title	Practice Career Professionalism
Unit Code	IND BPM5 12 0411
Unit Descriptor	This unit covers the knowledge, attitudes and skills in promoting career growth and advancement.

Elements	Performance Criteria
1. Integrate personal objectives with organizational goals	1.1 Personal growth and work plans are pursued towards improving the qualifications set for the profession 1.2 Intra- and interpersonal relationships are maintained in the course of managing oneself based on performance evaluation 1.3 Commitment to the organization and its goal is demonstrated in the performance of duties
2. Set and meet work priorities	2.1 Competing demands are prioritized to achieve personal, team and organizational goals and objectives. 2.2 Resources are utilized efficiently and effectively to manage work priorities and commitments 2.3 Practices along economic use and maintenance of equipment and facilities are followed as per established procedures
3. Maintain professional growth and development	3.1 Trainings and career opportunities are identified and availed of based on job requirements 3.2 Recognitions are sought/received and demonstrated as proof of career advancement 3.3 Licenses and/or certifications relevant to job and career are obtained and renewed

Variable	Range
Evaluation	<ul style="list-style-type: none"> • performance appraisal • psychological profile • aptitude tests
Resources	<ul style="list-style-type: none"> • human • financial • technology, hardware and software
Training and career opportunities	<ul style="list-style-type: none"> • participation in training program • serving as resource persons in conference/workshops • continuing education

Recognition	<ul style="list-style-type: none"> • recommendations • citations • certificate of appreciation • commendations / awards • tangible and intangible rewards
Licenses and/or certificates	<ul style="list-style-type: none"> • professional licenses • support level licenses

Evidence Guide	
Critical Aspects of Assessment	<p>Assessment must show evidence that the candidate:</p> <ul style="list-style-type: none"> • attained job targets within key result areas (KRAs) • maintained intra - and interpersonal relationship in the course of managing oneself based on performance evaluation • completed trainings and career opportunities which are based on the requirements of the industries • acquired and maintained licenses and/or certifications according to the requirement of the qualification
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • work values and ethics (Code of Conduct, Code of Ethics, etc.) • company policies • company operations, procedures and standards • fundamental rights at work including gender sensitivity • personal hygiene practices
Underpinning Skills	<p>Demonstrates skills on:</p> <ul style="list-style-type: none"> • appropriate practice of personal hygiene • intra and Interpersonal skills • communication skills
Resource Implications	<p>The following resources must be provided: variety of information, communication tools, simulated workplace</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Oral Questioning • Observation/Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting</p>

Occupational Standard: Bamboo Processing and Marketing Management Level V	
Unit Title	Develop and Refine Systems for Continuous Improvement in Operations
Unit Code	IND BPM5 13 1012
Unit Descriptor	This unit of competency covers the skills, knowledge and processes required to ensure that continuous improvement systems do not stultify and continue to improve along with other operational systems in an organization. This unit is about improving the process yield/unit of effort or cost, reducing process variation and increasing process reliability, upgrading, enhancing or refining process outputs, and includes developing a culture of reviewing and sustaining change ensuring improvements are maintained and built on.

Elements	Performance Criteria
1. Establish parameters of current internal improvement systems	1.1 Describe organization systems that impact on continuous improvement 1.2 Identify current relevant metrics and their values 1.3 Check that metrics are collected for all improvements 1.4 Determine yield of current improvement processes 1.5 Review results of improvements
2. Distinguish breakthrough improvement processes	2.1 Identify all improvements which have occurred over an agreed period of time 2.2 Distinguish between breakthrough improvements and continuous improvements 2.3 Determine the timing of breakthrough improvement processes 2.4 Analyze factors controlling the timing and selection of breakthrough improvements 2.5 Analyze continuous improvements to identify cases where breakthrough improvements were required 2.6 Validate findings with process/system owners and obtain required approvals 2.7 Improve timing/selection of breakthrough improvements 2.8 Improve other factors limiting the gains from breakthrough improvements
3. Develop continuous improvement practice	3.1 Check that levels of delegated authority and responsibility are appropriate for continuous improvement from the shop floor 3.2 Ensure all personnel have appropriate capabilities for

	<p>continuous improvement processes</p> <p>3.3 Ensure personnel and systems recognize potential breakthrough improvement projects</p> <p>3.4 Ensure sufficient resources are available for the operation of continuous and breakthrough improvement processes</p> <p>3.5 Check that relevant information flows from improvement changes to all required areas and stakeholders</p> <p>3.6 Check data collection and metrics analysis capture changes which result from improvement actions</p> <p>3.7 Check that improvement changes are standardized and sustained</p> <p>3.8 Check review processes for routine continuous improvements</p> <p>3.9 Remove or change factors limiting gains from improvements</p> <p>3.10 Modify systems to ensure appropriate possible changes are referred to other improvement processes</p> <p>3.11 Institutionalize breakthrough</p>
4. Establish parameters of current external improvement system	<p>4.1 Review value stream systems that impact on improvement</p> <p>4.2 Review procedures for deciding improvement methodologies Identify current relevant metrics and their values, as appropriate</p> <p>4.3 Determine yield of current improvement processes</p> <p>4.4 Review results of improvements</p>
5. Explore opportunities for further development of value stream improvement processes	<p>5.1 Review mechanisms for consultation with value stream members</p> <p>5.2 Develop mechanisms for further improving joint problem solving</p> <p>5.3 Develop mechanisms for increased sharing of organizational knowledge</p> <p>5.4 Obtain support and necessary authorizations from process/system owners</p> <p>5.5 Capture and standardize improvements</p> <p>5.6 Improve factors limiting gains from continuous improvements</p>
6. Review systems for compatibility with improvement strategy	<p>6.1 Review all systems which impact or are impacted on improvements and the improvement system</p> <p>6.2 Analyze relationships between improvement systems and other relevant systems</p>

	<p>6.3 Analyze practices caused by and results from the systems</p> <p>6.4 Negotiate changes to the systems to improve the outcomes from improvement systems</p> <p>6.5 Obtain necessary approvals to implement changes</p> <p>6.6 Monitor the implementation of the changes</p>
--	--

Variable	Range
Competitive systems and practices	<p>Competitive systems and practices may include, but are not limited to:</p> <ul style="list-style-type: none"> • lean operations • agile operations • preventative and predictive maintenance approaches • monitoring and data gathering systems, such as Systems Control and Data Acquisition (SCADA) software, Enterprise Resource Planning (ERP) systems, Materials Resource Planning (MRP) and proprietary systems • statistical process control systems, including six sigma and three sigma • JIT, kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping • problem solving • run charts • standard procedures • current reality tree • Competitive systems and practices should be interpreted so as to take into account: <ul style="list-style-type: none"> – stage of implementation of competitive systems and practices – the size of the enterprise – the work organization, culture, regulatory environment and the industry sector
Code of practice and standards	Where reference is made to industry codes of practice, and/or Ethiopian/international standards, the latest version must be used
Organization	Organization systems may include:

systems	<ul style="list-style-type: none"> • problem recognition and solving • operational/process improvement • improvement projects • product/process design and development • processes for making incremental improvements
Relevant metrics	<p>Relevant metrics include all those measures which might be used to determine the performance of the improvement system and may include:</p> <ul style="list-style-type: none"> • hurdle rates for new investments • KPIs for existing processes • quality statistics • delivery timing and quantity statistics • process/equipment reliability ('uptime') • incident and non-conformance reports • complaints, returns and rejects
Process improvement yield	<p>Improvement process yield may be regarded as:</p> <ul style="list-style-type: none"> • the benefit achieved for the effort invested
Breakthrough improvements	<p>Breakthrough improvements include:</p> <ul style="list-style-type: none"> • those which result from a kaizen blitz or other improvement project or event and are a subset of all improvements
Timing of breakthrough improvements	<p>Timing of breakthrough improvements includes:</p> <ul style="list-style-type: none"> • frequency (which should be maximized) and duration (which should be minimized) of events/projects
Continuous improvement	<p>Continuous improvement is part of normal work and does not require a special event to occur (although may still require authorizations) and contrasts with breakthrough improvement/kaizen blitz which occurs by way of an event or project</p>
Resources for improvement	<p>Resources for improvements include:</p> <ul style="list-style-type: none"> • improvement budget • guidelines for trialing of possible improvements • mechanism for approvals for possible improvements • business case guidelines for proposed improvements • indicators of success of proposed improvement • mechanisms for tracking and evaluation of changes • forum for the open discussion of the results of the implementation • mechanisms for the examination of the improvement for additional improvements • organization systems to sustain beneficial changes
Capturing value stream improvements	<p>Capturing value stream improvements includes:</p> <ul style="list-style-type: none"> • revised contractual arrangements • revised specifications • signed agreements • other documented arrangements which formalize the raised base line
Systems impacting	<p>Systems which impact/are impacted on improvements and the</p>

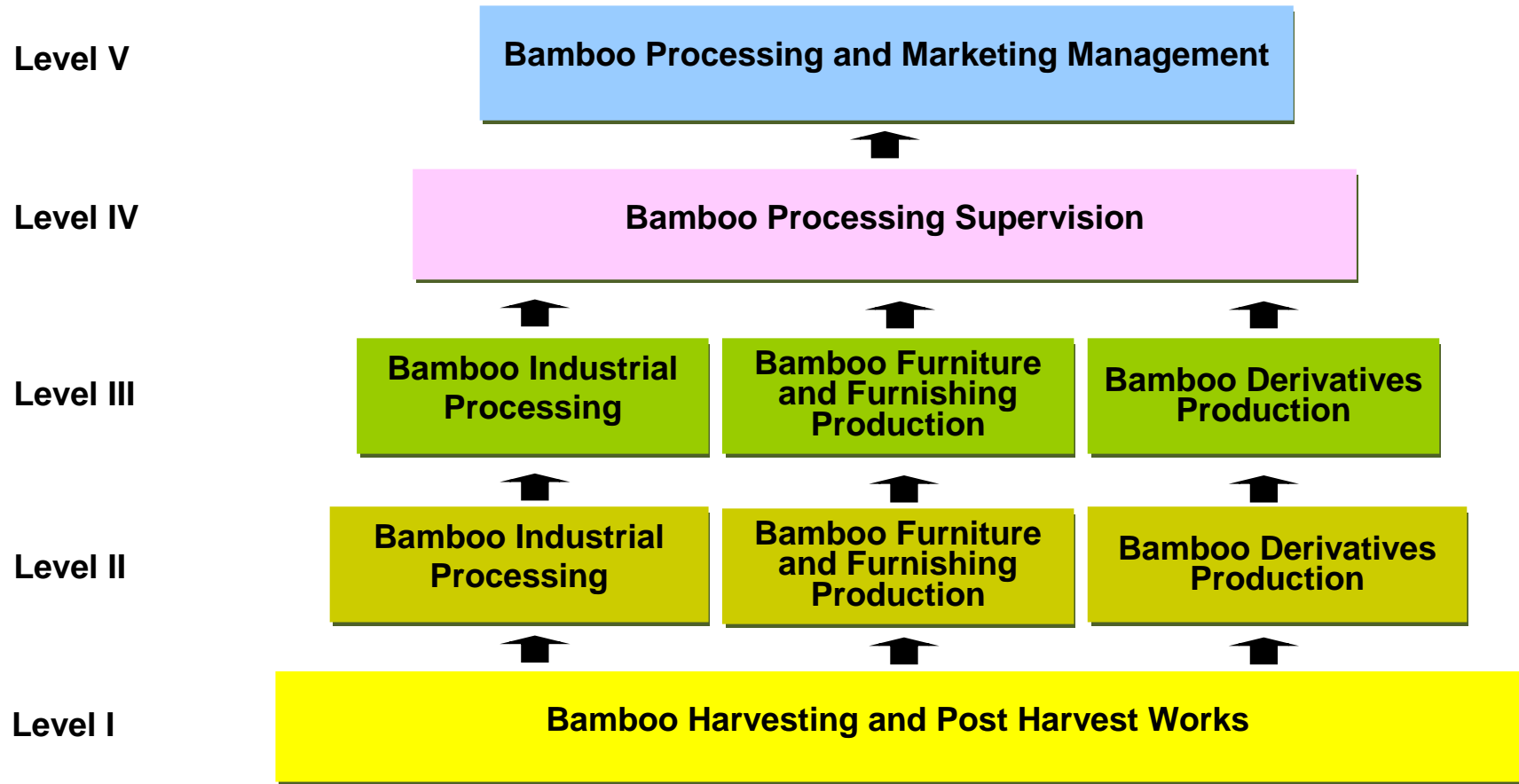
improvements	improvement system include: <ul style="list-style-type: none"> • office • purchasing • rewards (individual or team at all levels) • sales • marketing • maintenance • process/product • transport and logistics
Organizational knowledge	Organizational knowledge should: <ul style="list-style-type: none"> • be able to be quantified or otherwise modified to make its outcomes measurable or observable • be able to be expressed in an accessible and distributable form appropriate to the organization operations and stakeholders
Improvements	Improvements may: <ul style="list-style-type: none"> • be to process, plant, procedures or practice • include changes to ensure positive benefits to stakeholders are maintained
Manager	Manager may include: <ul style="list-style-type: none"> • any person who may have either a permanent or an ad hoc role in facilitating the function of multiple teams in a workplace, departments or entire organizations

Evidence Guide	
Critical Aspects of Competence	A person who demonstrates competency in this unit must be able to provide evidence of the ability to: <ul style="list-style-type: none"> • critically review current continuous improvement processes • establish ongoing review of continuous improvement processes • implement improvements in the practice of continuous improvement • better align internal and external systems • gather data through interviews with stakeholders • review existing data • obtain additional data through a variety of techniques • communicate and negotiate at all levels within the organization
Underpinning Knowledge and Attitudes	Demonstrates knowledge of: <ul style="list-style-type: none"> • competitive systems and practices tools, including: • value stream mapping • 5S • Just in Time (JIT) • mistake proofing • process mapping • establishing customer pull

	<ul style="list-style-type: none"> • kaizen and kaizen blitz • setting of KPIs/metrics • identification and elimination of waste (muda) • continuous improvement processes including implementation, monitoring and evaluation strategies for a whole organization and its value stream • difference between breakthrough improvement and continuous improvement • organizational goals, processes and structure • approval processes within organization • cost/benefit analysis methods • methods of determining the impact of a change • advantages and disadvantages of communication media, methods and formats for different messages and audiences • customer perception of value • define, measure, analyze, improve, and control and sustain (DMAIC) process
Underpinning Skills	<p>Demonstrates skills to:</p> <ul style="list-style-type: none"> • undertaking self-directed problem solving and decision-making on issues of a broad and/or highly specialized nature and in highly varied and/or highly specialized contexts • communicating at all levels in the organization and value stream and to audiences of different levels of literacy and numeracy • analyzing current state/situation of the organization and value stream • determining and implementing the most appropriate method for capturing value stream improvements • collecting and interpreting data and qualitative information from a variety of sources • analyzing individually and collectively the implementation of competitive systems and practices tools in the organization and determining strategies for improved implementation • relating implementation and use of competitive systems and practices and continuous improvement to customer benefit • solving highly varied and highly specialized problems related to competitive systems and practices implementation and continuous improvement to root cause • negotiating with stakeholders, where required, to obtain information required for implementation and refinement of continuous improvements, including management, unions, value stream members, employees and members of the community • reviewing relevant metrics, including all those measures which might be used to determine the performance of the improvement system, including: <ul style="list-style-type: none"> – key performance indicators (KPIs) for existing processes

	<ul style="list-style-type: none"> – quality statistics – delivery timing and quantity statistics – process/equipment reliability ('uptime') – incident and non-conformance reports – implementing continuous improvement to support systems and areas, including maintenance, office, training and human resources
Resources Implication	<p>Access may be required to:</p> <ul style="list-style-type: none"> • workplace procedures and plans relevant to work area • specifications and documentation relating to planned, currently being implemented, or implemented changes to work processes and procedures relevant to the assessee • documentation and information in relation to production, waste, overheads and hazard control/management • reports from supervisors/managers • case studies and scenarios to assess responses to contingencies
Methods of Assessment	<p>Competence in this unit may be assessed by using a combination of the following to generate evidence:</p> <ul style="list-style-type: none"> • demonstration in the workplace • suitable simulation • oral or written questioning to assess knowledge of principles and techniques associated with change management <p>In all cases it is expected that practical assessment will be combined with targeted questioning to assess underpinning knowledge</p>
Context of Assessment	<p>Assessment of performance must be undertaken in a workplace using or implementing one or more competitive systems and practices.</p>

Sector: Industry Development
Sub-Sector: Bamboo and Craft Production



Acknowledgement

We wish to extend thanks and appreciation to the many representatives of business, industry, academe and government agencies who donated their time and expertise to the development of this occupational standard.

We would like also to express our appreciation to the Experts of Ministry of Education (MoE) and Engineering Capacity Building Program (eCBP) who facilitated the development of this occupational standard.

This occupational standard was developed on April 2011 in Center of Excellence for Engineering (CEE) Addis Ababa, Ethiopia.

Page 51 of 51	Ministry of Education Copyright	Bamboo Processing and Marketing Management Ethiopia Occupational Standard	Version 1 April 2011
---------------	------------------------------------	--	-------------------------